

NORFOLK ARCHAEOLOGICAL UNIT

Report No. 780

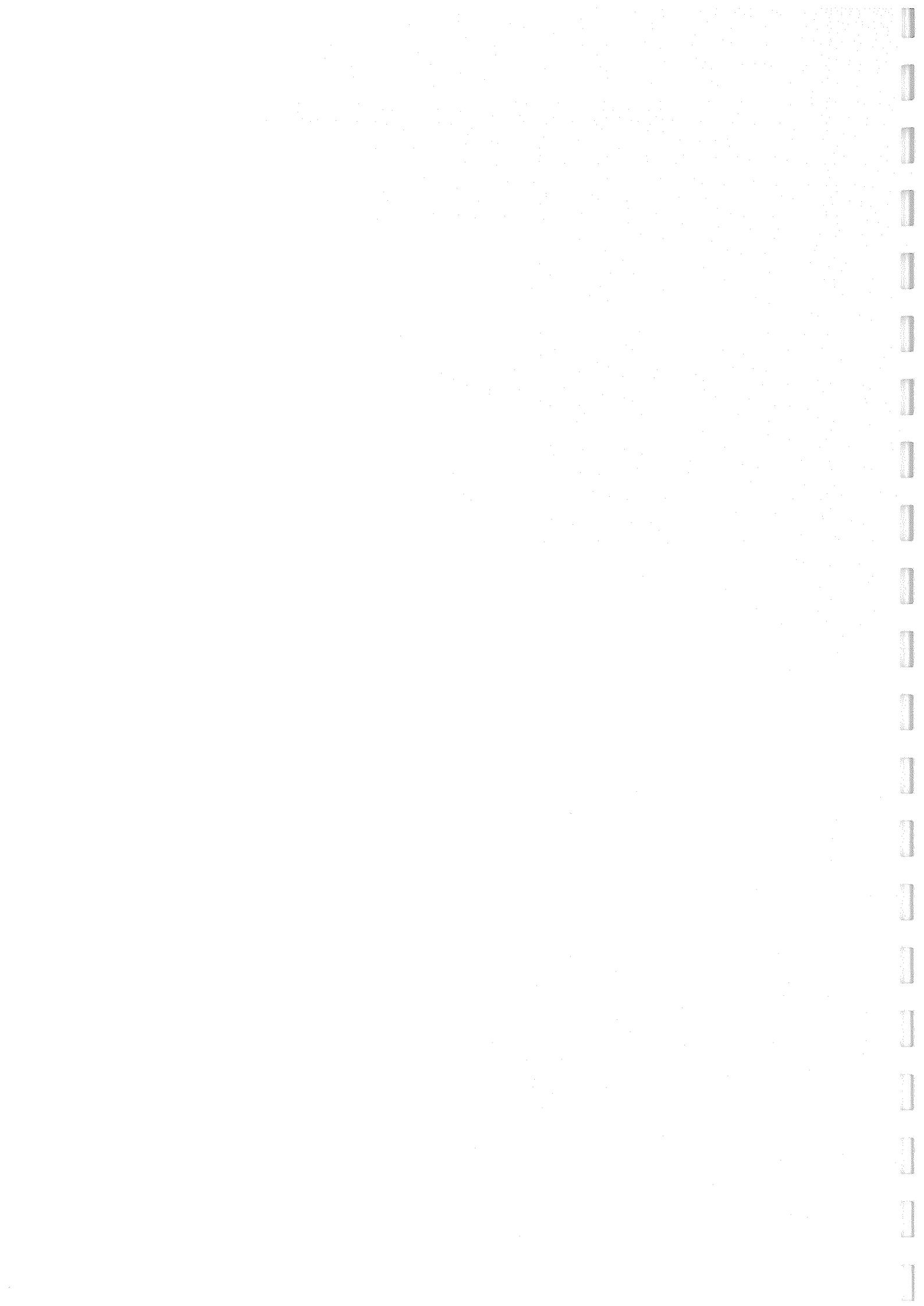
Report on an Archaeological Evaluation at Old Barge Yard
and St. Anne's Wharf, Norwich

37411N

John W. Percival and Andy Shelley

January 2003

© Norfolk Archaeological Unit



Contents

Summary

- 1.0 Introduction
- 2.0 Geology and Topography
- 3.0 Archaeological and Historical Background
- 4.0 Methods
- 5.0 Results
 - 5.1 Trench JS1
 - 5.2 Trench JS2
 - 5.3 Trench JS3
 - 5.4 Trench JS4
 - 5.5 Trench JS5
 - 5.6 Trench JS6
- 6.0 The Finds
 - 6.1 The Post-Roman Pottery
 - 6.2 The Roman Pottery
 - 6.3 The Faunal Remains
 - 6.4 The Flint
 - 6.5 The Architectural Fragments
 - 6.6 Ceramic Building Material
 - 6.7 Clay Tobacco Pipe
 - 6.8 Small Finds
 - 6.9 Glass
- 7.0 The Environmental Evidence
 - 7.1 Plant and Animal Macrofossils
- 8.0 Conclusions

Acknowledgements

Bibliography

- Appendix 1: Context Summary
- Appendix 2: Finds and Small Finds by Context
- Appendix 3: Roman Pottery Forms
- Appendix 4: Post-Roman Pottery by Context
- Appendix 5: Faunal Remains by Context
- Appendix 6: The Flint
- Appendix 7: The Plant-Macrofossils

Figures

- Fig. 1 Site Location, also shows churches and previous archaeological interventions
- Fig. 2 Trench Location, also shows buildings marked on OS 1885 plan
- Fig. 3 Plan of Trench JS1
- Fig. 4 South-facing section of Trench JS2
- Fig. 5 Plan of Trench JS3
- Fig. 6 South-facing section of Trench JS4
- Fig. 7 East-facing section of Trench JS5
- Fig. 8 East-facing section of Trench JS6

Location: Old Barge Yard and St. Anne's Wharf, Norwich
Grid Ref: TG 2359 0819
HER No: 37411N
Date of Fieldwork: 28th October to 22nd November 2002

Summary

Six trenches (JS1-JS6) measuring c.2m by 3m were excavated at Old Barge Yard and St. Anne's Wharf, Norwich. Investigations within Trench JS1 were curtailed by severe hydrocarbon contamination, and as a consequence Victorian and early 20th century industrial structures were the only features exposed. Trench JS2 revealed the scale of the land reclamation exercise carried out by the Austin friars during the 16th century and also contained remains relating to a post-medieval garden and Victorian housing. The presence of modern services within, and restrictions on the placement of Trench JS3 meant that only limited excavation was possible. Despite this the remains of a post-medieval warehouse were found.

Trenches JS4, JS5 and JS6 all presented similar sequences. Although a small amount of prehistoric and Roman material was recovered from the base of Trench JS6 the majority of evidence related to later periods. This entailed medieval activity which took place on a relatively unaltered river margin. Sizeable episodes of land reclamation had taken place during the post-medieval period and remains of post-medieval and Victorian buildings were found.

Environmental evidence indicates that in the immediate area of Old Barge Yard medieval waterfront activity took place on a relatively unaltered ground surface. There is evidence that wooden revetted wharves existed elsewhere on the King Street waterfront in the medieval period. This evaluation found no evidence of any such structures either at St Anne's Wharf or the river end of Old Barge Yard. This is probably as much due to unforeseen limitations on the placement of trenches and the scope on some of the investigations as any genuine archaeological or historical factors.

1.0 Introduction

Figs 1 & 2

Six trenches were excavated by Norfolk Archaeological Unit (NAU) on land at Old Barge Yard and St. Anne's Wharf, off King Street Norwich. These investigations took place during late October and November 2002 and were commissioned by John Samuels Archaeological Consultants acting on behalf of Wilson Bowden Developments. This work was the fourth archaeological intervention to be carried out within the former Watney Mann Brewery Distribution Depot (Wilson and Hurst 1969, 247; Brennand and Hutcheson 1998; Shelley in prep. b). This project was funded by Wilson Bowden Developments. The Distribution Depot site occupies all of the land between St. Ann's Lane to the south, King Street to the west, Mountergate to the north and Baltic Wharf and the River Wensum to the east. The work carried out during 2002 was, however, the first archaeological work to be undertaken in the former Readymix concrete works to the south of St Ann's Lane, and also the first work in the eastern part of Old Barge Yard.

All the trenches measured approximately 2m by 3m in area and were excavated to a depth of between 1.8m and 3.5m below the modern surface.

This archaeological evaluation was undertaken in accordance with a Project Design prepared by Norfolk Archaeological Unit (NAU Ref: AS/1441) which followed a Brief issued by John Samuels Archaeological Consultants (Ref: 981). The Project Design was approved by Norfolk Landscape Archaeology.

The work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, following the guidelines set out in *Planning and Policy Guidance 16 — Archaeology and Planning* (Department of the Environment 1990).

The site archive is currently held by the Norfolk Museums and Archaeology Service, following the relevant policy on archiving standards.

2.0 Geology and Topography

The site lies between an area of high ground to the west and a basin to the River Wensum to the east. The river partly encircles the majority of the medieval city, turning south-westward where it passes between the high ground of Mousehold Heath to the east and the Ber Street ridge to the west. Another angle in the river turns its direction towards the south and the site lies beside this angle. The river is tidal at this point in the city.

The Ber Street ridge is formed from Upper Chalk (British Geological Survey 1975) overlain by Norwich Crag (a sequence of late Pliocene and early Pleistocene marine sediments). King Street is situated over the chalk and the area to the east of the street lies over first terrace river gravels. The fall away from this ridge towards the river is dramatic by Norwich standards. The river basin is formed from a valley floor crossed by paleochannels separated by sand bars. The channels and the margins of the present river are filled with peats.

3.0 Archaeological and Historical Background

King Street was one of two arterial routes from the southern part of the Late Saxon town, Ber Street being the other. King Street connected the Late Saxon market at Tombland with the southern hinterland and, with Magdalen Street, provided a north-to-south route through the town. The road is probably 10th-century in origin (Shelley in prep. a).

The origins of settlement or human activity in the river valley through Norwich can be traced back to the Paleolithic period. Work in the 1920s at Carrow Works (immediately south of Carrow Bridge) discovered an important assemblage of Achulian-Clactonian hand axes and mammoth remains (Site 473). Evidence of more recent human activity comes from lithic assemblages discovered on the valley floor itself. Work in the late 1990s (Wiltshire and Emery 2000) and in 2002 (Adams 2003) has demonstrated that one or more sand bars which developed on the valley floor were used by Mesolithic peoples. The local environment at that time would have provided an ideal habitat for human exploitation, and nearly all sites in the area contain flint evidence for such activity. Other important discoveries of flint hand tools include a number of polished axeheads found at a depth of 42ft (12.81m, 'near the

chalk') at Foundry Bridge (Site 477) during the mid 19th century, and a polished Neolithic flint axe found 'on King Street' before 1948 (Site 254).

This seasonal occupation may have continued into and beyond the Neolithic period. Recent work has shown that Bronze Age settlement or, more accurately, activity in the area favoured the headlands surmounting the valley slopes. A possible later Bronze Age ?building and a Neolithic or Bronze Age paleosol were uncovered in 2000 during excavations on Palace Street (Emery and Ashwin 2001, 670-675). These remains point to the likelihood that further local Bronze Age settlement awaits discovery, although to date the only Bronze Age evidence from King Street is a bronze spearhead (Class II, Site 503) found in 1922 whilst dredging operations for construction of Carrow Bridge were being conducted.

The Roman period is not well represented in this area. There are no known Roman sites in Norwich and the few Roman finds recovered form the smallest percentage of any assemblage. Generally these are fragments of pottery like the mortaria found in Normans Buildings in 1966 (Site 538) or spindle whorls (eg. 51-53 King Street, Site 26260, Shelley and Brennand in prep.). No Roman metalwork has been recovered in the vicinity of the sample area.

There is also no evidence to support the existence of Early Saxon activity in the vicinity, and little to demonstrate occupation of the site during the Middle Saxon period. Excavations on King Street (ie 51-53 King Street, Shelley and Brennand in prep.) invariably uncover a few sherds of Middle Saxon ware and these are generally residual. It is conceivable, however, that 8th- and 9th-century occupation was taking place within the general south-western area of Norwich. The graves of more than forty individuals dating to the 8th and 9th centuries have been uncovered at Castle Mall (Shepherd Popescu in prep.), and Middle Saxon artefacts have been recovered from Castle Mall and Greyfriars (Emery forthcoming).

King Street developed as the means to connect the core of the Late Saxon town with its southern hinterland (Shelley 2000). It was effectively bisected by a major defensive earthwork when the town became a defended *burh* (this was seen during excavations in 2000 [Holme 2002]). Thereafter the part of King Street which the site lies beside became extramural, and it was not until the medieval period that it was finally enclosed with a defensive circuit (the 13th-century city walls). Archaeological work since the mid 1990s has sought to understand the extent of King Street's extramural development, and to compare it with known settlement within the defended *burh*. Evidence for the former has come from excavations at Dragon Hall (Shelley in prep. a) and at the Norwich Brewery site (Penn 1998; Holmes 2002) and for within the defended town from 80 King Street (Trimble 2000; Shelley 2001) and 51 to 53 King Street (Shelley and Brennand in prep.).

From current evidence it appears that settlement in this part of King Street commenced in the late 10th century, and developed from a number of small nucleated settlements (Shelley in prep a). Here the settlement was probably responsible for the parish church of St Julian (Site 436), which survives and in its current form displays 11th-century architectural work. This and other communities probably expanded during the 11th century to the extent that southern King Street came to resemble a suburban outlier to the main town, extending from the town ditch to at least the position of St Olafs, a church of probable Anglo-Scandinavian origin (Shelley in prep. a).

The settled area within which the site under discussion falls has been quite thoroughly examined in the past five years. This work has shown that the eastern King Street frontage was divided into a number of properties, each with buildings at their head (Shelley in prep a). These were small buildings of timber, clay and thatch, and were seemingly replaced on a regular basis. The eastern extent of the properties is not at present clear, although it is certain that the western edge of the river foreshore was a great deal closer to King Street than now. This community was in the Late Saxon period almost certainly engaged in, amongst other trades and activities, the production of worked bone items and ironwork. Evidence for cereal processing was also uncovered. The economy was apparently based on a local trading network, very few items being recovered from further afield than the eastern counties (Shelley in prep. a).

This situation continued into the 13th century, by which time evidence has shown that a commercial waterfront was developing. Contemporary infrastructure relating to exploitation of the waterfront has so far only been uncovered in one place on King Street, this being at Cannon Wharf where excavations in 1997 (Shelley 1997) showed evidence for narrow revetments, mooring posts and walkways extending at right angles into the river margins from the 12th-century onwards. It was also during this period that Old Barge Yard and a neighbouring road to the north (now lost) developed (Shelley in prep a).

The medieval stone buildings of Norwich have been the subject of much interest in recent years. A gazetteer of known examples (Rutledge 2002) shows that the parish of St Julian was the focus of a cluster of 12th- and 13th-century stone houses extending southward from the bend of the river to the Music House (Fig.1). Stone was probably used more generally in Norwich as a building material than has previously been thought and not all these houses need have been of the status of the Music House, the sole surviving example above ground (Rutledge 2002). Nevertheless the presence of this concentration shows, at the very least, a desire on the part of those wealthy enough to build in stone for a secure foothold in the area. Even the fact that the only known builder is an otherwise unidentifiable woman only highlights the point that a stone building here may have been considered a good investment (Rutledge in prep.). Clearly an important factor was ready access to the river. All but one of the known stone houses lay on the river side of the street and several may have had their own quays. Isaac son of Jurnet, the owner of the Music House in the early 13th century, got permission in 1225 to extend and build a quay there, as had already been done by his neighbour Henry de Stowe (Lipman 1967, 112). Nor was the river only of interest to secular owners. The Cistercian abbey of Warden (Beds) had acquired a holding near the river (and a stone house) by 1200 (Fowler 1931, no.306. See Rutledge 2002, for the evidence for its position).

At least one of these buildings lay to the immediate west of the site in question. Excavations to the rear of Dragon Hall (Shelley in prep a) uncovered the substantial remains of a stone house built in the 1270s or 1280s and first recorded in 1289 as being owned by the Abbey of Woburn. Alongside, and adjacent to Old Barge Yard, lay the property of John Page. Page has built his own stone house by the start of the 14th century, and elements of this survive in the south wing of Dragon Hall. His property had developed over a piece of land which had, by the evidence uncovered during the Dragon Hall excavations, lain close by a 12th century stone building of some status. The exact position of this building is unclear, but it is possible that it lay on the site of 125-127 King Street (currently derelict and formerly belonging to

Bennetts Electrical). No evidence had been unearthed before the evaluation described here for the eastern extent of these holdings, although they were undoubtedly connected to the river. The Abbey of Woburn holding developed during the 14th century to include a fishhouse (Shelley in prep a) built to exploit the local fisheries. This fishhouse, and the stone building belonging to the Abbey of Woburn, were linked to King Street by St Ann's Lane, which had developed by this period, the former road through the Dragon Hall site having fallen from use during the late 13th century.

The 1289 deed indicates that the Woburn holding was bordered to the north by property belonging to Bartholomew de Acre. This 13th century merchant had extensive interests in the area, and had served as a city bailiff in 1282 (Rutledge in prep.). This was not his only holding in the area but it included his capital messuage (main dwelling house) and in 1286 he was charged 12d a year for encroaching on the river 40ft by 2ft with a hall (*aula*) and quay (NRO NCR 17b Book of Pleas f.28d, in Rutledge in prep. a). In 1290 he granted the northern and western parts of his tenement to his servant, Andrew de Acre, and in 1301 procured a licence to convey the remainder to Langley abbey (Cal.Pat.Rolls 1301-7, 2). In 1314 Langley took over the property to the west and in 1325 received permission to convey a dwellinghouse to the Austin friars (Cal.Pat.Rolls 1324-7, 157). Although the abbey also owned a tenement further north (NRO DCN 45/29/1), perhaps near the bend in the river, there can be little real doubt that the Bartholomew de Acre holding was the one conveyed in 1325, bringing the precinct of the Austin friars down to the edge of St Ann's Lane (Rutledge in prep.).

Thereafter the block of land bordered by St Ann's Lane to the south, King Street to the west, Mountergate to the north and Baltic Wharf and the river to the east, gradually passed into the hands of the Austin friars. As has been shown this land was held by the 13th century by a number of different individuals, including St Michael's in Conesford church and Roger Miniot. The church was in existence by 1183 (Blomefield 1806).

In 1293 the friars obtained licence from King Edward I, to take in mortmain, the several lands of Bartholomew de Acre, Emma David, Hugh Feringseth and Julian, his wife, Reginald de Antingham and Roger de Morley (Shelley in prep. b). They gained the grant of the church of St Michael in Conesford in 1348 and in its place they built 'a noble cloister and church' (Blomefield 1806, 85-91). William of Worcestre gave the dimensions of the church as follows; total length 140 paces, breadth 38 paces, nave alone 60 paces). The church was dedicated to St Mary the Virgin and also to St Augustine. A plan of the friary was given by Taylor (1821) who, unfortunately, did not give his source. Blomefield (1806, 86) gives the dimensions of the conventual church as 150 feet long and 50 feet wide, with adjoining cloister on its south side.

In 1347 a license from King Edward III enabled them to enclose a common lane by their site (Blomefield 1806, 85) and to receive certain houses from the prior and convent of Norwich, adjoining there, which they could demolish. Further acquisitions in 1351 and 1354 enabled them eventually to gain the whole of St Michael's parish on that side of the street (Shelley in prep. b).

Archaeological excavations within the precinct of the friary in 1999 (Shelley in prep. b) showed that the northern part of the friary had been established on a thick raft of

made ground, which had the effect of raising the precinct above the level of the floodplain. Although the construction in 1970 of the brewery distribution depot had done much to destroy the remains of the friary the 1999 work showed that masonry walls to the claustral building survived, at least in the area to the north of the brewery building, to a height of a metre or more. Three human burials were recorded during this work – these almost certainly lay within the northern walk of the cloisters. From the results of the 1999 work it is possible to suggest that extensive remains of the friary survive beneath ground. It should be noted that above ground remains of the friary survived until recently – in 1858 it was described as “the site of an ancient monastery, remains of which still exist near the river” (Shelley in prep. b).

Aside from a further common lane enclosure in 1429 (others were enclosed in the 14th century) little appears to have fundamentally changed within the Austin precinct during the 15th and early 16th centuries (Shelley in prep. b). After dissolution on 29 August 1538 the friary passed indirectly to Sir Thomas Hennage. By 1604 it was owned by Sir William Paston and eventually by the Duke of Norfolk. Blomefield (1806, 86) describes the grant to Sir Thomas Hennage and William Lord Willoughbie thus; all the site and precinct of the Austin-friars in Norwich, and all that piece of ground as it is included with high stone walls, now called Cunsford-place, with all the orchards, gardens, and two acres of land thereto adjoining, and fishing thereto belonging, now in the tenure and occupation of Sir John Godsolve, Knt.

In 1661 Lord Henry Howard (the Duke of Norfolk) laid out a pleasure garden on the site. This was by the 18th century known as 'My Lords Garden' and survived well into the 19th century. The nature and extent of the gardens were predicted in 1998 when Norfolk Archaeological Unit excavated a trench between the brewery distribution depot and Baltic Wharf (Hutcheson and Brennand 1998). Edward Browne, in 1663, noted that Mr Howard intended “this piece of ground...by the water side in Cunsford...[as] a place for walking and recreation, having made already walkes round and crosse it, forty feet in bredth; if the quadrangle left be spacious enough hee intends the first of them for a bowling green, the third for a wilderness and the forth for a garden”. Howard House, a Grade II* listed building on the corner of Mountergate and King Street, was constructed in the mid 17th century for Henry Howard. Excavations within its courtyard, and details of surveys to date, are detailed in Shelley (in prep. b). From this work it appears that the house was constructed over the footings to a medieval building, possibly the gatehouse to the friary.

During the 19th century the former Austin friary block was progressively developed. By 1885 the principal buildings which existed were a synagogue, a row of terraced houses, a malthouse, Howard House, Morgan's brewery and St Ann's Works. A road, Synagogue Street, bisected the block. The synagogue was built in 1848 (Sandred and Lindstrom 1989, 145) and was demolished in 1968. St Ann's Works was established by Thomas Smithdale & Sons in 1847 (Fewster 1981, 23). Much of the works survived until the late 1980s – in 1981 it was being used by Watney Mann as garaging and workshops (Fewster 1981, 24).

The whole of the block was extensively damaged by air raids in 1942 and was rebuilt in 1946 by R G Carter (Shelley in prep. b). In 1961 Morgans was bought by Bullards & Sons and Stewart & Patteson, who sold it immediately to Watney Mann. During the 1960s the area between King Street and Synagogue Street continued to comprise a bottling works, a public house ('The Cellar House') and associated brewery service

buildings. In 1969 Watney Mann (East Anglia) Ltd proceeded with wholesale demolition of every building within the block (with the exception of Howard House) and in 1970 two huge warehouses, designed by the local firm Feilden and Mawson, were erected, in the course of which the line of Synagogue Street was lost.

A building survey and archaeological desk based assessment of 125 to 133 King Street was conducted during 2000 (Smith and Shelley 2000), and has been supplemented by research into historical documents (Rutledge in prep.). Briefly the block was probably formed from two properties with origins in the 10th century, and divisions ordered by the 11th century. Rutledge (in prep.) has shown that when John Page (owner of the property discussed in the Dragon Hall block) sold an undivided share in the Page holding to Peter de Bumpsted in 1351/2, the southern abuttal consisted of the tenement of Adam Midday, one of the owners of the most southerly of the three blocks of property that made up the later medieval river frontage of the parish of St Julian (the Midday block was probably formed from 129 to 133 King Street). The other undivided share belonged to Thomas Cole, owner of the middle block which lay south of Old Barge Yard (NRO NCR 21f/20). It is this block that today houses 125 to 127 King Street. Again, it is not known how far this 14th-century property extended into the river margin, although it is assumed that ownership of property against the eastern side of King Street granted access to the river frontage.

The 2000 building survey raised the possibility that 125-127 King Street, which it demonstrated are of late 15th century origin, may have been constructed as an inn and also demonstrated that, behind the internal cladding, a surprising amount of original work remains. Similarly, more of the original structure to No.129 King Street survives than might at first be imagined. The remains of the cellar and the vaulted chamber date from the late 15th century, and as such pre-date the remains of the timber-framed building above, which is of early 16th-century date. Again, a surprising amount of the original build might be revealed if the cladding was removed. Away from the extant buildings, however, there are very few above-ground clues to the origins of the site. The only exception is an area of wall beside Hobrough Lane which possibly relates to a late 15th- or early 16th- century building.

Rutledge (in prep.) has shown that by 1570 the Dragon Hall block had been joined to the property to the south of Old Barge Yard and both were in the hands of John Noller (Rutledge in prep.). Thereafter they passed together to Thomas Gleane, alderman, to John Wytfield of Norwich, keelman, and his wife and, finally, by 1619, to Christofer and Ann Marshall (NRO NCR 1/32m.54, 35m.33).

The point has already been made that the 2002 evaluation trenches were all in areas beside King Street where it is to be expected that river foreshore deposits are present. The available evidence from the various excavations and archaeological surveys in the immediate locality suggests that this intertidal and floodplain terrain was probably already divided into individual plots by the 13th century. There was, however, until the commencement of this evaluation, no indication that this land had been used for buildings or river-fronting infrastructure before the late 18th century, when Anthony Hochstetter drew his plan of Norwich. He showed the area to the south of Old Barge Yard, and that between Old Barge Yard and St Ann's Lane, was largely devoid of buildings with the exception of three structures on the water's edge and a large 'L'-shaped block behind Dragon Hall. This situation had radically altered by the time that the 1897 Insurance Sheet came to be drawn. By then the area

housed stables, a granary, warehouses, an iron foundry, numerous dwellings, Co-Operative Society stores, a mission room and petroleum stores.

Three 20th-century events were to radically transform the appearance of the area. In 1937 Norwich Corporation commenced demolition of large numbers of buildings in the area, as part of their 'slum clearance' programme. Many buildings that remained were to fall victim to the air raids of WWII, which hit buildings beside Synagogue Street particularly hard. Neither episode, however, fully removed the building stock of the area – Dragon Hall, for instance, survived both campaigns. The third event, post-war redevelopment, was probably the most damaging to the street's historic core, and lasted into the early 1970s. The brewery distribution depot was a product of the final campaign, being completed in 1970.

4.0 Methods

Fig. 2

The objective of this evaluation was to determine as far as reasonably possible the presence or absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.

John Samuels Archaeological Consultants requested the excavation of six trenches (JS1-JS6), each to measure c.2m by 3m. All the trenches were initially mechanically excavated, using a 7-tonne tracked 360° excavator fitted with a toothless bucket, under constant archaeological supervision.

Trench JS1 was initially machine excavated to a depth of c.1.3m below the modern surface. It immediately became apparent that all of the soils exposed within the trench were heavily contaminated with hydrocarbons. This contamination was judged to be so severe as to prevent Norfolk Archaeological Unit operatives from entering the trench until a range of personal protective equipment could be sourced. Eventually a small sondage, stepped in from the sides of the trench and measuring 0.6m by 1.9m and c.0.5m deep was dug by machine. This immediately filled with water heavily contaminated with hydrocarbons. Drawn, written and photographic records of the trench were made before backfilling a few days later.

Trench JS2 was initially machine excavated to a depth of 1.1m. Following cleaning and recording, steel sheet and hydraulic waling-beam shoring was then installed and a further metre was machine excavated from the trench. Hand excavation then followed. The final depth of this trench was c.3.4m below the modern surface. The basal deposit in this trench, which was 0.4m thick, lay below the modern water table. The hydro-carbon contamination seen in Trench JS1 had also spread into the basal deposit of this trench. Excavation to natural deposits continued utilising appropriate personal protective equipment. Bulk samples for plant macrofossil analysis were taken from the basal deposits in this trench.

Trench JS3 was located within the former Readymix Concrete (RMC) works (Fig. 2). Programming difficulties meant that excavation of this trench had to be carried out whilst the concrete batching plant was still trading. This necessitated the trench being dug towards the western end of the northern boundary to the concrete works yard. The trench was located approximately 2m south of the wall in the hope of avoiding a storm drain known to have been in the vicinity. After breaking out of up to 0.4m depth of reinforced concrete it was found that the storm drain was a massive brick-built structure which filled the whole of the northernmost part of the trench. The trench

was then extended to the south by c.1m to give it final dimensions of 3.2m by 3.5m. This operation uncovered a live electricity cable. The presence of these services meant that, with the exception of a 0.4m wide strip along the southern face of the trench, the rest of the trench did not exceed 0.6m in depth. The trench could not have been extended or moved any further south without hampering the heavy vehicle movements within the RMC works.

Trench JS4 was located in an area of car parking north of Old Barge Yard formerly associated with 125-129 King Street (the former Bennetts Electrical store). The trench was initially machine excavated to a depth of c.1.2m. Following cleaning and recording steel sheet and hydraulic waling-beam shoring was installed and a further 0.5m was machine excavated. The remaining 0.9m of material was hand excavated. Conditions for the excavation and recording of this trench, particularly the basal deposits, were poor. Heavy rain before and during work on this trench meant that ground water levels were high, with much subsurface water moving through the trench.

Due the presence of travellers, Trench JS5 was located further to the west than originally intended. The trench was machine excavated to 1.2m prior to cleaning, recording and the installation of steel sheet and hydraulic waling-beam shoring. It was noticeable that the shoring sheets could be driven no further than approximately 3.0m below the modern surface, due to the presence of a hard surface. Hand excavation of the western 60% of the trench then proceeded to a depth of c.3.0m below the present surface. The eastern 40% of the trench was left unexcavated, because of difficulties in installing the trench sheets to a correct depth.

Trench JS6 was located immediately to the rear (west) of the of the former Bennetts Electrical retail building and south of Old Barge Yard. The trench was machine excavated to an initial depth of c.1.2m. After cleaning and recording steel sheet and hydraulic waling-beam shoring was installed and a further c. 0.6m machine excavated from the trench. The remaining material in the trench was hand excavated. The final depth of Trench JS6 was c.2.4m below the modern surface.

All archaeological features and deposits were recorded using Norfolk Archaeological Unit's *pro forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits.

Parts of the site had to be cleared of buddleia and other shrubs including alder. Generally conditions for excavation and recording can only be described as moderately good. Adverse weather conditions in the form of persistent heavy rain in particular hampered progress. This meant that ground water levels were high with much subsurface water moving through the trenches. Water levels in the river (tidal at this point) were also very high. Both river levels and tides can effect water levels in excavations, even those some distance from the river. At times the lower soils in some of the trenches, particularly Trench JS4, are more adequately described as flows than as deposits.

Following completion of the excavations, all trenches were mechanically backfilled with arisings. Where possible this material was summarily compacted with the bucket of the mechanical excavator. Any asphalt or other hard surfaces were not reinstated and the backfilled trenches were fenced with orange plastic fencing and steel pins. It is likely that the material backfilled into the trenches will settle under its own weight leaving slight depressions within the fenced areas.

5.0 Results

5.1 Trench JS1

Figs 2 & 3

The earliest two deposits in this trench ([31] and [32]) were not firmly dated but were probably laid down prior to c.1850. The lowest deposit ([32]) was so contaminated that its appearance and all other characteristics had been so altered that little of its nature could be ascertained, particularly given the conditions for observation described above (Section 4.0). It was overlain by a less contaminated deposit ([31]) which contained chalk flecks, also brick and tile fragments; this was probably a post-medieval make-up deposit. This deposit was cut by a large brick-lined well ([43]). A fragmentary mortar floor ([37]) was associated with this well. These features were probably associated with the Smithdale Iron foundry, which occupied this part of the site from c.1850 to c.1890 (Fewster 1981). The well was topped with a concrete disc sealed around its edge with yellowish grey clay, a procedure which suggests that noxious material had been dumped in the well before it was sealed. Two intersecting brick walls ([35] and [39]) lay above the concrete slab. Where they were not directly sealed to the slab they too had concrete foundations. The bricks in these walls were of the soft 'Norfolk red' type, consistent in appearance with a late 19th- or early 20th-century date. By c.1890 the Smithdale Iron foundry building was being used a store by the Anglo-American Oil Company. It was doubtless during this use that most of the contamination occurred. The brick walls themselves were probably alterations made during this or subsequent changes of use. The former foundry building survived in a somewhat altered form until the late 1980s. The retaining wall between the upper (westernmost) and lower (easternmost) parts of the open area south of the former distribution depot buildings, and parts of the dividing wall between this area and the former RMC works, are surviving elements of the foundry buildings.

From the late 1960s, or early 1970s, the foundry building was used as garages and workshops by the Watney Mann brewery. Evidence of its demolition, in the form of mixed brick rubble and garden soil ([29]) up to 0.45m thick, was dumped within the brick walls. A further demolition deposit of almost pure brick rubble of 0.4m to 0.5m depth covered the whole upper portion of the trench. This deposit did not seem to contain any significant contamination. The rubble was sealed by a skim of concrete with the extant asphalt car-park surface above.

5.2 Trench JS2

Figs 2 & 4

The contaminated deposit ([40]) which lay immediately above naturally-formed soils in this trench (natural lay at c. 0.10m OD) had probably at one time formed a land surface. Normal biological soil formation processes had probably, at least in part, been augmented by colluvial and/or alluvial deposition to form this material. It contained Thetford 'type' ware pottery probably deposited during the 11th century. The nature of this material, and the macrofossil remains from Sample <1>, suggest that this was a floodplain deposit augmented by refuse.

Above this lay a 1.50m thick layer of clayey make-up ([36]) which contained chalk flecks and fragments. The pottery in this soil was of late 15th- or early 16th-century date. It is likely that this episode of ground-making was caused by a renewed phase of friary development in the decades prior to the Dissolution, or the development of the precinct area after the Dissolution. It should be borne in mind that much of the

precinct would have been gardens for the friary, and as a consequence would have generally risen in height over the course of the friars' tenure. A layer of drier sandy silt ([28]) with some lime mortar debris, possibly waste from the construction or destruction of flint and mortar buildings to the north, overlaid the sticky and water-retentive make-up. A gravel surface ([09]) overlaid deposit [28].

A layer of garden soil ([08]) 0.4m thick, overlaid the gravel surface. This may have been a post-medieval deposit associated with the formal garden established by the Duke of Norfolk in 1661. A pit containing late 16th- or 17th-century pottery ([12]) cut through this soil, which was also overlain by the remains of two phases of Victorian or early 20th-century, brick-built structures (probably cottages or terraced houses). The earliest of these buildings was evidenced by a wall footing ([15]), which was probably built during the construction of Synagogue Street in 1848. The brick buildings were demolished in 1968 to make way for the Watney Mann Distribution Depot. The building remains were sealed by a 0.2m depth of sand, or hoggin, and powdery concrete waste, which was sealed by an asphalt surface.

5.3 Trench JS3

Figs 2 & 5

The earliest feature seen in this trench was an east-to-west aligned flint and mortar wall ([106]). The presence of brick fragments in the lowest visible build of the wall suggests a post-medieval or later date for its construction. The eastern continuation of St. Ann's Lane, or Staithe Lane as it was known in the late 19th century, probably lay to the north of the wall. The remains of a late Victorian, or early 20th-century granite sett surface ([115]) to the road was seen at the base of the northern face of the trench.

Originally the area to the south of the wall had been cellared. The cellar had been floored with a mortar and chalk surface ([111]). The cellar had been infilled with brick rubble ([112] and [113]) in the very late 19th or early 20th centuries. This infill was overlain by another mortar and chalk floor ([108]). There was some evidence of a later Victorian rebuild on top of the post-medieval wall. The wall may have formed the northern wall of a warehouse building.

Cartographic and pictorial evidence indicates that by the late 18th century the riverside in the King Street area was lined with large buildings, presumably warehouses. Late 19th-century maps show a large warehouse to the south of the eastern end of St. Ann's Lane in the area of this trench. By the 1960s the warehouse building had been demolished and replaced with buildings relating to the concrete works. The recently demolished concrete works structures are a replacement for the original works on a different footprint.

5.4 Trench JS4

Figs 2 & 6

Natural soils in this trench lay at 0.69m OD. This was sealed by a layer of dark grey silty material ([117]) possibly the result of natural soil build-up in a low-lying riverside location. A sample from this deposit (<2>) whilst containing fewer macrofossils than the sample from Trench JS2, again appeared to be domestic in origin. Mineralised faecal concretions were common, probably indicating that dumped domestic refuse was mixed with sewage residues. Pottery dating between the 11th to 12th century was recovered from [117].

A band of dumped sandy clay make-up material ([77]) of up to 1.0m depth, was seen to overlay deposit [117]. This was sealed by a thinner band of garden soil deposits, ([53] and [65]). Pottery finds from [77], dating from between the 13th and 16th centuries, suggests that the upper surface of the garden soils developed during the late 16th or 17th century.

A north-to-south-aligned ditch ([74]) was dug through this possible land-surface. The ditch was c.1.0m wide and 0.7m deep and had a sharp 'V'-shaped profile. This, and the nature of its single fill ([66]) suggests it did not remain open for long. The fill contained late 16th- or 17th-century pottery. It probably formed a marker for a boundary which was later expressed in another form, such as a fence. This boundary may have marked the division between the drier, more built up areas to the west and the wetter, riverbank or foreshore areas to the east

The ditch infill was capped with a thin deposit of burnt material ([54]). This burnt ditch-fill capping material was overlain by several bands of silty clay make-up ([63] and [64]), interleaved with occasional small layers of crushed lime mortar such as [62]. These deposits, approximately 0.4m thick, were probably post-medieval in date. They were topped with a final layer of crushed mortar ([50]) with a chalk and mortar possible floor surface ([47]) above. No other structural elements to this possible post-medieval building were found.

Overlying the chalk and mortar possible floor was a silty clay make-up ([46] and [60]), of 0.2m depth, which contained some brick fragments. The top of this deposit probably formed a ground surface. The deposit was overlain by a c.0.25m thick layer of rubble, of two distinct types. Crushed mortar with small brick and flint fragments ([55]), the result of the demolition of a nearby flint and mortar wall, was seen alongside a similar deposit ([59]) containing a greater concentration of brick as well as copious fragments of Welsh slate. This rubble possibly came from a nearby 18th-century warehouse or industrial building which had been re-roofed in the early Victorian era. The building may have been demolished by the 1880s to be replaced with smaller brick-built domestic structures. Parts of one such building ([67]), with a semi-sunken ground floor or cellar, could be seen in the south-west corner of the trench.

The late Victorian buildings which had sat in the vicinity of Trench JS4 survived until 1957 when the buildings at 125-129 King Street were altered and the car park to the rear of was formed (Smith and Shelley 2000).

5.5 Trench JS5

Figs 2 & 7

The obstruction encountered whilst trying to drive in the shoring sheets for this trench turned out to be a layer of natural geologically-derived river gravels which lay at -0.2m OD. The deposits overlaying this ([180], [181], [182] and [183]) were essentially natural in character, being riverine sandy silts mixed with organic matter and twigs and lumps of wood. At least half of these deposits had been reworked and some contained finds of 11th- to 12th-century date.

Three samples were taken from these deposits (<5>, <6> and <7>) and both samples <5> and <6> appear to be deposits of fluvial detritus. Possible domestic refuse (in the form of charred cereals, seeds/fruitstones of soft fruits, and fuel residues including charcoal and charred heather stems) was again present. The assemblages appear to be dominated by material derived from the local flora, either

plants growing in the shallow water at the river margins, on the banks or on land in close proximity to the river. Ruderal and segetal weeds are common along with grassland and, or, meadow plants. Given this riverine context, it is perhaps of note that wetland plant macrofossils are quite rare. The taphonomy of fluvial deposits is very complex, and it is by no means certain what percentage of the material recovered is derived from plants growing in the immediate vicinity. However, this paucity of wetland plant macrofossils may indicate that the riverbanks in this area were reasonably dry at the time at which the material was deposited.

With the exception of several large fragments of waterlogged wood, plant macrofossils were rare within sample <6>. Although it is not possible to conclusively interpret the assemblage, the low density of plant macrofossils (as compared with samples <5> and <7>) may indicate that this deposit was sealed before detrital material could accumulate.

An extensive tranche of make-up deposits sealed the riverine sandy silts. These were mostly silty clays, perhaps derived from a mixture of alluvial material and spoil from chalk extraction activities carried out along the eastern slope of the Ber Street ridge. They contained redeposited pottery dating between the 11th to 14th centuries, together with a small fragment of glass, probably of post-medieval date.

The make-up was sealed by extensive dumps of drier peat ash ([132]). During the late medieval and early post-medieval periods Norwich may have been extensively fuelled by peat from the Norfolk Broads peat workings (Lambert *et. al.* 1960). Sealing this peat ash were further dumps of silty material ([161] and [162]) and crushed mortar ([156]). These layers were overlain by two phases of mortar and chalk flooring ([130] and [131]). A single post-hole ([165]) was associated with these floors.

Layers of demolition material (including [128]) sealed the floors. Some of these contained undecorated wall plaster ([128]). This material was interleaved with sandy make-up deposits (such as [127] and [154]). A north-to-south aligned brick wall ([166]) was built on top of this material, and two phases of mortar and chalk flooring were associated with the wall. A later post-medieval date for this brick-built building seems likely.

Following the demolition of the brick-built structure, which was evidenced by rubble deposit ([124]), another mortar and chalk floored building ([147] and [151]) was constructed. Three further post-holes ([138], [140] and [145]) were identified in the trench. These were probably associated with this late post-medieval, mortar and chalk-floored building, but could have been internal partitions within a later Victorian warehouse which replaced the second building. The warehouse was brick-built and had a semi-sunken ground floor, or partial cellar, floored with reused yellow bricks and blue engineering bricks ([148]).

Cartographic evidence indicates that the Victorian warehouse was demolished between 1914 and 1935 and the area converted into a coal yard. Demolition deposits, make-up layers and an ash and cinder surface, the last probably associated with the coal yard, were recorded. In 1957 the area surrounding Trench JS5 was resurfaced with asphalt as part of the redevelopment of 125-129 King Street.

5.6 Trench JS6

Figs 2 & 8

Mid yellow-brown natural sand lay in this trench at 0.5m OD. This was sealed by a layer of slightly siltier sand ([171]) of 0.3m thickness, probably a natural deposit of alluvial or colluvial origin. This contained finds of prehistoric, Roman and Late Saxon date. The recovery of large unabraded sherds of Roman pottery from within the city of Norwich is unusual, although most sites on King Street contain a few finds of Roman date (Shelley in prep. a). A layer of a much darker silt ([170]) of 0.4m thickness, overlaid [171]. This contained medieval domestic debris, and was probably again the result of human augmented natural build-up in a floodplain, marsh or foreshore environment. Two samples (<3> and <4>) from deposits [170] and [171] indicated a plant macrofossil assemblage sufficiently similar to that from sample <1> (Trench JS2) to suggest that the material was contemporary. Plant remains in sample <4> were rare, the assemblage being consistent with domestic detritus.

During the post-medieval period an episode of ground-making or land reclamation took place. Up to c.0.9m of reworked riverine material ([176], [97] and [92]) was deposited and capped with 0.4m depth of garden soil ([89]). The reworked riverine material contained clay tobacco pipe stem fragments and pottery dating to the late 17th or early 18th centuries.

Somewhat later in the post-medieval period a nearby flint rubble building was demolished. Brick fragments from this demolition material ([90]) suggest that this building was of medieval date. Further garden soil was dumped on top of the crushed mortar and rubble demolition material.

In the late post-medieval or early Victorian period a large pit ([86]), possibly originally for industrial use, was dug in the north-eastern corner of the trench. Following its infilling the pit was capped with clay ([82]) overlain by an external cinder surface ([81]). By the middle of the Victorian era the Old Barge Yard area had become a warren of small courts and yards surrounded by low status domestic buildings (Goreham 1974). In 1937 these began to be cleared by Norwich Corporation. The Victorian buildings in the immediate vicinity of Trench JS6 seem to have been largely demolished between 1914 and 1935 to make way for a coal yard. An extensive layer of brick rubble ([80]) relating to this operation was seen within the trench, together with the footings for a brick wall ([95]) that possibly formed the eastern boundary of the coal yard.

In 1957 125-129 King Street was converted into their present form and the area to the rear of these buildings converted into a car park.

6.0 The Finds

6.1 The Roman Pottery

Introduction

Four sherds of Romano-British pottery weighing 0.125kg (Table 1), and in remarkably good condition, were recovered from two augmented natural deposits [170] and [171] in Trench JS6. The pottery constituted two sandy grey ware sherds from an unsourced, but probably local, production centre found in the utilitarian vessel types of a medium mouthed jar and lid. A fine ware pedestal beaker base

from Pakenham, in north Suffolk, was also found together with a fragment of Oxfordshire white mortaria. Both the Pakenham fine ware sherd and the Oxfordshire white ware mortaria can be allocated to the later part of the Roman period and suggest a date for this small assemblage of the late 3rd to 4th century AD.

Fabric	Forms	Quantity	Weight (g)	Weight (%)
Pakenham colour coat ware	3.0	1	81	53.29
Oxfordshire white mortaria	7.8	1	50	32.89
Sandy grey ware	4.5.3, 8.1	2	21	13.82
TOTAL		4	152	100.00

Table 1 Fabrics and forms listed in descending order of percentage of weight

Methods

The pottery was analysed using the recording procedure described in *Norfolk Archaeological Unit Finds Manual* (Shepherd 1999). All sherds were identified by fabric and form types, then counted and weighed to the nearest whole gram. The pottery and paper archive is currently held by the Norfolk Museums and Archaeology Service.

The Fabrics

The fabrics are described below in alphabetical order.

Oxfordshire white mortaria

Description: Tomber and Dore 1998, 174.

Pakenham colour coated ware

These include a range of hard fine fabrics with an irregular fracture. Fabric colours range through buff, pink, orange, red, brown or dark grey, often with different combinations in the margins and core. The colour of the slip is also variable, it can be buff, orange, brick red, brown or black; it can also be mottled or two-toned. The fabric is tempered with abundant fine to medium-grained sand with moderate amounts of larger grained quartz, sparse red iron stone, black ironstone and sparse moderate mica. Pakenham Colour Coats are found in a wide range of forms including bottles, flagons, jugs, imitation Samian forms and castor boxes. Beakers, both bag shaped and folded are most common and are decorated with barbotine scrolls, figures, scales, folding with rouletting and grooving and painting.

Pottery was produced at Pakenham between the late 2nd and 3rd centuries AD. It is not known to be distributed beyond local and regional sources and has been identified at Scole, Mildenhall and Lakenheath.

Description: Lyons and Tester forthcoming.

Sandy grey ware

Description: Andrews 1985, 92.

Discussion

Romano-British pottery dating to the period spanning the 1st to 4th centuries AD has been recorded across the whole area covered by the modern city of Norwich. Recent work on the distribution of Roman pottery from Norwich suggests that residual (in some instances re-used) Romano-British pottery and artefacts are frequently found surviving in the Saxon and medieval deposits of the city. Find spots of this nature are

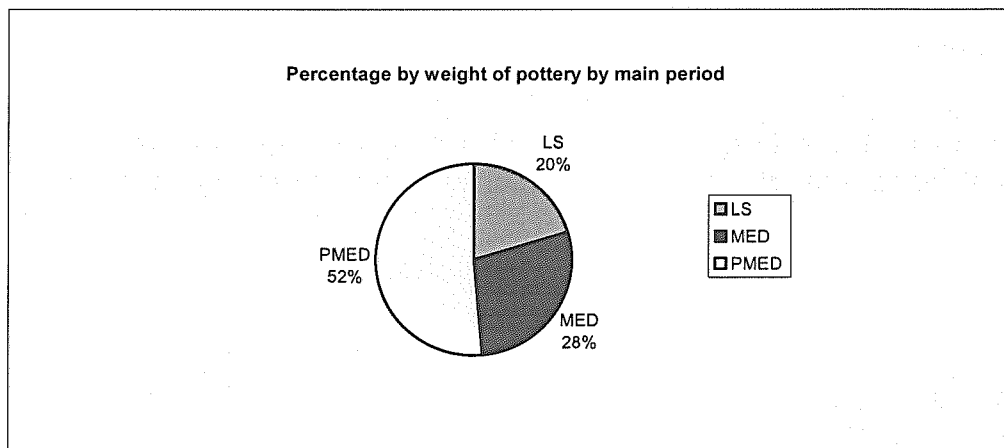
so frequent within Norwich that no discernible pattern of distribution can be seen. Roman pottery and tile was found during the nearby excavations at Dragon Hall (Shelley in prep. a). The tile assemblage from Dragon Hall has been interpreted as material imported (or robbed) from the Roman town of *Venta Icenorum*, which lies five kilometres to the south of Norwich, and the pottery as stray finds caused by manuring.

The unabraded nature of the pottery from Trench JS6 suggests that it was recovered from a spot close to the site of its primary deposition. This suggests possible activity in the area during the later part of the Roman period.

6.2 The Post-Roman Pottery

Introduction

A total of eighty-three fragments of post-Roman pottery, weighing 1.530kg, was recovered. The pottery ranges in date from Late Saxon through to post-medieval. A small quantity of the pottery came from deposits which had been contaminated with diesel ([36] and [40]).



Methods

The ceramics were quantified by the number of sherds present in each context, the estimated number of vessels represented and the weight of each fabric. Other characteristics such as condition and decoration were noted, and an overall date range for the pottery in each context was established. The pottery was recorded on proforma sheets by context using letter codes based on fabric and form. The codes used are based mainly on those identified by Jennings (Jennings 1981), and supplemented by additional ones used by Suffolk Archaeological Unit (S Anderson, unpublished fabric list). The ceramic information was recorded on an excel spreadsheet.

Late Saxon

Twenty-seven fragments of Late Saxon pottery weighing 0.31kg were recovered. The pottery comprises fragments of Thetford-type wares, mainly body sherds. However, three rim sherds of jars or cooking vessels were present, and several base fragments, included one which was distorted from [170], were also found. This context also contained a body sherd which had an applied thumbed decoration.

Some of the Thetford-type wares were clearly residual, whilst other sherds associated with pottery of 11th- and 12th-century date may have been contemporaneous. Thetford-type ware was the only fabric present in [172], apart from a single fragment of Roman pottery. It was also identified in [171], along with a single thick-walled sandy fragment with vertical striations, of indeterminate date.

Medieval

Thirty sherds weighing 0.43kg dated to a period of time from the 11th through to the 15th century. The early medieval wares comprised small quantities of Early medieval wares, including the rim of a ginger jar in [170]. Fragments of coarse sand and shelly ware identified as Yarmouth-type ware were also present as body sherds, and these dated to the 11th to 12th century. Local medieval unglazed ware, a fine to medium sandy greyware commonly found on sites in Norwich, was also present in some quantity. Although mainly represented by body sherds, the developed rim of a cooking vessel was found in [36], and this dated to the 13th and 14th centuries. Only a small quantity of Glazed Grimston ware was present, namely an undecorated fragment in [133], and a fragment of unglazed Grimston coarseware in [170].

A number of medieval glazed wares of regional, rather than local origin were present in the assemblage. These included three fragments of glazed Stamford ware, two of which were from a Developed Stamford ware vessel dating to post-1150 in [133]. A third fragment in [170] which was covered with a type 5 glaze which is thick and glossy yellow with black iron specks and impurities (Kilmurry 1980, 12) was made in a finer fabric (type B), dating to c.1050-12th century (Leach 1987, 74). In addition to the above, a fragment of a Hedingham jug was identified in [36]. The sherd has a Rouen-style decoration, consisting of zones of red slip differentiated by applied strips and bands of white slip, in imitation of the classic whiteware jugs imported from North France (Cotter 2000, 79). The dating of this type of highly decorated style for Hedingham ware still awaits clarification, but current research into the pottery from Colchester suggests that this type of decoration occurred there most commonly during the period c. 1200-50 (Cotter 2000, 86). Hedingham ware is found on sites in Norwich, such as Castle Mall, although it is rare (Lentowicz in prep.). It is perhaps more commonly found on sites in South Norfolk, closer to the area of its production, for example in Thetford (Little 1995, 108).

In addition small quantities of imported vessels were present, reflecting the location of the site near the river and in the heart of the mercantile area of the medieval city. A Flemish greyware body sherd was present in [176], this dating to the 11th to 12th century (Jennings 1981, 27), and the lower part of a Pingsdorf pitcher from the Rhineland with a thumbled base in [77] with a wider date range of 10th to 13th century. A small sherd of Andenne/Huy type ware from the Meuse area was also identified in [97]. This has a wide date range in the medieval period. A single fragment of Dutch-type redware which is of late medieval date was found in [36], in the same context as more local pottery dating to the 13th to 15th centuries.

Post-Medieval

Twenty-six fragments of post-medieval pottery weighing 0.79kg were recovered, including four unstratified sherds. Several locally made redwares were present in [6], as well as a fragment of the rim of a West Norfolk Bichrome pipkin. This fabric is thought to date to the 17th century, although it is possible that it may be present in late 16th-century deposits. A large sherd of a tin-glazed polychrome dish of 17th-

century date was also present. This is likely to have been made in the Low Countries rather than being an English copy. The vessel has a blue and orange abstract decoration around the border, and a central design of a green and orange foliate and floral pattern. The dish is decorated with more care and finesse than, for example, a typical product of one of the Southwark kilnsites.

In addition to a range of redwares, a fragment of a Cologne/Frechen drinking jug was present in [66], which dates to the second half of the 16th century. A sherd of Dutch-type redware was also present in this deposit. Other later pottery comprised fragments of Glazed red earthenware, a speckle-glazed jug of late 17th- to 18th-century date, and the handle of an English Staffordshire stoneware drinking vessel from a mug or tankard which was also of late 17th- to mid 18th-century date. A small fragment of Green glazed Border ware from Surrey-Hampshire was present in [180].

Conclusions

This small assemblage comprises a range of pottery which is typical of sites in central and riverside Norwich. The group is dominated by Thetford-type wares, locally produced medieval and post-medieval pottery, with a small range of more regional wares and a wide range of imported vessels, which were predominantly of Low Countries and German origin, reflecting the intensity of the trading connections between these countries from the early medieval period through to the 16th century.

6.3 The Faunal Remains

Introduction

A total of 3.405kg of faunal remains were recovered. Both domestic and wild species were identified during the assessment. The assemblage principally produced bone which had undergone fairly extensive butchering. Much of the assemblage appears to be derived from butchering and food use, although skinning and possible working evidence was also identified.

Species	Total identified	Measurable	Countable
Cattle	19	13	8
Sheep/goat	18	14	8
Bird	3	3	3
Deer (?)	1	0	1
Small mammal	1	1	1
TOTALS	42	19	21

Table 2: Quantities of identifiable species and quantities of measurable and countable bones

Methods

All of the bone was scanned for basic information, primarily to identify species present. Identified species were recorded and quantified following English Heritage guidelines (Davis 1992) and the number of countable elements and measurable bones were noted. A note was made of the estimated ages of the animals identified, elements present and any butchering observed. Overall context quantities and weights were also taken. All information was recorded on faunal remains recording sheets and a summary appears in a table with this report.

Results

The assemblage is dominated by the presence of the main two domesticated animals; cattle and sheep/goat, which were identified in almost equal numbers. Remains of these most common species showed extensive butchering, including skinning, and possible working on one bone. Ageing and measurable data is also obtainable from the remains of the cattle and sheep/goat in this assemblage (Appendix 5). Other identifiable bone in this assemblage includes bird, small mammal and possible deer remains. Proper identifications would be possible if a full analysis was carried out.

Conclusions and Recommendations for Further Work

It is probable that most of this assemblage derives from the butchering and consumption of both domestic animals and wild species. Marks on some of the bone also suggest skinning and possible working of the remains. Although this is a small assemblage, it has produced a good deal of identifiable bone and butchering evidence. Ageing data is also present and could give further indications to the uses of animals kept on or near this site. It is recommended that this assemblage is included in the analysis of any further bone from any potential further excavations on this site and full analysis should be carried out on any material of a 17th-century or earlier date.

6.4 The Worked Flint

Introduction

A total of seventeen pieces of struck flint were recovered from the site. Two pieces of burnt flint, weighing a total of 0.088kg, were also found; these have been discarded. The flint is summarised in Table 3 and listed by context in Appendix 6.

Two pieces appear to represent the preparation of cores and as such probably date to the Mesolithic or early Neolithic period. These are a long, soft hammer struck, rejuvenation flake, struck from across the platform edge of a core [171] and a possible crested blade [180]. This is triangular in cross section and has a few flakes struck from one side of its dorsal ridge. This technique was deliberately used to enable the production of good quality blades by improving the striking quality of the flint. The blade seems, subsequently, to have been utilised as a piercer-type implement with some retouch at its blunt distal point.

The flint consists mostly of unmodified flakes. A few soft hammer struck flakes of probable Mesolithic or early Neolithic date are present as well as hard hammer struck pieces which are more likely to be of later prehistoric date. One small blade is present [36].

Type	Number
Blade	1
Burnt fragment	2
Core trimming flake	1
Crested blade	1
Flake	11
?building fragment	1
Retouched flake	2

Table 3: The Worked and Burnt Flint

Many of the flints have very slight traces of a greyish or orangey coloured sandy concretion on their surfaces. In some cases this is likely to be mortar and the flints may be fragments of pieces used for building during the medieval period. However the frequency of this material, sometimes appearing on pieces which are clearly of prehistoric date, suggests it might be a natural concretion resulting from iron-rich gravels. Despite this, a few of the flints, which are sharp and have a fresh or 'dry' appearance, are thought possibly to be building debris.

One very thick flake is present [132]. This may be from the initial breaking of a nodule for use as a core but its squarish shape suggests that it too may possibly be a piece of building material or related waste.

Two retouched pieces are present. One is a sharp flake [133] with neat retouch along one edge. The other is a flake fragment, also sharp, which has retouch along one, possibly two, edges [170].

Distribution

A small blade was found in late 15th to early 16th-century make-up [36] in Trench JS2. The rest of the flint was found in Trenches JS5 and JS6. Ten pieces of struck flint came from Trench JS5. Most of it, including one retouched flake, was from make-up deposits [132], [133], [172] and [174] which were of post-medieval date. Two flints, the crested blade and a flake, were from [180] at the interface between the natural riverine material and the overlaying make-up deposits. Six struck flints and the two burnt fragments were from Trench JS6. Two flakes, one of them retouched, and a burnt piece were from Late Saxon silt deposit [170] and the core trimming flake, another flake and a burnt piece were from the underlying waterlogged deposit [171].

Discussion

The assemblage is small but represents activity dating to more than one period. A few flints, the core preparation pieces and some soft hammer struck flakes, may be of relatively early (Mesolithic or earlier Neolithic) date. Other pieces are more likely to be of later prehistoric date. It is possible that a small number of pieces might be debris from the use of flint as building material during the medieval period.

Struck flint similar in nature to that from this excavation was found during work at adjacent sites at St Anne's Wharf (Site 374) to the north and Dragon Hall (Site 449) to the west. Although most of this material, including that from the present site, has been found residually, its presence strongly suggests that activity, and probably settlement, occurred from the Mesolithic period onwards on the banks of the River Wensum and in its vicinity.

Worked flint has also been recovered from other sites on the banks of the Wensum River in this part of Norwich. Several worked flints of probable early Neolithic date were found from peat deposits on the east bank of the river during work on the Riverside development, and the diverse and fertile nature of the river valley in this area is seen as the ideal environment for occupation during the Mesolithic and early Neolithic period (Wiltshire and Emery 2000). Part of a polished flint of Neolithic date is recorded from Foundry Bridge (Site 477) and on the west bank of the river, material includes a patinated blade and two rounded end scrapers, the latter of probable Neolithic date, from Greyfriars (Site 845), and eleven flints including a blade of probable Mesolithic or Early Neolithic date from the site of the Austin friary (Site 374).

6.5 The Architectural Fragments

In total five worked stone fragments were recovered during the evaluation. Four of the pieces formed two sets of two joining fragments.

The first of these sets was found amongst demolition rubble [122] near the top of Trench JS5. It would have formed a flat rectangular slab of sandstone, probably Yorkstone, that measured 0.47m by 0.33 by 0.09m thick. It had a shallow regular worked groove 0.11m wide running longitudinally down its centre and was almost certainly a roadside drain or gutter dating from the late Victorian era (post-1860s). They were not retained after examination and recording.

The second set of fitting fragments, which were recovered from a layer of demolition material [57], also formed a flat rectangular slab of sandstone that measured 0.66m by 0.38m by 0.125m in thickness. Five of its six surfaces were covered with peck or pock-mark tooling, to allow the keying of mortar or cement. It had an oval depression c. 0.35m across in the centre of one face of the slab. These fragments probably formed a drain cover or gully. A late Victorian date for these pieces is also the most likely. These fragments were not retained after examination and recording.

The fifth fragment (SF 3) was medieval or late medieval in date and comprised a fragment of hood mould from an internal doorway with a double chamfer. It was of Caen stone and had a scoring-out line indicating the extent to which it would have projected (0.07m). There were claw chisel marks on its joint end. This fragment might have come from the Austin friary, a high-status secular building at Dragon Hall or one of the many other stone buildings which lined King Street during this period.

6.6 Ceramic Building Material

The site produced seventy-six examples of medieval and post-medieval brick and flat roof tile, some of which had traces of glaze present, and pan tile [12.414kg]. Although the majority of the assemblage is fragmentary, one complete post-medieval brick was recovered from deposit [157] measuring 233 x 111 x 60mm. This is notable for the presence of a shallow frog on one surface.

6.7 Clay Tobacco Pipe

Deposit [97] produced three fragments of undiagnostic clay tobacco pipe stem [0.022kg].

6.8 Small Finds

Small find numbers were allocated to an iron artefact which had been broken into two (SF1, [66]). The core of this item suggests it could be a blade of some sort. A piece of water-logged leather (SF2, [181]) was also recovered. The fragment has been stitched along two sides and appears to be a vamp or front upper of a medieval shoe, possibly a turn-shoe (Richenda Goffin, pers. comm.). One iron nail [133] was also recorded.

6.9 Glass

The site produced three pieces of post-medieval wine bottle and window glass [36], [133] and [172].

7.0 The Environmental Evidence

7.1 Plant and Animal Macrofossils

Introduction

Excavations at Old Barge Yard and St. Anne's Wharf revealed a series of deposits overlying natural river gravels on the west bank of the River Wensum. Seven samples were taken from basal deposits within four trenches for the extraction of the plant macrofossil assemblages.

Methods

The samples were processed by manual water flotation/washover. As it was anticipated that waterlogged plant macrofossils would be present within the assemblages, the flots were collected in a 250 micron mesh sieve and were stored in water prior to sorting. The wet retents were scanned under a binocular microscope at magnifications up to x 16, and the plant macrofossils and other remains noted are listed on Table 1. Nomenclature within the table follows Stace (1997). Unless otherwise stated, all plant remains were preserved in a waterlogged condition. The non-floating residues were collected in a 1mm mesh sieve. Once dried, artefacts/ecofacts will be removed for further specialist analysis. As no further analysis was anticipated as a result of this assessment, and as the macrofossils were generally robust, the wet retents (with the exception of the larger wood fragments) were air-dried after sorting to facilitate long term storage.

Results

Cereals, seeds and/or wetland plant and tree/shrub macrofossils were present at varying densities in all samples. Samples 1 to 4 produced small charred assemblages of cereals and seeds. Preservation of the charred material was poor to moderate; most cereal grains were puffed and distorted (probably due to high temperatures during combustion) and a high proportion of the remaining material was very fragmented. Although rare examples of charred macrofossils were also noted in Samples 5 to 7, waterlogged remains were predominant within these assemblages. Most waterlogged macrofossils were well preserved and robust although some specimens were degraded and distorted.

Cereals and Other Food Plants

Charred oat (*Avena* sp.), barley (*Hordeum* sp.), rye (*Secale cereale*) and wheat (*Triticum* sp.) grains were noted, with oats being predominant. A single rye rachis node was the sole chaff element recorded. Waterlogged remains of other food plants included fig (*Ficus carica*) and strawberry (*Fragaria vesca*) seeds, fragmentary apple/pear (*Malus/Pyrus* sp.) 'pips' and plum/damson (*Prunus* sp.) type fruit stone fragments. A single flax (*Linum usitatissimum*) seed and a possible fragment of cherry (*Prunus avium*) fruit stone were recovered from Sample 7.

Wild Flora

Charred seeds of common cereal contaminants were noted as single specimens in Samples 1, 2 and 4. Seeds of corn cockle (*Agrostemma githago*), corn spurrey (*Spergula arvensis*) and vetch/vetchling (*Vicia/Lathyrus* sp.) were present. Segetal taxa were also recorded from the waterlogged assemblages and included corn

cockle, stinking mayweed (*Anthemis cotula*), orache (*Atriplex* sp.), fat-hen (*Chenopodium album*), knot grass (*Polygonum aviculare*), wild radish (*Raphanus raphanistrum*), dock (*Rumex* sp.), campion (*Silene* sp.), sow thistle (*Sonchus oleraceus*) and chickweed (*Stellaria media*). Ruderal taxa were also common and included fool's parsley (*Aethusa cynapium*), hemlock (*Conium maculatum*), dead-nettles (*Lamium* sp.), nipplewort (*Lapsana communis*), dandelion (*Taraxacum* sp.) and nettles (*Urtica* sp.).

Wetland/aquatic plant macrofossils were present at a low density in all but Samples 2 and 4. Charred sedge (*Carex* sp.) and spike-rush (*Eleocharis* sp.) nutlets were noted in Samples 1 and 3 respectively. Waterlogged remains included seeds of water plantain (*Alisma plantago-aquatica*), wild celery (*Apium graveolens*), marsh marigold (*Caltha palustris*), bog-bean (*Menyanthes trifoliata*), fine-leaved water dropwort (*Oenanthe aquatica*), pondweed (*Potamogeton* sp.), celery-leaved crowfoot (*Ranunculus sceleratus*) and horned pondweed (*Zannichellia palustris*).

Tree/shrub macrofossils were rare. Charred hazel (*Corylus avellana*) nutshell fragments were noted in sample 3 and small waterlogged fragments were recorded from Samples 5, 6 and 7. Samples 5 and 7 also contained individual specimens of alder (*Alnus* sp.) fruits, elderberry (*Sambucus nigra*) seeds and bramble (*Rubus* sect. *Glandulosus*) 'pips'.

Other Plant Macrofossils

Charcoal fragments and/or pieces of charred root, rhizome or stem were present throughout. Waterlogged root/stem fragments were abundant in Samples 5, 6 and 7. Charred ling (*Calluna vulgaris*) capsules were noted in Sample 5 along with heather (Ericaceae) stem, floret and leaf fragments and a single cross-leaved heath (*Erica tetralix*) leaf. Other plant macrofossils included indeterminate buds, thorns, seeds, twigs and a catkin. Moss fragments were common in Samples 5 and 7 and Sample 6 produced a large quantity of sizeable wood fragments.

Animal Macrofossils

With the exception of waterlogged arthropod remains, animal macrofossils were rare. Bone fragments, including burnt specimens, were noted in Samples 1, 2, 3 and 6 and fish bones/scales were present in all but Sample 6. Possible faecal concretions were relatively common in Sample 2. Other animal macrofossils included eggshell and marine mollusc shell fragments and small mammal or amphibian bones.

Molluscs

Mollusc shells were noted at low to moderate densities in four samples (Samples 1, 2, 5 and 7). Terrestrial and freshwater obligate species were present, with freshwater taxa being predominant. Although shells of terrestrial snails were rare, most were of woodland/shade loving species including *Clausilia* sp., *Discus rotundatus* and *Oxychilus* sp.. Of the freshwater mollusc shells, specimens of *Bithynia* sp. were common in Sample 5, while shells of *Lymnaea peregra* were abundant in Sample 7. Other taxa included *Anisus leucostoma*, *Bathyomphalus contortus*, *Planorbis planorbis*, *P. vortex*, *Valvata cristata* and *V. piscinalis*.

Other Material

Other materials were only noted in Samples 1 to 4. The black porous 'cokey' material may be derived from the combustion of organic materials at very high temperatures. Other materials included fragments of burnt or fired clay and vitrified material.

Discussion

The charred material within Samples 1, 2, 3 and 4 may all be derived from very low density scatters of domestic refuse. Possible dietary residues from Sample 1 ([40], Trench JS2) include cereal grains, bone fragments, eggshell, fish bones and marine mollusc shell fragments. Although fewer macrofossils were present in Sample 2 (Trench JS4), the assemblage again appears to be domestic in origin. Mineralised faecal concretions are common, probably indicating that the dumped domestic refuse is mixed with sewage residues. The plant macrofossil assemblage from Sample 3 (Trench JS6) is sufficiently similar to that from Sample 1 to suggest that the material is contemporary. Sample 4 (Trench JS6, [171]) was from a layer containing medieval domestic debris. Plant remains were rare, but the assemblage is consistent with domestic detritus.

Possible domestic refuse from (in the form of charred cereals, seeds/fruitstones of soft fruits, and fuel residues including charcoal and charred heather stems) is again present in Samples 5 and 6. The assemblages appear to be dominated by material derived from the local flora – either plants growing in the shallow water at the river margins, on the banks or on land in close proximity to the river. Ruderal and segetal weeds are common along with grassland and/or meadow plants. Given this riverine context, it is perhaps of note that wetland plant macrofossils were quite rare. The taphonomy of fluvial deposits is very complex, and it is by no means certain what percentage of the material recovered is derived from plants growing in the immediate vicinity. However, this paucity of wetland plant macrofossils may indicate that the riverbanks in this area were reasonably dry at the time at which the material was deposited.

With the exception of several large fragments of waterlogged wood, plant macrofossils are rare within Sample 6, and it seems very unlikely that the material was derived from a peat, as was originally suspected during excavation. Although it is not possible to conclusively interpret the assemblage, the low density of plant macrofossils (as compared with Samples 5 and 7) may indicate that this deposit was sealed before detrital material could accumulate.

Conclusions and Recommendations for Further Work

In summary, charred domestic refuse appears to be present in all assemblages and is the dominant component of Samples 1 to 4. A high proportion of the material within Samples 5 to 7 may be derived from the flora bordering the river; ruderal weeds and grass-/meadow-land plants are predominant, with wetland/aquatic taxa being rare by comparison. Although the species list for Samples 5 and 7 is relatively comprehensive, the precise origin and date of the material is unknown and its relevance to the archaeological interpretation of the area is uncertain. The remaining assemblages contain insufficient material for further quantitative analysis. No further work on these samples is recommended.

8.0 Conclusions

The curtilage of the development area within which these trenches were dug (from the boundary between 127 and 129 King Street, the river edge, the southern wall of the brewery distribution depot, the western wall of the concrete works and the eastern wall of Bennetts) encompasses an area of c. 5360m². The six trenches totalled an area of 49m², or less than 1% of the St Ann's Lane and Old Barge Yard area. This figure should be borne in mind when the results of the evaluation are taken into account.

Natural sands and gravels were seen in four of the trenches. One of the others was too heavily contaminated by hydrocarbons to allow excavation to natural soils, and the excavation of the sixth was hindered by live services and an operating concrete plant. The natural horizon is considerably lower than the existing ground surface, as befits the former river floodplain that the development area under examination encompasses. The trenches have shown that up to 3.4m depth of material has accumulated over the natural horizon, the deepest deposits being in the car-parking area to the south of the distribution depot shed, and the shallowest being behind the former Bennetts building.

The earliest deposits related to vegetal growth beside the river, augmented by the introduction of human refuse and waste. Environmental analysis of these deposits indicate that riverine incursions may have been surprisingly rare, and that the foreshore was more often dry. The introduction of refuse appears, from the ceramic evidence, to have commenced in the 10th or 11th centuries, and this concords with the evidence from excavations at Dragon Hall for the first settlement of the area (Shelley in prep.). The horizon was not flat, significant differences in the level of natural being noted. It is entirely possible that small outflows crossed the foreshore, and it is to be noted that the level of natural in Trench JS4 was considerably lower than in other trenches. This, and the free flow of ground water within this trench, may suggest the buried remnants of a small, seasonal stream.

There were several indications that the length of human presence in the area could be considerably extended backwards in time beyond the Late Saxon period. The recovery of worked flints adds to the corpus of evidence from this bank of the river, which suggests that the area was visited from the Mesolithic period onward. The discovery of large and unabraded sherds of Roman pottery may provide the first, tantalising evidence for Roman settlement on the east-facing slopes of the Ber Street ridge. Unfortunately there is not at present a sufficiently large assemblage to prove or disprove this suggestion.

The fact that no evidence was discovered for medieval waterfront activities other than refuse dumping is disappointing, and it is here that the small sample area must be borne in mind. There is no reason to suppose that development of the river foreshore was any less concerted here than at Cannon Wharf to the south (Shelley 1997) or between the distribution depot and Baltic Wharf (Brennand and Hutcheson 1997). The wet environment pertaining in many of the trenches at lower depths means that preservation of organic material would be good, and this is evidenced by the recovery or recording of several lumps of wood and a leather shoe fragment.

A progressive raising of the level of the foreshore was demonstrated in many of the trenches. In Trench JS4 a metre's depth of soils had been deposited between the 13th and 16th centuries, presumably as the waterfront area became more

established. This material acted to separate the foreshore of the early medieval period from the ground upon which the post-medieval buildings noted in the trenches were raised. Between these two episodes the area outside of the Austin friary must have been used for activities relating to the wharf. Such activities may be reflected in evidence for cranaige infrastructure, stock-holding areas and light warehouses. These may be more visible in an area excavation than in small evaluation trenches.

The evidence from the trenches within the area of the former friary (Trenches JS1 and JS2) visibly demonstrated the build-up of garden soils which occurred within the precinct. This remained as gardens until the 19th century, after which time industrial and domestic buildings were constructed. Trench JS1 contained evidence for the former Thomas Smithdale and Sons iron foundry, and Trench JS2 evidence for the Victorian buildings seen on the 1885 Ordnance Survey plan.

The evidence for 17th-century expansion of buildings seen at Dragon Hall is repeated in Trenches JS3, JS4, JS5 and JS6. The ditch seen in Trench JS4 may have related to this expansion over the waterfront. The building in Trench JS3 in particular, and the remnants of St Ann's Lane, survived in reasonable condition and would, if excavated, provide evidence for the nature of the waterfront infrastructure during the post-medieval period.

Recommendations for future mitigation of the archaeological features and deposits recorded by this evaluation will be made by Norfolk Landscape Archaeology.

Acknowledgements

The evaluation excavation was carried out by John Percival, David 'Ghost' Adams, Mick Boyle and Richard Jackson (NAU). The project was designed and overseen by Andy Shelley of Norfolk Archaeological Unit. The finds were processed by Lucy Talbot. The medieval pottery was examined by Richenda Goffin, the faunal remains by Julie Curl, the leather object by Richenda Goffin and Alice Lyons, the Roman pottery by Alice Lyons and other finds by Lucy Talbot. The architectural fragments were examined by Stephen Heywood of Norfolk County Council Historic Building Conservation Section. Machine excavation and shoring was carried out by Bryn Williams Builders and Civil Engineers. Thanks are also due BWB partnership and their subcontractors, Britannia Parking Ltd. and Andrew Dodson of Greenhatch Ltd. The author would also like to thank Forbes Marsden of John Samuels Archaeological Consultants, Rex Littlewood of Wilson Bowden Developments and Chris Barringer and Neil Sigsworth of the Dragon Hall Trust for their invaluable co-operation and help. This report was edited by Alice Lyons and Andy Shelley. Illustrations are by Neil Moss (Fig. 1), Maggie Foottit, David Dobson and the author.

Bibliography

- Adams, D., 2003 *Report on an Archaeological Evaluation and Building Survey at Norwich City Football Club, Carrow Road, Norwich, Norfolk*, Norfolk Archaeological Unit report 791
- Andrews, G., 1985 'The Coarse Wares' in *Excavations at Brancaster 1974 and 1977*, E. Anglian Archaeol. 23, 71-123
- Ayers, B. 1994 *Norwich* (London)
- Blomefield, F., 1805-10 *An essay towards a topographical history of the county of Norfolk*
- Brennand, M., and Hutcheson, A. R. J., 1998 *Results of an Archaeological Evaluation at Norwich Breweries Distribution Depot, 99-107 King Street, Norwich Norfolk* Archaeological Unit report 328
- British Geological Survey 1975 *Norwich, England and Wales Sheet 161 Solid and Drift edition, 1:50,000 series* (Southampton)
- Cotter, J., 2000 *Post-Roman pottery from excavations in Colchester 1971-85* Colchester Archaeological Report 7
- Darling M. J. and Gurney, D., 1993 'The Pottery' in *Caister-on-Sea Excavations by Charles Green, 1951-55*, East Anglian Archaeology 60, 153-256
- Davis, S., 1992 *A Rapid Method for Recording Information about Animal Bones from Archaeological Sites*, Ancient Monuments Laboratory Report 19/92
- Emery, P.A., forthcoming *Norwich Greyfriars: Excavations at the Former Mann Egerton Site, Prince of Wales Road, Norwich 1992-5*, BAR British Series
- Emery, P.A., and Ashwin, T. A., 2001 'Prehistoric Occupation Evidence at Bussey's Garage, Palace Street, Norwich', *Norfolk Archaeol.* Vol. XLIII, Part IV, 670-675
- Fewster, M., 1981 'Thomas Smithdale and Sons: A study of a Victorian Ironfounder', *Journal of the Norfolk Industrial Archaeology Society*, Vol.3, No.1, 23-31
- Fowler, G.H., (ed) 1931 *The cartulary of the Cistercian abbey of Old Wardon, Bedfordshire*
- Goreham, G., 1974 *Yards and Courts of Old Norwich* (Dow Litho Press: Norwich/Dereham)
- Holme, M., 2002 *Excavations at King Street, Norwich (813N and 26577N): Assessment and Updated Project Design* Northamptonshire Archaeology unpublished report
- Hutcheson, A. R. J., 1998 *Report on an Archaeological Evaluation and Structural Survey at Read's Flour Mill, 238-249 King St, Norwich Norfolk* Archaeological Unit Report 311, unpublished
- Jennings, S., 1981 *Eighteen Centuries of Pottery from Norwich*, East Anglian Archaeology 13
- Kilmurry, K., 1980 *The pottery industry of Stamford, Lincolnshire c. AD850-1250* British Archaeological Reports (British Series) 84
- Lambert, J. M., Jennings, J. N. Smith., C. T., Green, C., and Hutchinson, J. N., 1960 *The Making of the Broads; A reconsideration of their origin in the light of New Evidence* The Royal Geographical Society, London
- Leach, H., 1987 'Stamford ware fabrics' *Medieval Ceramics* 11
- Lentowicz, I., in prep. 'The pottery' (passim,) in Shepherd Popescu E, forthcoming *Norwich Castle Excavations and Historical Survey, 1997-98* East Anglian Archaeology
- Lipman, V.D., 1967 *The Jews of Medieval Norwich* (London)
- Little, A., 1995 'The Pottery' in Andrews, P. *Excavations at Redcastle Furze, Thetford* East Anglian Archaeology 72 101-116
- Lyons, A. L., and Tester, C., forthcoming 'The Roman Pottery' in Ashwin, T. and Tester. A., *Scole*, East Anglian Archaeology

- Penn, K. J., 1998 *Results of an Archaeological Evaluation at the former Brewery Site, King St, Norwich* Norfolk Archaeological Unit Report 342
- Rogerson, A., 1977 *Excavations at Scole 1973*, East Anglian Archaeology 5, 97-224.
- Rutledge, E., in prep. 'Historical and archaeological background to the King Street area' in Shelley, A., in prep a.
- Rutledge, E., 2002 'The early stone house in Norwich: the documentary evidence' in eds Ayers, B.S., and Pitte, D., *La maison medieval/the medieval house*, 103-109
- Sandred, K.I., and Lindström, B., 1989 *The place-names of Norfolk part I*, English Place-name Society LXI
- Shelley, A., 1997 *An Evaluation at Cannon Wharf, King Street, Norwich*, Norfolk Archaeological Unit report 296
- Shelley, A., 2000 'King Street' *Current Archaeology* 170, 79-84
- Shelley, A., 2001 *Report of a Watching Brief at 80 King Street*, Norfolk Archaeological Unit report 625
- Shelley, A., in prep. a *Dragon Hall, Norwich: Excavation and survey of a late medieval merchant's trading complex*, E. Anglian Archaeol
- Shelley, A., in prep. b *Excavations at the Austin Friary, Norwich: Assessment Report and Updated Project Design* Norfolk Archaeological Unit report draft
- Shelley, A., and Brennand, M., in prep. 'Excavations at 51-53 King Street, Norwich', *Norfolk Archaeol.*
- Shepherd, L., (ed) 1999 *Norfolk Archaeological Unit. Finds Manual* (Version 2.0). Unpublished.
- Shepherd Popescu, E., in prep. *Norwich Castle: Excavations and Historical Survey, 1987-98*, E. Anglian Archaeol.
- Smith, R., and Shelley, A., 2000 *Report of surveys on buildings and walls between King St, Hoborough Lane, the River Wensum and Old Barge Yard, Norwich*, Norfolk Archaeological Unit report 500
- Stace, C., 1997 *Flora of the British Isles*. Second edition. Cambridge University Press.
- Taylor, R., 1821 *Index Monasticus*, 76 plan f.
- Tomber, R., and Dore, J., 1998 *The National Roman Fabric Reference Collection. A Handbook*, MoLAS Monograph 2
- Trimble, G., 2000 *Report of an Archaeological Evaluation at 80 King Street*, Norfolk Archaeological Unit report 533
- Hurst, G.,(eds) 1969 'Norfolk: Norwich, Austin Friary' in *Medieval Archaeol.* Vol XIII, 247
- Wiltshire, P.E.J., and Emery, P.A., 2000 *Report on an Archaeological Watching Brief at Riverside, Norwich* Norfolk Archaeological Unit report 354
- Young C J., 1977 *The Roman Pottery Industry of the Oxford Region.* British Archaeological Report 43 (Oxford)

Appendix 1: Context Summary

Context	Category	Trench	Description/interpretation	Period
1	Deposit	JS2	Asphalt yard surface	Modern
2	Deposit	JS2	Hoggin below Asphalt	Modern
3	Deposit	JS2	Compacted grey sandy silt make up layer	Modern
4	Masonry	JS2	Red brick /lime mortar footing	Victorian
5	Cut	JS2	Construction cut for (4)	Victorian
6	Deposit	JS2	Grey sand silt makeup	Late 16th or 17th century
7	Deposit	JS2	Crushed mortar spread, interface between Victorian make up and underlying Post-medieval deposits, surface?	17th century
8	Deposit	JS2	Post friary garden soil?	17th century
9	Deposit	JS2	Stony sand makeup layer	Late 15th or early 16th century
10	Deposit	JS2	Brown silty sand fill of [12]	Late 16th or 17th century
11	Deposit	JS2	Chalky soil fill of [12]	Late 16th or 17th century
12	Cut	JS2	Cut of trench/post hole	Late 16th or 17th century
13	Deposit	JS2	Grey/brown gritty soil fill of [14]	Modern
14	Cut	JS2	Cut of pipe trench	Modern
15	Masonry	JS2	Red brick mortar footing of wall for 19th/20th century warehouse	Victorian/Modern
16	Cut	JS2	Construction cut for (15)	Victorian/Modern
17	Deposit	JS2	Dump of lime mortar ; makeup	17th century ?
18	Deposit	JS2	Grey ashes/cinders makeup	Victorian/Modern
19	Deposit	JS2	Reddish grey clay silt makeup layer	Victorian/Modern
20	Deposit	JS2	Red brick /mortar demolition rubble	Victorian/Modern
21	Masonry	JS2	Red brick/lime mortar N-S aligned wall	Victorian/Modern
22	Cut	JS2	Cut of a modern truncation	Victorian/Modern
23	Deposit	JS2	Greyish brown clay silt dump	Victorian/Modern
24	Deposit	JS2	Grey gritty silt makeup layer	Victorian/Modern
25	Cut	JS2	Cut for N-S aligned wall [21]	Victorian/Modern
26	Deposit	JS2	Spread of flint pebbles, possible surface, path track?	Late medieval ?
27	Deposit	JS2	Spread of flint pebbles, possible surface.	Late medieval ?
28	Deposit	JS2	Lime mortar spread/dump. Possible basis for a surface	Late 15th or early 16th century
29	Deposit	JS1	Demolition rubble makeup	Victorian/Modern
30	Deposit	JS1	Silty loam ,cultivated surface?	Victorian/Modern
31	Deposit	JS1	Grey brown makeup deposit	Pre 1850 ?
32	Deposit	JS1	Contaminated grey black silty clay	Pre 1850?
33	Deposit	JS1	Fill of construction trench for wall (35)	Modern
34	Cut	JS1	Construction cut for wall (35)	Modern
35	Masonry	JS1	Remains of N-S aligned wall	Modern
36	Deposit	JS2	Grey clay silt make up layer	Late 15th or early 16th century
37	Deposit	JS1	Chalk mortar, construction debris from wall (35)	Victorian
38	Cut	JS1	Construction cut for wall (39)	Modern
39	Masonry	JS1	Red brick and concrete footing for N-S aligned wall	Modern
40	Deposit	JS2	Contaminated dark grey sandy silt probably a natural deposit overlying natural gravels	11th-14th century
41	Masonry	JS1	E-W aligned red brick wall	Modern
42	Deposit	JS1	Yellowish grey sandy clay dump	Victorian
43	Masonry	JS1	Rectangular red brick well lining	Victorian
44	Deposit	JS4	Black asphalt yard surface	Modern
45	Deposit	JS4	Orange sand, bedding layer for asphalt surface (44)	Modern
46	Deposit	JS4	Mid brown gritty clay, compacted demolition rubble	Post-Medieval
47	Deposit	JS4	Dump of waste chalk	Post-Medieval
48	Deposit	JS4	Fill of pipe trench [49]	Modern

Context	Category	Trench	Description/interpretation	Period
49	Cut	JS4	Cut of pipe trench	Modern
50	Deposit	JS4	Chalk mortar rubble	Post-Medieval
51	Deposit	JS4	Dark brown silty clay make up layer	Post-Medieval
52	Deposit	JS4	Mid yellow clay deposit	13th-16th century
53	Deposit	JS4	Mid brown sandy clay make up layer	13th-16th century
54	Deposit	JS4	Brownish black gritty carbonised deposit	Post-Medieval
55	Deposit	JS4	Yellowish white flint and mortar rubble deposit	Victorian/Modern
56	Deposit	JS4	Dump of ashes cinders and charcoal for making up purposes	Modern
57	Deposit	JS4	Dump of demolition material for levelling /making up purposes	Post-Medieval
58	Deposit	JS4	Charcoal dump	Post-Medieval
59	Deposit	JS4	Red brick and mortar demolition rubble associated with building above cellar [69]	Victorian/Modern
60	Deposit	JS4	Mid to dark grey clay silt dump for making up purposes	Post-Medieval
61	Deposit	JS4	Pale to mid grey clay silt dumped for making up purposes	Post-Medieval
62	Deposit	JS4	Dump of lime mortar for making up purposes	Post-Medieval
63	Deposit	JS4	Dark grey clay silt dump for making up purposes	Post-Medieval
64	Deposit	JS4	Orange brown silt clay make up layer	Post-Medieval
65	Deposit	JS4	Pale to mid grey clay silt makeup layer	13th-16th century
66	Deposit	JS4	Pale grey silt sand primary fill of ditch [74]	Late 16th or 17th century
67	Masonry	JS4	Red brick lime mortar wall of a cellar associated with demolished Victorian? building above	Victorian/Modern
68	Deposit	JS4	Mid grey clay silt backfill of cellar[69]	Victorian/Modern
69	Cut	JS4	Cut of Victorian cellar wall	Victorian/Modern
70	Cut	JS4	Cut of pipe trench containing 19th-20th century ceramic drain pipe	Modern
71	Cut	JS4	Cut of feature of unknown useage	Modern
72	Deposit	JS4	Pale to mid grey sand silt clay fill of [71]	Modern
73	Deposit	JS4	Backfill of drainpipe trench [70]	Modern
74	Cut	JS4	Cut of N-S aligned ditch [boundary]	Late 16th or 17th century
75	Deposit	JS4	Grey stone slabbing, sealing layer /floor	Victorian/Modern
76	Deposit	JS4	Brownish red brick and tile fragments (burnt)	Post-medieval
77	Deposit	JS4	Pale orange brown sandy clay makeup	13th-16th century
78	Deposit	JS6	Asphalt	Modern
79	Deposit	JS6	Mid yellow brown hoggin levelling/makeup for (78)	Modern
80	Deposit	JS6	Crushed brick ,chalk and sand demolition material	Modern
81	Deposit	JS6	Dark grey cinders/ dark soil ,debris from industrial activity	Victorian/Modern
82	Deposit	JS6	Mixed mottled orange brown chalk clay trample sealing pit [86]	Victorian/Modern
83	Deposit	JS6	Dark grey brown gritty sandy silt, upper fill of pit [86]	1600-1800
84	Deposit	JS6	Dark grey brown gritty silty sand ,fill of [86]	1600-1800
85	Deposit	JS6	Sand /ash/organic material, fill of [86]	1600-1800
86	Cut	JS6	Cut of pit	1600-1800
87	Deposit	JS6	Dark soil and rubble backfill of modern pipe trench	Modern
88	Cut	JS6	Cut of a modern pipe trench	Modern
89	Deposit	JS6	Dark grey brown silt/sand/ loam .Garden soil, makeup?	Post-medieval
90	Deposit	JS6	Crushed mortar rubble demolition debris ,fill of [91]	Post-medieval
91	Cut	JS6	Possible cut of pit, mortar rubble tip, robber trench	Post-medieval
92	Deposit	JS6	Dark grey brown silty gritty soil ,redeposited garden soil?	Late 17th or 18th century
93	Deposit	JS6	Mid to dark brown gritty garden soil, fill of [94]	Modern
94	Cut	JS6	Cut of pit	Modern
95	Masonry	JS6	Brick/tile Victorian or more recent wall footing	Modern
96	Cut	JS6	Construction cut for footing (95)	Modern
97	Deposit	JS6	Mid brown sandy clay silt ,post Medieval levelling	Late 17th or 18th century
98	Deposit	JS6	Compacted rubble forming upper fill of pit [94]	Modern
99	Masonry	JS3	Norfolk red brick storm drain	Victorian/modern
100	Deposit	JS3	Crushed chalk mortar, backfill of construction cut for(99)	Victorian/modern

Context	Category	Trench	Description/interpretation	Period
101	Cut	JS3	E-W aligned construction cut for storm drain (99)	Victorian/modern
102	Deposit	JS3	Pale to mid brown sandy clay, fill of post medieval cellar	Victorian/modern
103	Deposit	JS3	Fill of electrical service trench	Modern
104	Cut	JS3	Cut of electrical service trench	Modern
105	Deposit	JS3	Dark brown gritty garden soil makeup	Post-medieval ?
106	Masonry	JS3	E-W aligned brick and flint wall	Post-medieval
107	Cut	JS3	Construction cut for wall (106)	Post-medieval
108	Deposit	JS3	Crushed chalk floor	Victorian/modern
109	Deposit	JS3	Reinforced concrete dump	Modern
110	Deposit	JS3	Debris from demolition and clearance in preparation for construction of concrete works	Modern
111	Deposit	JS3	Crushed chalk floor	Post-medieval
112	Deposit	JS3	Red brick/mortar demolition rubble ,makeup for chalk surface (108)	Victorian/modern
113	Deposit	JS3	Dark brown industrial debris	Victorian/modern
114	Deposit	JS3	Asphalt yard surface	Modern
115	Deposit	JS3	Yard surface prior to asphalt (104)	Modern
116	Deposit	JS3	Crushed brick demolition rubble	Modern
117	Deposit	JS4	Dark grey sandy silt clay, represents accumulation of material prior to med-post med making up of area .Overlies natural	11th-12th century
118	Deposit	JS5	Asphalt yard surface	Modern
119	Deposit	JS5	Hoggin bedding for (118)	Modern
120	Deposit	JS5	Pale purplish brown ash/cinders,. Bedding/ levelling for (118) (119)	Modern
121	Deposit	JS5	Chalk mortar floor	Modern
122	Deposit	JS5	Crushed red brick mortar rubble	Modern
123	Deposit	JS5	Dark grey ash/clinker. Levelling material	Victorian/modern
124	Deposit	JS5	Mid grey ashy sandy silt .Dump of demolition material	Post-medieval
125	Deposit	JS5	Tamped crushed chalk floor	Post-medieval
126	Deposit	JS5	Tamped crushed chalk floor	Post-medieval
127	Deposit	JS5	Orange brown coarse sand. Makeup for chalk surfaces (125) (126)	Post-medieval
128	Deposit	JS5	Mid orange brown sandy silt. Dump of demolition material	Post-medieval
129	Deposit	JS5	Dark greyish brown sandy silt. Demolition material	Post-medieval
130	Deposit	JS5	Crushed chalk mortar floor	Post-medieval
131	Deposit	JS5	Crushed chalk mortar floor	Post-medieval
132	Deposit	JS5	Deposit of largely peat ash. Makeup/ levelling for chalk floor (130)	Post-medieval
133	Deposit	JS5	Mid to dark grey silty clay makeup layer	Post-medieval
134	Masonry	JS5	Flint and mortar foundation for Victorian warehouse wall	Victorian/modern
135	Deposit	JS5	Brick/mortar rubble. Backfill of construction trench for foundation (134)	Victorian/modern
136	Deposit	JS5	Dark grey sandy silt. Backfill of construction trench [137]	Victorian/modern
137	Cut	JS5	Construction cut for wall footing (134)	Victorian/modern
138	Cut	JS5	Cut of a post hole associated with chalk floors (125) (126)	Victorian/modern
139	Deposit	JS5	Fill of post hole [138]	Victorian/modern
140	Deposit	JS5	Cut of post hole associated with chalk floors (125) (126)	Victorian/modern
141	Deposit	JS5	Fill of post hole [140]	Victorian/modern
142	Cut	JS5	Cut containing (132)	Post-medieval
143	Cut	JS5	Cut for trench containing ceramic drainage pipe	Modern
144	Deposit	JS5	Backfill of trench cut [143]	Modern
145	Cut	JS5	Cut of possible large post hole	Victorian/modern
146	Deposit	JS5	Fill of [145]	Victorian/modern
147	Deposit	JS5	Chalk mortar floor	Post-medieval
148	Masonry	JS5	Brick floor .Constructed from yellow reused bricks and blue engineering bricks	Victorian/modern
149	Masonry	JS5	Norfolk red brick and lime mortar wall for Victorian warehouse	Victorian/modern
150	Masonry	JS5	Large flints and mortar foundation for wall (149)	Victorian/modern
151	Deposit	JS5	Brown ash and charcoal. Base for chalk floor (152)	Post-medieval
152	Deposit	JS5	Chalk mortar floor	Post-medieval
153	Deposit	JS5	Grey sandy loam. Makeup for chalk floor (147)	Post-medieval
154	Deposit	JS5	Yellow brown sand makeup	Post-medieval

Context	Category	Trench	Description/interpretation	Period
155	Deposit	JS5	Mid brown silty clay makeup	Post-medieval
156	Deposit	JS5	Crushed chalk/lime mortar rubble makeup	Post-medieval
157	Deposit	JS5	Greyish brown silty sand makeup for (147)	Post-medieval
158	Deposit	JS5	Fill of post hole [145]	Victorian/modern
159	Deposit	JS5	Carbonised material used as levelling for chalk floor (121)	Post-medieval
160	Deposit	JS5	Fill and over-spill of post hole [165]	Post-medieval
161	Deposit	JS5	Grey sandy silt clay. Dump of levelling material	Post-medieval
162	Deposit	JS5	Pale grey sandy clay .Dump of makeup material	Post-medieval
163	Deposit	JS5	Chalk mortar floor	Post-medieval
164	Deposit	JS5	Crushed brick and mortar fragments. Primary fill of post hole [165]	Post-medieval
165	Cut	JS5	Cut of a post hole	Post-medieval
166	Masonry	JS5	Norfolk red brick and lime mortar wall, N-S aligned	Post-medieval
167	Deposit	JS5	Makeup layer for brick floor (148)	Victorian/modern
168	Cut	JS5	Construction cut for foundation trench containing flint and mortar footing for Victorian warehouse	Victorian/modern
169	Cut	JS5	Construction cut for N-S aligned wall (166)	Post-medieval
170	Deposit	JS6	Mid to dark grey brown silt sand deposit	10th-13th century
171	Deposit	JS6	Mid brown with a tinge of red brown waterlogged deposit	10th-11th century
172	Deposit	JS5	Pale greenish grey sandy silt clay. Makeup	Post-medieval
173	Deposit	JS5	Mid to dark grey clay silt. Makeup	Post-medieval
174	Deposit	JS5	Dark brown clay silt. Makeup	Post-medieval
175	Deposit	JS5	Mixed mid brownish grey clay silt. Dump of demolition material for making up purposes	Post-medieval
176	Deposit	JS6	Mid chocolate brown silt sand deposit	10th-13th century
177	Deposit	JS6	Mid yellow brown medium sand. Waterlogged natural at base of trench	Post-medieval
178	Deposit	JS5	Mid brown silt clay. Makeup	Post-medieval
179	Deposit	JS5	Dark brownish grey sand clay silt .Makeup	Post-medieval
180	Deposit	JS5	Dark grey gritty sandy silt inter face between naturally deposited riverine material and making up deposits above.	11th-12th century
181	Deposit	JS5	Naturally deposited riverine material	11th-12th century
182	Deposit	JS5	Natural deposit of peaty material with well preserved fragments of wood	11th-12th century
183	Deposit	JS5	Dark grey /black silty clay .Natural riverine deposit	11th-12th century

Appendix 2: Finds and Small Finds by Context

Finds by Context

Context	Period	Material	Quantity	Weight (kg)
U/S	Post-medieval	Pottery	4	0.109
06	Medieval and post-medieval	Pottery	10	0.331
06		Animal bone	-	0.221
36	Medieval and post-medieval	Pottery	7	0.071
36	Medieval and post-medieval	Ceramic building material	15	0.765
36	Prehistoric	Flint	1	-
36		Animal bone	-	0.254
36	Post-medieval	Window glass	1	-
40	Saxon and Medieval	Pottery	5	0.050
40	Post-medieval	Ceramic building material	1	0.089
40		Animal bone	-	0.919
66	Post-medieval	Pottery	5	0.076
66	Medieval	Ceramic building material	1	0.058
66		Iron (SF 1)	1	-
66		Animal bone	-	0.152
77	Medieval and post-medieval	Pottery	6	0.220
77	Post-medieval	Pottery	1	0.039
77		Animal bone	-	0.113
84	Post-medieval	Pottery	2	0.130
97	Post-medieval	Pottery	8	0.197
97	Post-medieval	Ceramic building material	3	0.317
97	Post-medieval	Clay tobacco pipe	3	0.022
97		Stone	1	0.374
117	Medieval	Pottery	1	0.065
132	Medieval and post-medieval	Ceramic building material	3	0.358
132	Prehistoric	Flint	1	-
133	Medieval and post-medieval	Pottery	3	0.006
133	Medieval	Ceramic building material	19	1.413
133		Iron	1	-
133	Prehistoric	Flint	2	-
133	Post-medieval	Bottle glass	1	-
133		Animal bone	-	0.654
146	Post-medieval	Ceramic building material	1	0.104
157	Post-medieval	Ceramic building material	4	6.000
170	Saxon and medieval	Pottery	19	0.188
170	Medieval and post-medieval	Ceramic building material	2	0.080
170	Prehistoric	Flint	3	0.060
170		Animal bone	-	0.053
171	Roman and Saxon	Pottery	6	0.193
171		Ceramic building material	3	0.081
171	Prehistoric	Flint	5	0.032
172	Saxon and medieval	Pottery	4	0.058
172	Medieval and post-medieval	Ceramic building material	9	1.024
172	Prehistoric	Flint	1	-
172	Post-medieval	Bottle glass	1	-
172		Animal bone	-	0.402
174	Medieval and post-medieval	Ceramic building material	3	0.106
174	Prehistoric	Flint	4	-
174		Animal bone	-	0.123
175	Medieval	Pottery	1	0.008
175	Medieval and post-medieval	Ceramic building material	3	1.256
175		Animal bone	-	0.017
176	?Saxon	Pottery	4	0.033
176		Animal bone	-	0.086
180	Medieval	Pottery	2	0.010
180	Medieval	Ceramic building material	8	0.724
180	Prehistoric	Flint	2	-
180		Animal bone	-	0.411
181		Leather (SF2)	1	-

Small Finds by Context

Small Find	Context	Quantity	Period	Material	Description	Comments
1	66	1		Iron	Artefact	?Possible blade
2	181	1	Medieval	Leather	Shoe	Fragment, ?possible vamp or front upper
3	157	1	Medieval	Caen Stone	Architectural Fragment	Hood Mould

Appendix 3: Roman Pottery Forms

The Forms, in numerical order

3.0 Miscellaneous beakers

4.5.3 Medium mouthed jar, short neck, rolled severely undercut rim which forms a pointed lower rim edge and globular body.
CoS: 416.

7.8 All Oxfordshire White Ware forms.

Most are mortarium with an upright rim and angular flange.
Oxford: c.100

8.1 Lid. Standard type to fit cooking/storage pot, can have terminal grip.
Scale 102, 103 and 104.

Key to sites abbreviated in pottery type series:

Site Abbreviation	Site name	Publication reference
CoS	Caister on Sea	Darling and Gurney 1993
Oxford	Oxford	Young 1977
Scale	Scale, Norfolk	Rogerson 1977

Appendix 4: Post-Roman Pottery by Context

Context	Fabric	Form	Qty	Weight (kg)	Overall Date Range
0	Frechen Stoneware	Body	1	0.077	
0	Yellow ware	Body	1	0.010	
0	Glazed red earthenware?	Body	2	0.019	
6	Tin glazed earthenware	Dish	1	0.097	17th century
6	West Norfolk Bichrome	Pipkin	1	0.035	
6	Glazed red earthenware?	Body	3	0.072	
6	Dutch type red ware?	Cauldron	1	0.020	
6	Late medieval and transitional ware?	Body	1	0.046	
6	Local early post-medieval wares?	Body	1	0.012	
6	Miscellaneous	Body	1	0.025	
6	Late medieval and transitional ware?	Bowl?	1	0.028	
36	Local medieval unglazed ware	Cooking pot and jar	4	0.042	14th-15th century
36	Dutch type red ware	Body	1	0.003	
36	Miscellaneous	Body	1	0.006	
36	Hedingham fine ware	Jug	1	0.019	
40	Thetford-type ware	Body	1	0.016	
40	Local medieval unglazed re	Body	2	0.010	11th-14th century
40	Thetford-type ware?	Cooking pot and jar	1	0.019	
40	Local medieval unglazed ware?	Body	1	0.004	
66	Glazed red earthenware	Dish	1	0.028	
66	Glazed red earthenware	Body	2	0.017	
66	Dutch type red ware	Skillet?	1	0.017	
66	Cologne Stoneware/Frechen Stoneware	Jug	1	0.011	1550-1700
77	Pingsdorf ware	Pitcher	1	0.092	
77	Late medieval and transitional ware/Local early post-medieval wares	Cauldron	1	0.073	
77	Yarmouth-type ware?	Body	2	0.022	15th-16th century
77	Thetford-type ware	Body	2	0.028	
84	Glazed red earthenware	Bowl	1	0.035	
84	Glazed red earthenware	Body	1	0.094	16th-18th century
97	Thetford-type ware	Body	2	0.009	
97	Yarmouth-type ware	Body	1	0.008	
97	Local medieval unglazed ware	Body	1	0.006	
97	English stoneware Staffordshire type	Mug?	1	0.006	
97	Andenne-type? ware	Body	1	0.001	
97	Speckle-glazed ware	Body	2	0.130	Late 17th to 18th century
117	Local medieval unglazed ware	Body	1	0.065	
133	Grimston-type ware	Body	1	0.002	Late 12th to 14th century
133	Stamford type A? ware	Body	2	0.005	
170	Thetford-type ware	Body	14	0.136	
170	Early medieval ware	Ginger jar	1	0.010	11th to 12th century
170	Early medieval ware	Body	1	0.005	
170	Yarmouth-type ware	Body	1	0.006	
170	Unglazed Grimston-type ware	Body	1	0.007	
170	Stamford type B? ware	Body	1	0.006	
171	Thetford-type ware	Base	1	0.034	

Context	Fabric	Form	Qty	Weight (kg)	Overall Date Range
171	Thetford-type ware	Body	1	0.010	10th to 11th century
171	Miscellaneous	Body	1	0.007	
172	Red painted ware?	Body	1	0.001	
172	Thetford-type ware	Body	2	0.037	
172	Thetford-type ware	Cooking pot and jar	1	0.010	10th to 11th century
175	Local medieval unglazed ware	Body	1	0.008	11th to 14th century
176	Thetford-type ware	Cooking pot and jar	1	0.005	
176	Thetford-type ware	Body	1	0.005	
176	Local medieval unglazed ware	Body	1	0.005	
176	Flemish grey ware	Body	1	0.020	11th to 14th century
180	Early medieval ware	Body	1	0.008	11th to 12th century
180	Green-glazed border ware	Body	1	0.002	1550-1700

Appendix 5: Faunal Remains by Context

Context	Weight (kg)	Quantity	Species	Comments
6	0.221	3	Cattle	Humerus
			Sheep/Goat	Molar
36	0.254	11	Sheep/Goat	Tibias and humerus, chopped
			Large mammal	Butchered
40	0.919	18	Cattle	Inc juvenile mandible and chopped astragalus
			Sheep/goat	Chopped tibia
			?Deer	Metapodial – roe deer?
			Large mammal	Butchered
66	0.152	8	Cattle	Sawn/chopped - ?unfinished working?
			Bird	Carpo-metacarpus
			Large mammal	Butchered, split ribs
77	0.113	5	Sheep/goat	Tibia, chopped
			Large mammal	Butchered
133	0.654	24	Cattle	Mature adult mandible, pelvis, scap, all chopped + cut hyoid
			Sheep/goat	Metatarsals, tibia, pelvis, all chopped or cut
			Bird	Humerus, needs species ID
			Large mammal	Butchered
170	0.053	3	Cattle	Chopped/cut proximal phalange
			Sheep/goat	Chopped metatarsal and tibia
172	0.402	9	Cattle	Chopped tibia and ulna
			Sheep/Goat	Metatarsal (Roe deer?), metacarpal
			Large mammal	butchered
174	0.123	5	Sheep/goat	Metacarpal
			Bird	Tarso-metatarsus - ?goose
			Small mammal	Humerus – needs ID
			Large mammal	Butchered
175	0.017	1	Large mammal	Butchered
176	0.086	2	Large mammal	Butchered
180	0.411	10	Cattle	Chopped ulna and metatarsal
			Sheep/goat	Metacarpal
			Large mammal	Butchered

Appendix 6: The Flint

Context	Type	Quantity
36	Blade	1
132	?building fragment	1
133	Flake	1
133	Retouched flake	1
170	Burnt fragment	1
170	Flake	1
170	Retouched flake	1
171	Burnt fragment	1
171	Core trimming flake	1
171	Flake	3
172	Flake	1
174	Flake	4
180	Crested blade	1
180	Flake	1

Appendix 7: The Plant Macrofossils

Sample No.	1	2	3	4	5	6	7
Context No.	40	117	170	171	181	182	183
Cereals and other food plants							
<i>Avena</i> sp. (grains)	xc	xc	xcfc		xc		xc
Cereal indet. (grains)	xc	xc	xc	xc		xc	
<i>Ficus carica</i> L.					xcf		
<i>Fragaria vesca</i> L.					x		
<i>Hordeum</i> sp. (grains)	xcfc		xc				
<i>Linum usitatissimum</i> L.							x
<i>Malus/Pyrus</i> sp.					x		xcf
<i>Prunus</i> sp. (fruit stone frag.)					x		
<i>P. avium</i> L.							xcffg
<i>Secale cereale</i> L. (grains)				xc			
(rachis nodes)	xcfc						
<i>Triticum</i> sp. (grains)	xc						
Herbs							
<i>Aethusa cynapium</i> L.					xxtf		xcf
<i>Agrostemma githago</i> L.	xc				xxtf		xtf
<i>Anagallis arvensis</i> L.					xcf		xcf
<i>Anthemis arvensis</i> L.							x
<i>A. cotula</i> L.					x		x
Apiaceae indet.					x		
<i>Atriplex</i> sp.					xx		x
<i>Brassica</i> sp.					xtf		
<i>Centaurea</i> sp.							xcf
<i>Chenopodium album</i> L.					xx	x	xx
<i>C. ficifolium</i> Sm.					xcf		
Chenopodiaceae indet.					x	x	
<i>Chrysanthemum segetum</i> L.							x
<i>Cirsium</i> sp.					x		
<i>Conium maculatum</i> L.					x		x
<i>Euphorbia helioscopia</i> L.							x
<i>Hyoscyamus niger</i> L.						xcftf	
<i>Lamium</i> sp.					x		x
<i>L. album</i> L.					x		
<i>Lapsana communis</i> L.					x	x	
<i>Malva</i> sp.							x
<i>Papaver argemone</i> L.					x		
<i>Persicaria maculosa/lapathifolia</i>						x	
<i>Plantago major</i> L.							x
Small Poaceae indet.							x
Large Poaceae indet.					x		
<i>Polygonum aviculare</i> L.					x	x	x
Polygonaceae indet.					x		
<i>Potentilla</i> sp.					x	xcf	
<i>Ranunculus</i> sp.					xcf		
<i>R. acris/repens/bulbosus</i>							x
<i>Raphanus raphanistrum</i> L. (siliqua frags.)					xx		x
<i>Reseda lutea</i> L.							x
<i>R. luteola</i> L.					x		
<i>Rumex</i> sp.					x		xx xc
<i>R. acetosella</i> L.					x		

Sample No.	1	2	3	4	5	6	7
Context No.	40	117	170	171	181	182	183
Indet.twig/wood frags.					x		
Indet.wood frags. >10mm						xxx	
Animal macrofossils							
Bone	x xb	x	xx xb			xb	
Caddis larval cases							x
Cladoceran ehippia							x
Eggshell	x		xb				
Fish bone	x	x xb	xx	x	x		x
Marine mollusc shell frags.	x		x				
Mineralised/faecal concretions	x	xx					
Ostracods							x
Small mammal/amphibian bone			x	x			
Waterlogged arthropods					x	x	xx
Molluscs							
Terrestrial species							
<i>Clausilia</i> sp.							x
<i>Cochlicopa</i> sp.	x						
<i>Discus rotundatus</i>		x					
Helicidae indet.		x					x
<i>Oxychilus</i> sp.	x						
Zonitidae indet.							x
Freshwater obligate species							
<i>Anisus leucostoma</i>					x		
<i>Bathyomphalus contortus</i>					x		
<i>Bithynia</i> sp. (operculi)	x				xx		x
<i>Hydrobia ulvae</i>					xcf		
<i>Lymnaea peregra</i>							xx
<i>Pisidium</i> sp.					x		x
<i>Planorbis</i> sp.					x		x
<i>P. planorbis</i>					x		x
<i>P. vortex</i>					x		
<i>Valvata cristata</i>					x		x
<i>V. macrostoma</i>					xcf		
<i>V. piscinalis</i>					x		x
Other materials							
Black porous cokey material	x	x		x			
Burnt/fired clay	x		x	x			
Burnt stone				x			
Small coal frags.		x	x				
Mineralised concretions			x				
Vitrified material	x	x	x				
Vivianite concretions	x	x					
Sample volume (litres)	8	7.5	8	8	8	4ss	8
Volume of flot (litres)	0.1	0.1	0.1	<0.1	0.7	1.5	0.2
% flot sorted	100%	100%	100%	100%	<12.50%	<10%	50%

Key

x = 1- 10 specimens xx = 10 – 100 specimens xxx = 100+ specimens

c = charred fg = fragment tf = testa fragment b = burnt ss = sub-sample

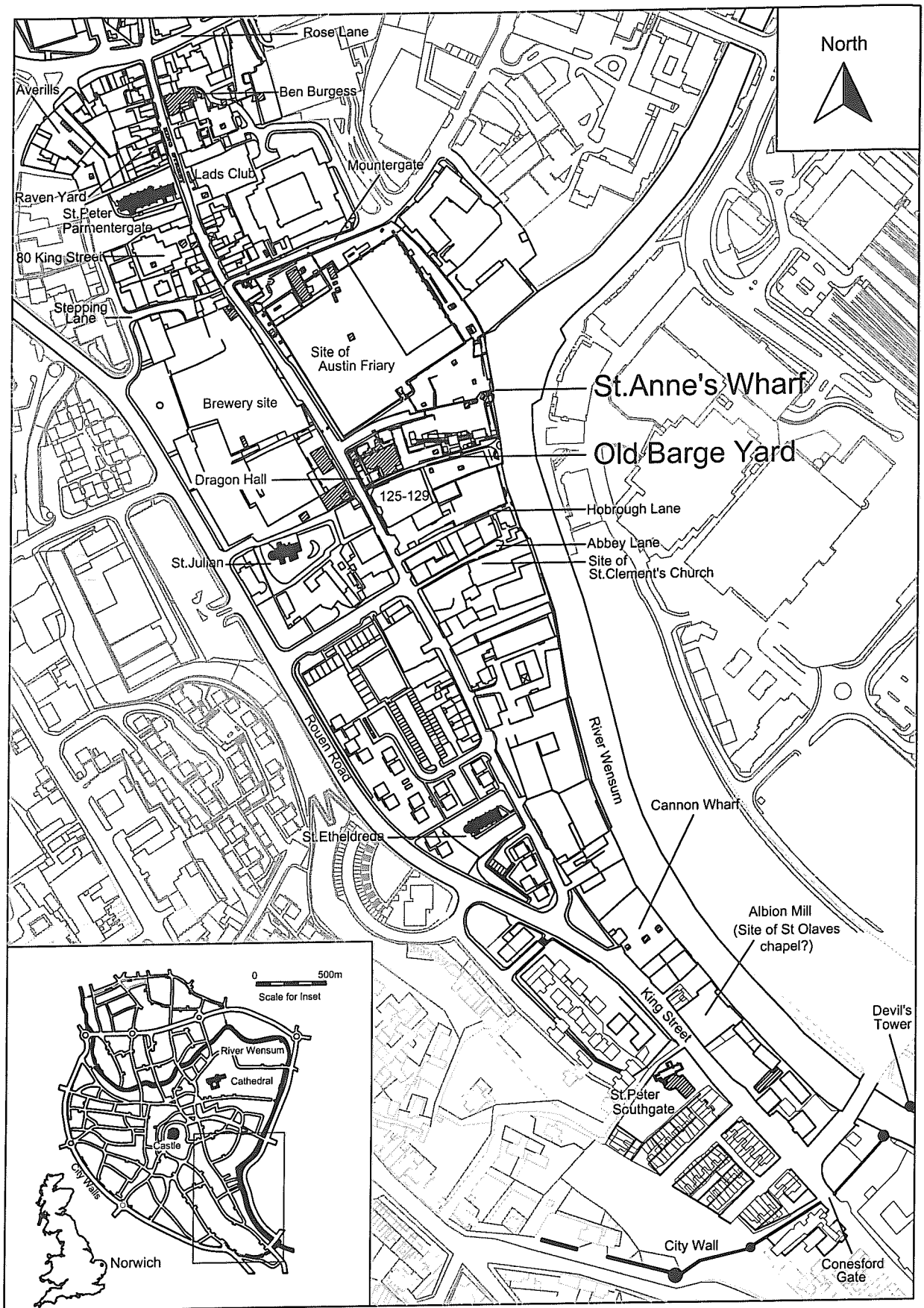


Fig. 1 Site location, also show churches and previous archaeological interventions, scale 1:4000

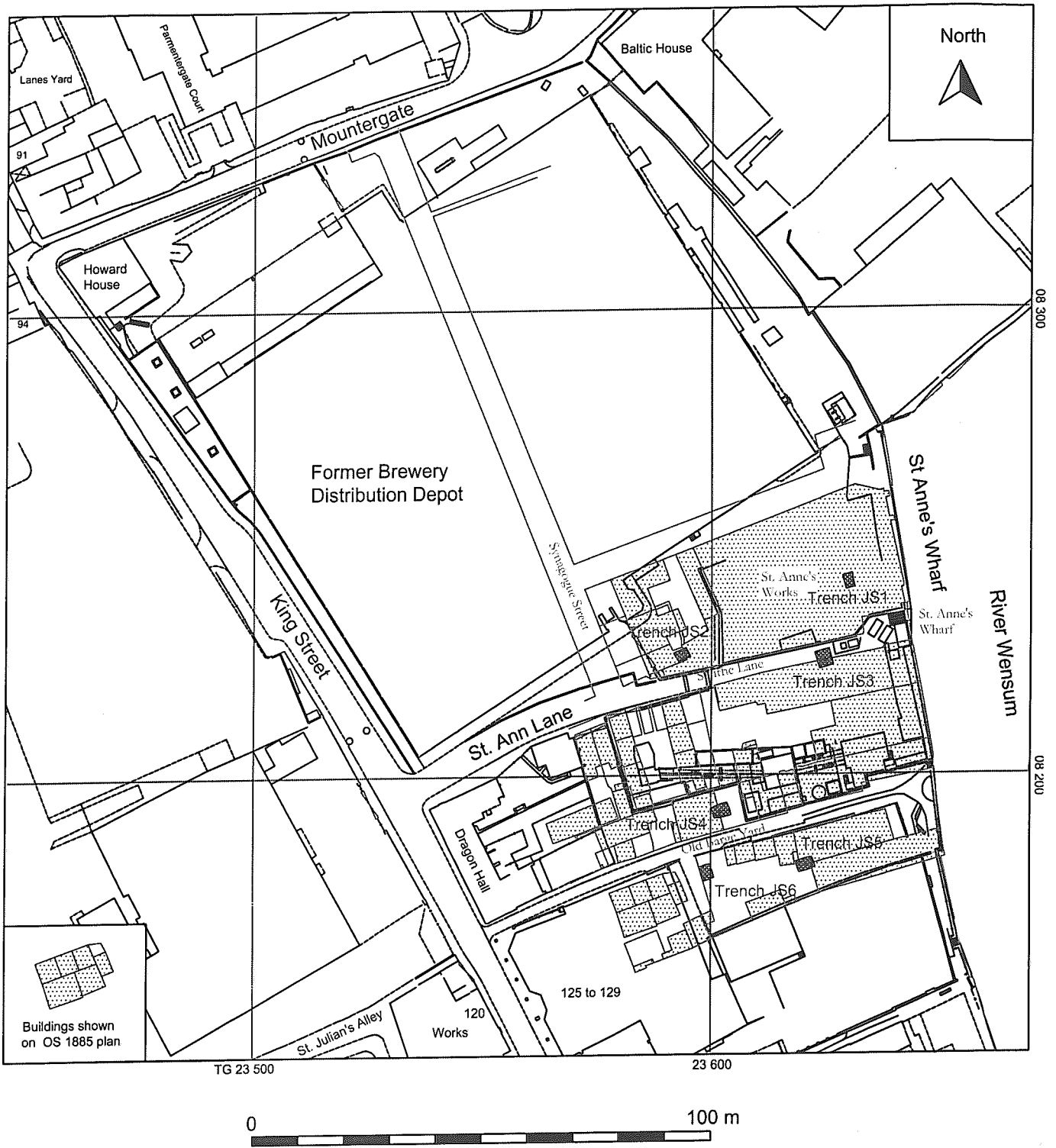


Fig. 2 Trench Location, also shows buildings marked on OS 1885 plan. Scale 1:1250

North

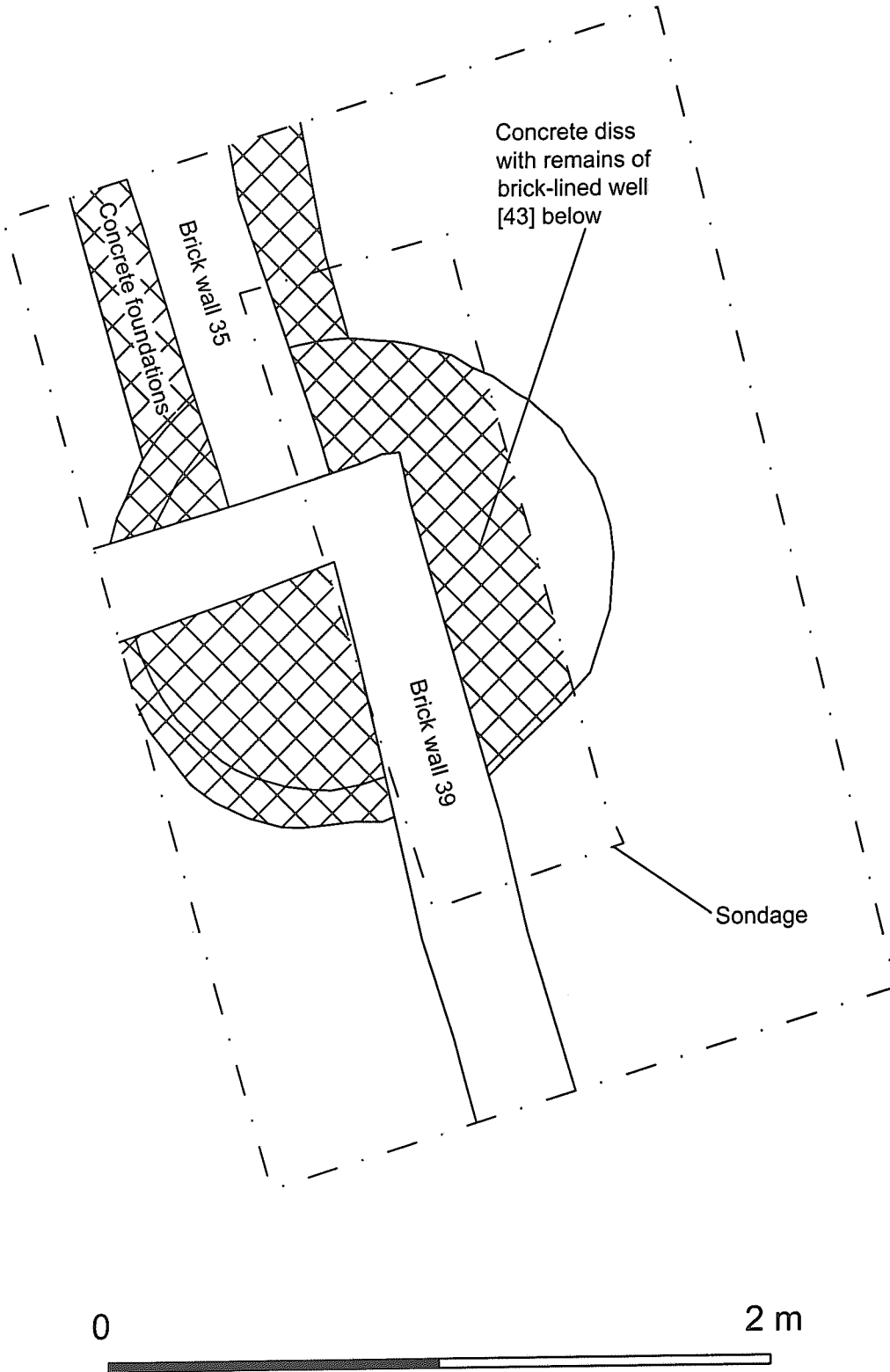


Fig. 3 Plan of Trench JS1. Scale 1:20

4.00m OD

West

East

3.00m OD

2.00m OD

1.00m OD

0.00m OD

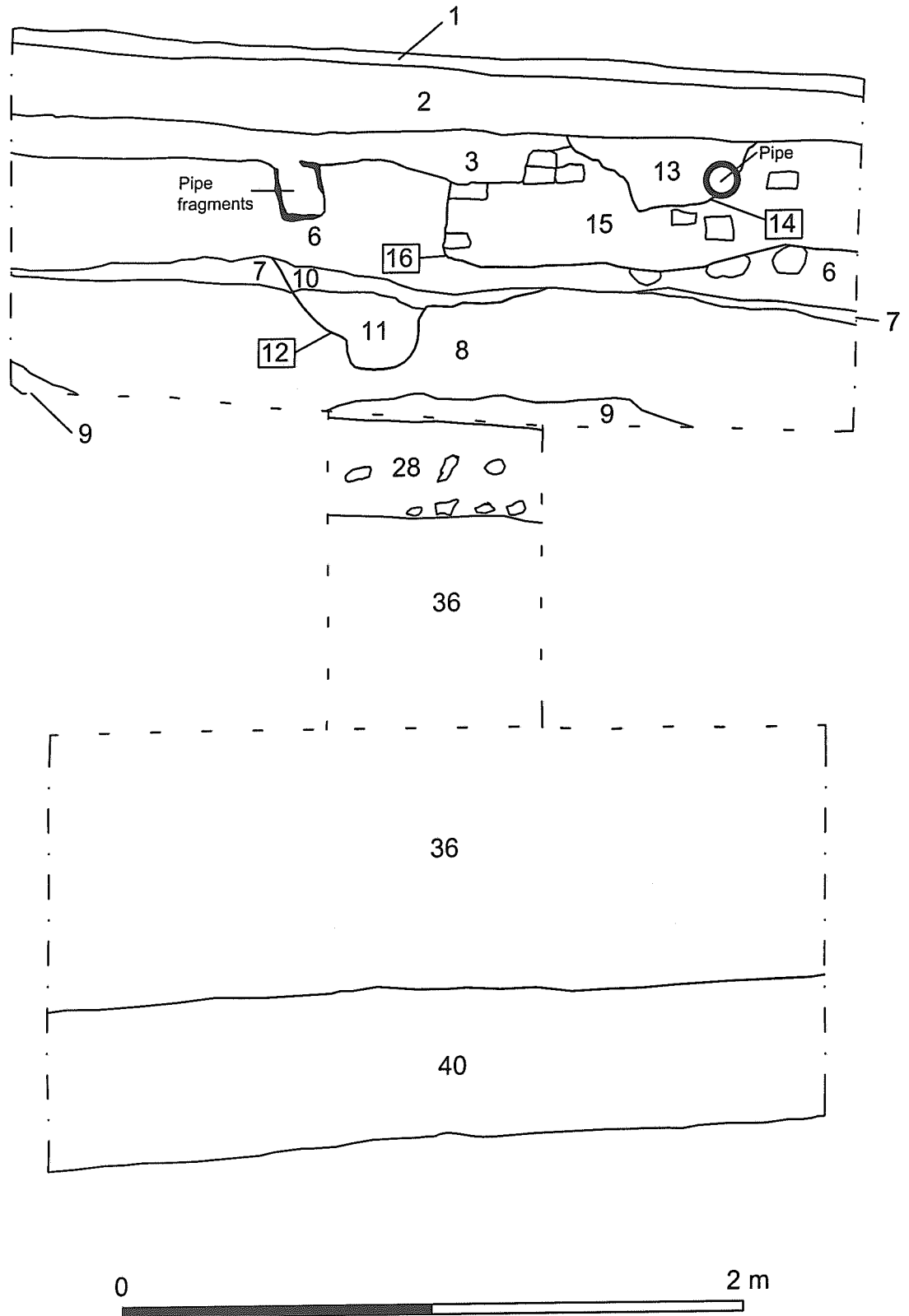


Fig. 4 South-facing section of Trench JS2. Scale 1:20

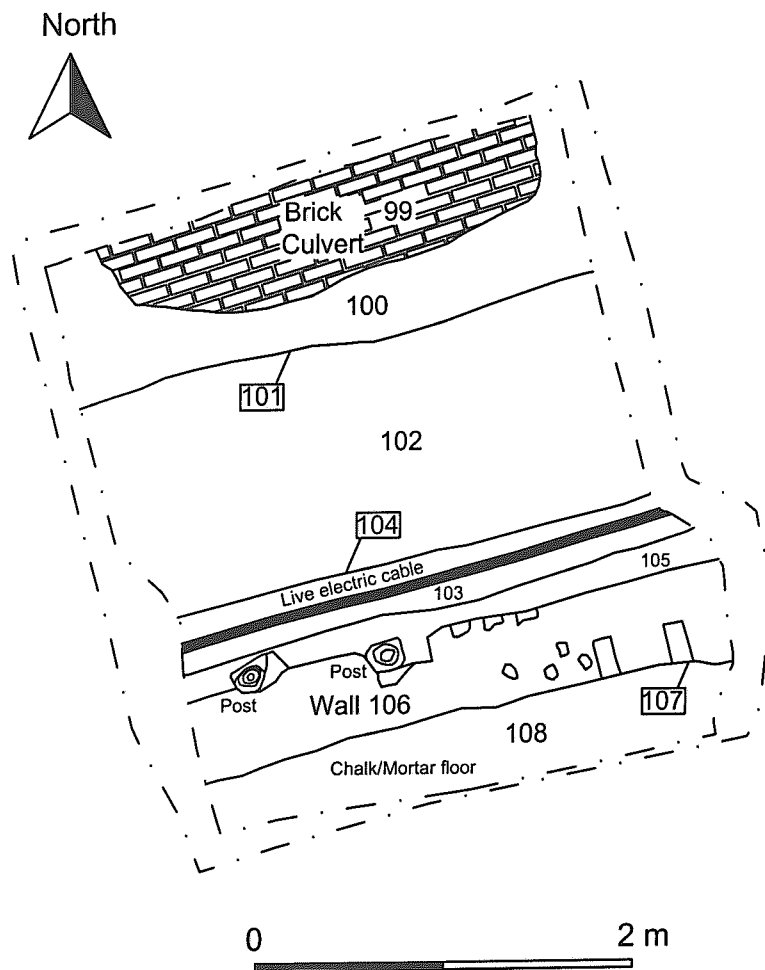


Fig. 5 Plan of Trench JS3. Scale 1:40

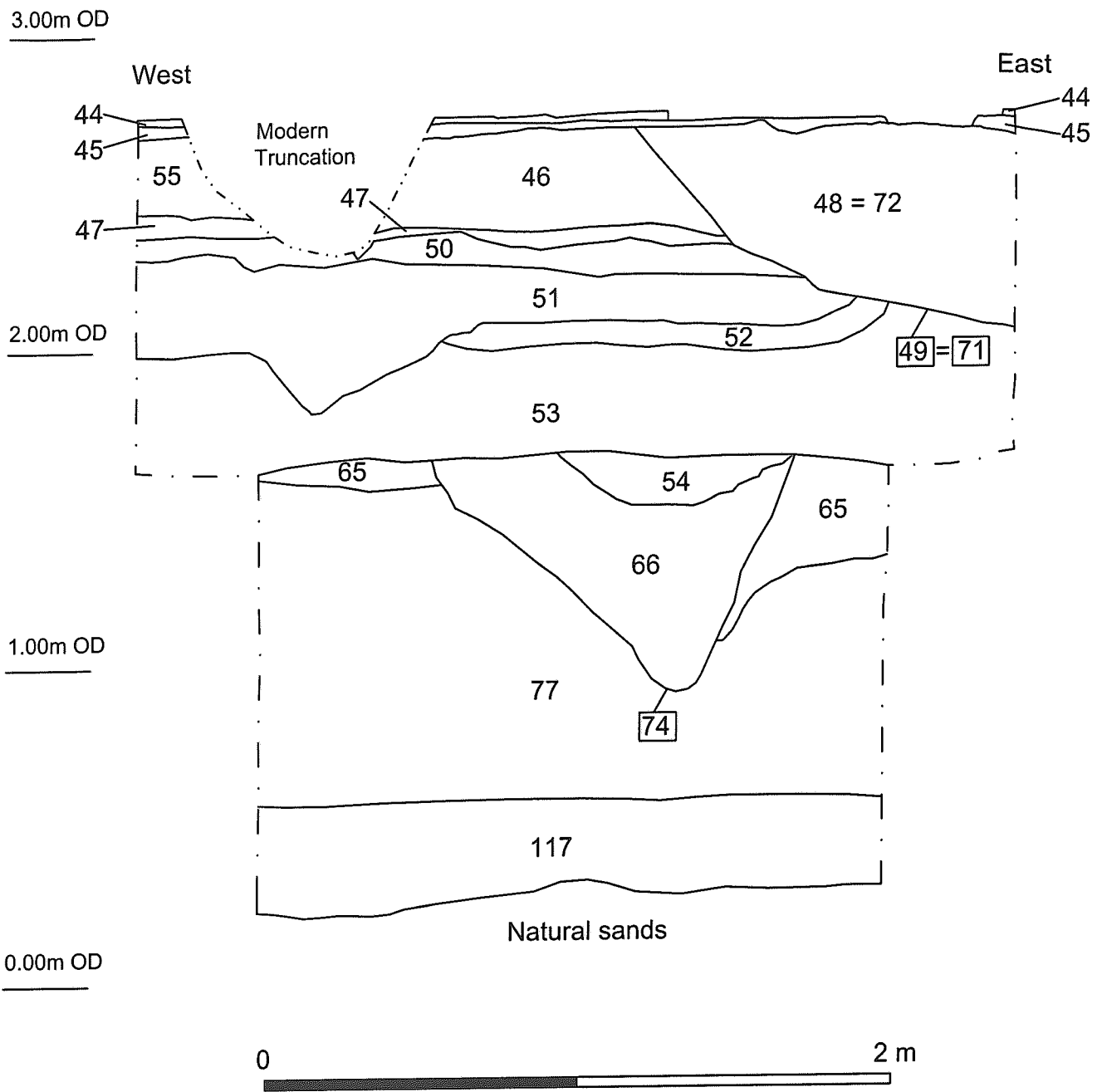


Fig. 6 South-facing section of Trench JS4. Scale 1:20

3.00m OD

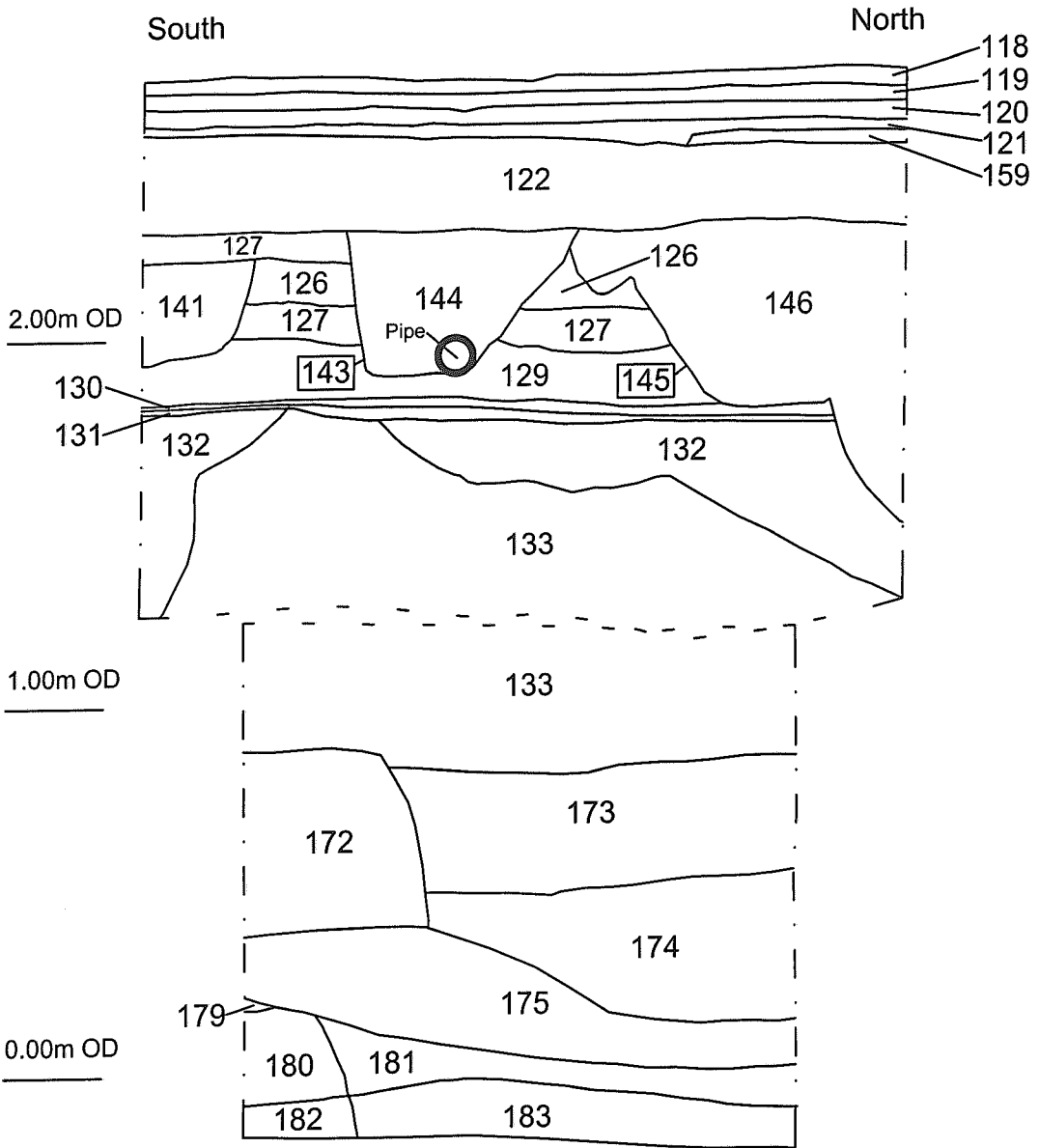


Fig. 7 East-facing section of Trench JS5. Scale 1:20

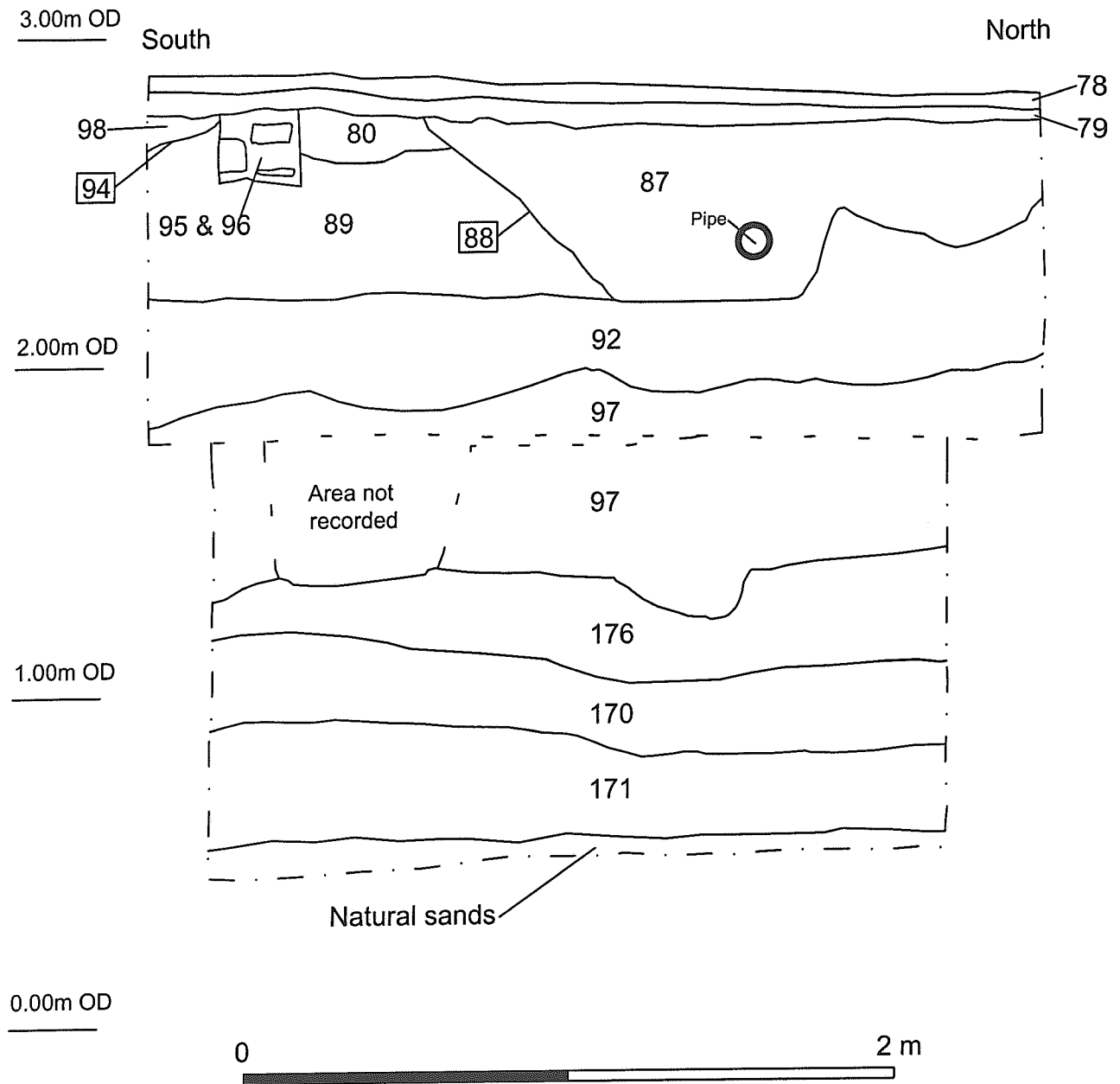


Fig. 8 East-facing section of Trench JS6. Scale 1:20