From the *Transactions* of the
Bristol and Gloucestershire Archaeological Society

**A Royalist Bastion? Evidence from 30 Gloucester Lane Old Market Bristol**

by Andrew King with Rod Burchill † Reg Jackson, Ticca Ogilvie, Julie Jones, Ann Linge and Lorrain Higbee

2010, Vol. 128, 121-145

© The Society and the Author(s)
A Royalist Bastion?
Evidence from 30 Gloucester Lane, Old Market, Bristol

By ANDREW KING

with Rod Burchill†, Reg Jackson, Ticca Ogilvie, Julie Jones, Ann Linge and Lorrain Higbee

INTRODUCTION

In November 2002 Bristol & Region Archaeological Services (BaRAS) was commissioned by Redland Housing Association Ltd to carry out an archaeological excavation at no. 30 Gloucester Lane, Bristol, centred on O.S. Nat. Grid. ST 6044373626. The site was to be redeveloped as residential accommodation with associated car parking. The site lay on the east side of Gloucester Lane, approximately 40 m from the junction with West Street and 15m from the junction with Braggs Lane, in the suburb of Old Market. Topographically, West Street runs along the top of a ridge of high ground and the excavation area was situated on the northern slope of this ridge at a height of between 20.12 m and 18.36 m above OD. The finds and paper archive generated by the fieldwork are deposited with Bristol City Museum under the accession no. BRSMG 2001/32. The excavation and watching brief have been assigned the Bristol Urban Archaeological Database nos. 3923 & 3967 respectively.

As conditions of planning consent, a desk-based assessment (Burchill 2001a) and field evaluation (Insole 2001) had already been carried out. The site was formerly an open yard space and had not been built on since the early 1920s. The evaluation in May 2001 identified evidence for medieval occupation in the near vicinity and an extensive deposit of worked garden soil containing pottery of 12th–17th-century date. It appeared that the site had mainly been under pasture or gardens until the mid-17th century. In one section of a machine-cut trench, part of the east-west profile of a large ditch, evidently in excess of 4 m in width with a possible north-south return was exposed. Ceramic evidence from the fills of this ditch dated to no later than c.1660. 18th and 19th-century structural features had been cut into the garden soil and upper fill of the ditch.

From the findings of the evaluation and due to the considerable disturbance posed by the proposed development, the City Archaeologist requested a full excavation of the site. One of the excavation objectives was to record in detail the 17th-century ditch, establishing its form and development. The excavation incorporated the full extent of the evaluation trenches. The findings of the evaluation were confirmed by the excavation of part of a flat-bottomed ditch with an ‘L’-shaped bend. The ditch was over 2 m deep and 6 m wide and was clearly defensive in form.

Four months after the main excavation a watching brief was maintained during the initial groundworks of the new development. This added to the findings of the excavation by the location of a further 4 to 8 m of the line of the ditch.
HISTORICAL AND ARCHAEOLOGICAL BACKGROUND TO THE SITE

In the mid 12th century a district known as ‘La Feria’ (the market) existed immediately east of Bristol Castle (Potto Hicks 1934, 172). Unlike other districts of the Norman town the Feria was never enclosed by a wall but by a boundary ditch and bank recorded as ‘magni fossati ville Bristollie’ in the 1373 perambulation of the new county of Bristol. The ‘Great Ditch’ (Bryant 1986) most probably ran south-east from the River Frome, up a ridge of high ground, before curving westwards to join the River Avon (Fig. 1). The principal entry across the Great Ditch was Lawford’s Gate which does not seem to have been strongly fortified in the medieval period, but would have been a useful place for collecting tolls from those attending the markets and fairs in the Feria. The historic road from Bristol to London ran from Lawford’s Gate along the route of the present-day West Street. Gloucester Lane branched from West Street 100 m north-east of Lawford’s Gate and continued northwards as the start of the historic route to Gloucester (Fig. 2).

A recent excavation at nos. 18–20 West Street (Parry 2004) confirmed that by the later 13th-century buildings were present close to the junction of the London and Gloucester roads and also gave indications that West Street would have been considerably narrower than it is today. Urban development generally spreads along the route of highways and it is quite likely that throughout the 14th to 16th-centuries shops and tenements with gardens and yards continued to be established along West Street. The maps of Bristol in the early post-medieval period are not accurate enough to identify individual plots and do not extend as far as Gloucester Lane. Numerous historic records of land ownership from this period survive, for example an indenture of 1570 described a residential property and garden ‘without Lawford’s Gate in a lane called Gloucester Lane’ (BRO P/St P & J/D/3b); this same property was mentioned in later documents until 1623 (Burchill 2001a, 4–6). Only the general location of properties can be inferred from documentary references before the 17th century.

During the Civil War the city of Bristol was occupied initially for Parliament and later for the King. As a consequence of this it was subjected to two sieges. In July 1643 the city was held for Parliament and at that time the area between the Rivers Frome and Avon appears to have been only lightly defended (Russell 2003, 27), possibly because of the size of the Great Ditch, which may have been partly flooded. A contemporary account of the Parliamentarian defences has been interpreted as saying that Lawford’s Gate was fortified with an artillery platform and a single gun (Peachey 1993, 29–31). However, the Royalist attack did not concentrate on this side of the city but on the more heavily-defended northern and southern sectors. The apparently insignificant defensive position at Lawford’s Gate makes it uncertain if the common practice of demolishing surrounding buildings to give a clear field of fire, such as occurred in Gloucester (Atkin 1992, 66), was thoroughly implemented before 1643 for the area around West Street.

Following the prudent capitulation of Bristol to Prince Rupert, extensive measures were taken to refortify the city from July 1643 until the start of the second siege in September 1645. The modest eastern defences were significantly improved and enlarged, the main defensive circuit would still have followed the line of the Great Ditch, running roughly parallel with the present day Lawford Street and Midland Road. Lawford’s Gate had outer defences constructed immediately around it; beyond these it is probable that individual, bastion-like structures were erected at strategic places to cover an enemies’ approach, such as near road junctions or in topographically advantageous locations. This was certainly the case at other cities such as Worcester, Newark and York that were involved in the conflict. The majority of these outer defensive works would have been of earthen construction, possibly revetted with timber or stone (Duffy 1979, 157).

The Parliamentarian assault, under Sir Thomas Fairfax, was most successful against the eastern defences of Bristol. Edward Montagu, earl of Manchester, commanded his own and Colonel
Fig. 1. Gloucester Lane, Bristol. Position of site in relation to the medieval county boundary, scale 1:4000.
Fig. 2. Gloucester Lane, Bristol. Site location map (scale 1:1562) and excavation area.
Pickering’s regiments of foot and together they captured Lawford’s Gate with relative ease, taking ‘16 pieces [of artillery] in the several workes and half-moones, which they took by storming’. Other accounts of the Royalist defences outside Lawford’s Gate, given after the Parliamentarian attack, mentioned that the besieging army seized ‘twenty-six guns and took many prisoners in the works’ (Lynch 1999, 155) and referred to the capture of a ‘double work well filled with men and cannon’ (Carlyle 1893, 184). Montagu ordered part of the outworks to be levelled to allow his two regiments of horse to cross and lay siege to the castle walls, an action that was ultimately avoided by Prince Rupert’s surrender of the city.

The contemporary description of ‘half moones’ is a translation of the French term *lunette*, a detached earthwork, open to the rear, composed of two faces forming a salient angle and two flanks, the flanks and faces being of nearly equal length. The many types of defensive earthwork, with names such as hornworks, crownworks and ravelins, were theoretically intended to be part of a larger system of interlinked bastions (Hogg 1981, 125). The original concept of this style of defensive work came from Italy in the 15th century, initially as a way of strengthening medieval castle walls against cannon fire (Brice 1984, 109). German, Dutch and French military engineers adapted and improved the designs, creating geometrically intricate fortresses that were most successfully assaulted by the construction of equally complex siege-lines. For these defences to be effective they needed to follow certain designs (Duffy 1985, 1–3). The perfect example of a fortified town would have been a star-shaped system of inter-connected outworks providing many angled-redoubts to cover all approaches with a lethal cross-fire. The forces of both King and Parliament employed foreign engineers to assist in the defence and besieging of towns (RCHME 1964, 47) yet the continental models, of regular defence works and siege tactics, were often, out of sheer necessity, given a peculiarly English twist that inevitably compromised the ideal (Duffy 1979, 159) but sometimes these could be measurably stronger than more rigid, classical prototypes. For example, limited resources meant that instead of a half-moon being one element of a much stronger system it would be used as a defensive work or gun emplacement in its own right.

At Gloucester Lane it seems that the ‘L’-shaped, flat-based ditch was likely to have been part of a bastion-like structure, loosely modelled on the half-moons mentioned above. The ditch itself would have been too wide for a man to jump and should someone fall in, it would be extremely difficult to get out again, with or without the hostile interest of the defenders. From the crown of the low hill on which it stood, at the highest point east of Lawford’s Gate and overlooking the road to Gloucester and the shallow valley of the river Frome, this bastion would have covered the northern and eastern approaches to West Street. The usefulness of such defences would hinge on the provision of a cleared *glacis* or killing ground, preventing the enemy from advancing under cover. Thus, certainly during the Royalist occupation, any buildings in the immediate vicinity that were not incorporated within the defensive line would need to have been demolished. The scale of the ditch at Gloucester Lane and the necessity for similar defences facing south, would suggest that most, if not all, buildings along West Street and Gloucester Lane were cleared before the siege of 1645.

Rebuilding of the outer suburb probably only began in earnest after the defeat of the future Charles II at the battle of Worcester in 1651. The Bristol Urban Archaeological Database contains numerous entries for old photographs, illustrations and descriptions of historic buildings along both sides of West Street and Gloucester Lane. These entries give a consistent impression of a mid- to late 17th-century date for the earliest standing buildings, either from their outward appearance or from architectural details recorded before their demolition. For example, the Lamb Inn that stood in West Street until 1905 had a staircase newel-post dated 1651 (Pritchard 1906, 268) and the oldest standing walls along West Street typologically date from the later decades of the 17th century. In 1988 two party walls, surviving to a height of 1.7 m within properties
fronting West Street were dated to the 15th century (Bryant 1988). These remains are the only late medieval standing walls recorded in the area outside Lawford’s Gate.

Despite being produced less than thirty years after the second siege of Bristol, Jacob Millerd’s map of 1671 did not depict any trace of the Civil War defences in the area of Gloucester Lane. Millerd’s map showed housing along the west side of Gloucester Lane, closest to West Street and an enclosed field to the east; his later map of 1673 showed the east side of Gloucester Lane occupied by a detached building with adjoining garden (Fig. 3). Deeds in the Bristol Record Office attest to a cottage and garden in Gloucester Lane existing by 1689 but, once again, the exact location of this property is unknown (Burchill 2001a, 6). Millerd’s plan of 1715 depicted housing at the northern end of Gloucester Lane precisely in the location of the excavation area and extending along the line of the present Braggs Lane. An abstract of title in the parish records of SS. Philip and Jacob, covering the period from 1719 to 1808, referred to two messuages in Gloucester Lane and a messuage and garden in Braggs Lane (BRO 25016/3/22–23). Rocque’s map of 1742 did not show individual buildings and it indicated that the street frontages were fully developed by the mid 18th century.

Plans of Bristol in the 19th century show the gradual accumulation of buildings that culminated in the incorporation of the whole Gloucester Lane site within the warehouse of the Hudd & Colliers leatherworks. The leatherworks were rebuilt after 1893 and continued in operation until 1915 when the firm of Ridingberry toy makers took over the premises. The Kelly’s Bristol directory has no entries for the site from 1921 to 1946 suggesting that it was vacant, presumably after demolition of the warehouse. In the early 1950s the east side of Gloucester Lane was partially widened. Further to the north, just beyond the junction with Braggs Lane, Gloucester Lane was blocked off in the early 1960s to change the road from a main highway to a cul-de-sac. Certainly most of the excavation site had been cleared of buildings at that time and remained largely

---

Fig. 3. Gloucester Lane, Bristol. Millerd’s map of 1673 showing location of excavation area.
unaltered until the present day. Most recently the premises at 30 Gloucester Lane were in use as a storage yard by a scaffolding firm.

THE EXCAVATION AND WATCHING BRIEF

The excavation took place between 4 and 22 November 2002 and the fieldwork for the subsequent watching brief between 3 and the 28 March 2003. The modern yard-surfacing and concrete footings on the site were removed by mechanical excavator. The area available for hand excavation was divided into two trenches because of constraints posed by the presence of live services and the need for site access. Deposits and structural features representing six main phases of archaeological activity, from the medieval period to the 20th century, were recorded.

Only periods 2 to 5 have been considered in any detail in this report as these contribute most to the understanding of events associated with the Civil War in this part of Bristol.

Period 1. Medieval

Documentary records suggest that the area around Gloucester Lane and the eastern end of West Street was mostly undeveloped pasture with very few dwellings until at least the early 13th century. A buried soil horizon (213/214/229) and part of a heavily truncated medieval wall footing (220), re-used as a foundation in the 19th century, were exposed in trench 1 of the excavation. Beneath the pavement on the east side of Gloucester Lane, the digging of a new service trench revealed a further fragment of medieval wall footing, heavily truncated in the late 19th century. Overlying deposit 213/214/229 was a brownish-red, silty clay (235) containing pottery sherds dating from the mid 13th to mid 14th centuries. The paucity of structural features, coupled with the residual and abraded condition of ceramics recovered from the buried soil, does not reflect a high level of occupancy in the immediate vicinity. The picture is one of a small-scale pre-urban settlement in an agricultural, or more probably, horticultural environment.

Period 2. 16th – 17th century

Above context (235) and extending across much of the excavation area was an extensive deposit of poorly sorted, mid-brown silty clay (236/256/267) indicative of a worked garden soil. In the 2001 evaluation, pottery sherds from this deposit had a date range of the 12th to 17th centuries. Most of the pottery recovered during the excavation came from context (256) and dated from between 1550 and 1700. This was a context that contained clay tobacco-pipe of an early 17th-century typology. Given the topographical location of the site and the broad date-range of the finds in deposits (236) and (256), a down-slope accumulation within cultivation soils was evident, of waste material from nearby dwellings fronting West Street and the southern end of Gloucester Lane. Observations made during the watching brief supported the conclusion that the majority of the site area during this period would have consisted of cultivated soil deposits following the natural slope of the hill.

Period 3. The Civil War Ditch (Fig. 4)

The most historically significant feature recorded on site was an ‘L’-shaped ditch [231] dug through the buried soil deposits (236), (235) and (214). The northern and western edges of the ditch were exposed for 15.3 m on an east-west alignment and for 13.7 m north-south and would
Fig. 4. Gloucester Lane, Bristol. Plan of Civil War ditch [231] and location of sondages. Period 3.
have continued to the south and east beyond the area of the site. The inner edges had been almost entirely removed by a 20th-century pit for a concrete footing [272]. The outer curve of the ditch had been partially truncated by a late 17th- to mid-18th-century cesspit (233). A 19th-century wall (279) and the bases of two drains (225, 226) were cut into the uppermost fill. Four sondages were excavated into the fills of ditch [231] in an attempt to define its form and function, while later monitoring of groundworks in 2003 recorded as much as was possible of the ditch edges.

Sondage 1

The first sondage was excavated through the east-west line of the ditch to reveal half of its profile (Figs. 5 and 6). The fully exposed northern side was cut at a fairly steep angle of approximately 45° from vertical to an original depth of around 2.1 m; the flat base was reached at a height of 16.55 m above OD. The primary fill of the ditch consisted of a blackish-grey waterlogged silt (278) up to 300 mm deep with frequent inclusions of preserved sticks, animal bone, and a single object of leather and wood identified as the tip of a scabbard. Samples were taken of (278) for palaeoenvironmental analysis. There was a sharp division between the primary fill and the overlying layer of redeposited natural, reddish-brown, clay (266) within which were occasional lenses of blackish-grey, organic-rich, silt containing a few sherds of pottery. Above (266) was a tip layer of rubble (264) made up of Pennant Sandstone with frequent inclusions of plaster, burnt stone, charcoal and occasional pieces of Oolitic limestone. Some of the plaster fragments within fill (264) retained the moulded impression of wooden lathes. The uppermost fill was a homogenous, reddish-brown, silty clay (227) similar in consistency to (266) but with no lenses of organic material. This was by

![Fig. 5. Gloucester Lane, Bristol. East-facing section of sondage 1 showing deposits within ditch [231]. Period 3.](image-url)
far the most extensive fill and continued throughout the length of the ditch. Along the top edge of the ditch was a thin deposit of greyish-brown silt (228) similar in consistency to the primary fill (278) but with no organic inclusions. It is likely that deposit (228) relates to the period when the ditch was in use and represents the weathered primary fill.

**Sondage 2**

The second sondage was excavated into the curve of the ditch where it had been truncated by cesspit (233). The exposed outer edge had a more gradual slope of around 50° from vertical and the ditch at this point was filled by a similar, but shallower, sequence of deposits to those recorded in Sondage 1. The base of the ditch at this point had already been disturbed by a trench from the 2001 evaluation, but enough of the primary fill survived for environmental samples to be collected. The results of the primary fill analysis are summarised below.

**Sondage 3**

The third and largest sondage revealed most of the ditch profile in the north-facing edge of excavation (Fig. 7). Both sides had been cut at a steep angle of around 45° from vertical. The top width was 6.2 m and although the base of the ditch could not be reached in this sondage, a projection of the profile indicated an original depth of around 2.2 m with a flat base approximately 1.8 m wide. The sequence of fills at the southern end of the ditch was similar to those in the east-west line, with the notable absence of the rubble deposit (264). The top of the primary fill (260) was reached at a height of 17.3 m above OD and was sealed beneath the redeposited, reddish-brown, clay (266). Overlying the redeposited clay were two quite discrete dumped deposits to either side of the ditch, a dark-brown, silty clay with moderate organic inclusions (261) to the east
and a sandy, light-brown silt (258) to the west. The edges of these deposits were clearly visible during excavation and appeared to represent a fairly rapid backfilling operation. The uppermost fill (227) lay between 200 and 400 mm beneath the modern yard surface.

**Sondage 4**

In the fourth sondage no evidence could be found for either the southern edge or the inner curve of the ditch as the modern foundation pit [272] had truncated these elements of the feature. The primary fill was exposed again during subsequent groundworks of the housing development. At the base of the east-facing section of a soak-away pit a layer of dark staining was clearly visible. Unfortunately, closer inspection of this pit was not possible for health and safety reasons. The slope of the tip-layers and environmental evidence from samples taken of the primary ditch fill indicate that it was dug and in use for a relatively short period of time before it was rapidly backfilled from a south-easterly direction. The excavated clay would presumably have been used for an associated, internal rampart or counterscarp bank. The form of the ditch, having steep sides with a flat base, points to a deliberate attempt to construct a blockading or defendable feature. Pottery sherds and clay tobacco-pipes recovered from the fills of the ditch dated to no later than c.1660.

**Period 4. Late 17th century**

Running on a north-south alignment across the site were the footings of two walls constructed of Pennant Sandstone bonded with orangey-pink, lime-flecked mortar that is fairly typical of 17th-century masonry in this part of Bristol. The insubstantial nature of these footings suggests they were for boundaries between gardens rather than the supporting walls of buildings. The first length of footings (280) had been incorporated in the foundations of the present-day eastern boundary to the site. A projected continuation of the line of (280) would join the party wall between nos. 43 and 45 West Street.

The second set of footings (270) was exposed for 4 m beneath the concrete capping of a sewer pipe. Removal of the concrete capping during the watching brief in 2003 exposed more of (270)
and extended the line of these footings south towards West Street for approximately 6 m. The construction cut for (270) had been dug through deposit (256) and across the southern edge of ditch [231]. At the north-eastern end of the site, surviving amongst considerable 19th- and 20th-century disturbance, was a linear cut [244] containing pieces of Pennant Sandstone rubble and similar mortar to the bonding material in (270). A later construction cut through deposit (236) revealed that [244] held the fragmentary remains of wall footings. A southerly projection of the line of [244] would link up not only with (270) but also with the boundary wall between the present-day properties of nos. 39 and 41 West Street.

**Period 5. 18th century**

A rectangular cesspit (233) partially truncated the curve of ditch [231]. The cesspit contained broken pottery vessels dating from the early to mid 18th century and certainly no later than c.1760. Against the western edge of the excavation area, a short length of Pennant Sandstone and brick wall (224) was revealed, with a return heading towards Gloucester Lane. The western face of this wall was abutted by demolition rubble, indicating the presence of a backfilled basement. To the south of (224) was a well (215) constructed of Pennant Sandstone bonded with a whitish-lime mortar that had been backfilled in antiquity. Monitoring of groundworks in 2003 recorded a truncated Pennant Sandstone wall (282) exposed in section in the south-western corner of the site. The wall was 480 mm in width and followed the same alignment as the medieval footings (220).

**Period 6.**

Until at least 1870 there had been small dwellings around a courtyard at the northern end of the site. These were incorporated within the late 19th-century expansion of Hudd’s leatherworks and were eventually cleared when the premises were rebuilt in 1893. Recorded structural features associated with these dwellings included a well, drains, wall footings, and in trench 2 a cobble surface and a rainwater collection tank, all representative examples of mid to late 19th-century structures found in this part of Bristol. A modern pipe trench [238] delimited the southern extent of trench 2. The most significant disturbance to the Civil War ditch had been caused by the excavation of a pit for a large concrete foundation plinth [272] over 5 m in diameter and 1 m in depth that had been filled with rubbish. The pit was located almost entirely over the inner bend of the ditch and remained waterlogged during the excavation. This meant the sections of this pit were of little use in characterizing surrounding deposits.

**THE FINDS**

*Reports were prepared by Rod Burchill on the ceramic roof tile (Burchill 2002) and Lynne Keys on the iron slag (Keys 2003). The complete reports are available for research in the site archive.*

**The Clay Tobacco Pipes** by Reg Jackson

Clay tobacco pipe material was found in six contexts. Period 2 context (256), the uppermost deposit cut by the Period 3 Civil War ditch [231] at the southern end of the site, contained eleven stem fragments and two small, heeled bowls. The bowls may be dated by their typology to the second quarter of the 17th century. One had the initials ‘WC’ stamped in the heel along with
crude decorative motifs. Two pipe-makers with these initials were working in Bristol at that time: William Carter who took an apprentice in December 1641 and was dead by 1647 and William Cooper who took apprentices in February 1641 and June 1642. Both bowls belong to pipes that could have been made before the first campaigns of the Civil War began in 1642.

Part of the primary fill of ditch [231], context (228), contained two stem fragments and a single small, heeled bowl. The bowl is unmarked but its typology suggests a date for manufacture no later than the middle of the 17th century, c.1630–1650.

The fill context of the Period 5 stone-lined cesspit (233) produced two spurred bowl fragments. Both date to the 18th century. One had the initials ‘RB’ incuse on the rear of the bowl and the initials ‘R(?B)’ with decoration all in relief in a circle on the side of the bowl. It could have been made by one of two 18th-century Bristol pipe-makers with these initials: Richard Bourne, free in October 1739 and still working in 1762, and Richard Brewer, free in August 1713 and dead by 1744 (Price and Jackson 1979).

Context (202), the fill of a Period 6 drain, contained five pipe stems and four spurred bowls. All the bowls had stylised leaf decoration in relief on either side of the front and rear mould lines. One had a single flower motif in relief on either side of the spur. All the bowls date to around the middle of the 19th century.

Another drain fill, context (140) contained one stem fragment and two bowls. Both bowls had elaborate leaf decoration in four panels all in relief. The front and rear mould lines had also been deliberately raised, that at the front also having traces of leaf decoration. Both bowls appear to have come from the same mould and date to the second half of the 19th century or possibly the early 20th century.

An unstratified bowl had the two line mark ‘H.DEWY/GLOSTER’ within a rectangular frame incuse on the back of the bowl. It was made by H. Dewy and Company who were working in Westgate Street, Gloucester, between 1879 and 1889 (Peacey 1979, 57).

The Pottery by Rod Burchill

Introduction

Three hundred and fifty sherds of medieval and later pottery were recovered from 22 contexts. Of these, 30 sherds from six contexts represented material recovered during the site evaluation. The pottery was identified using the classification devised by Ponsford in the 1970s and subsequently expanded during the 1980s and 1990s. The classification has never been published in its entirety; however, relevant extracts have been published in a number of papers (Ponsford 1988 and 1998; Burchill a forthcoming). The type series entry for each of the pottery types recorded, recently updated and amended by the present writer, are not described here but are available for study within the BaRAS offices and the collections of Bristol City Museum.

The Assemblage

Period 1

Pottery of this period consisted of 177 sherds, 121 (68%) of which were residual. Twelfth-century material was recovered from a number of contexts but only one context, (229), contained pottery solely of this period. This material consisted mostly of Ham Green wares (BPT26, 27, 32 and 114) along with sherds of north-west Wiltshire tripod pitcher (BPT18) and single sherds of south-east Wiltshire tripod pitcher (BPT18c) and unglazed jar (BPT17).
The most common material found from this period was the so-called Redcliffe ware in both the early (BPT118) and late (BPT118L) forms. Seventy-three of the 93 sherds of BPT118 were residual as were 13 of the 14 sherds of BPT118L.

Of particular interest were 24 sherds of waste pottery in the same Redcliffe fabric. In an unpublished typescript of the Bristol Pottery Type Series Ponsford called the pottery in this fabric ‘Redcliffe’ after his excavation of a dump of pottery in the same fabric on Redcliff Hill, Bristol, in 1971 (Burchill b forthcoming). However, there was another group of waste pottery sherds found redeposited in a probable 14th-century construction trench at St. Peter’s Church, Bristol where it was found associated with wheel-thrown Minety (north-west Wiltshire) type jars (Dawson et al. 1972). A dump of material similar to that from Redcliff Hill was also recovered during an excavation at 30 St. Thomas Street in 2000 (Burchill c forthcoming). As with the previous finds many of the Gloucester Lane sherds were coated with an under-fired red clay. Ponsford, in another unpublished typescript, has suggested this was the result of the sherds being mixed with clay and used to form a temporary capping for the kiln (Ponsford 1979). There was a single sherd from a green glazed Southwest French jug (BPT156).

Periods 2–5

Most of the post-medieval pottery from Gloucester Lane ranged in date from the 15th to the 18th century. Of 15th- or 16th-century date were sherds of Tudor Green (BPT182) and Malvernian red ware (BPT197). Somerset wares from Wanstrow (BPT96), Donyatt (BPT268) and Nether Stowey (BPT280) were common from the mid 16th century. A sherd from a Wrangway vessel, of a Somerset type not common on Bristol sites, probably dates between about 1550 and 1650.

Of particular importance were sherds recovered from the fills of the Period 3 Civil War defensive ditch [231]. It was hoped that the pottery within the various fills would date the period when the ditch was open and subsequently its backfilling. The ditch's primary fills were represented by two contexts that contained pottery dating to the first half of the 17th century, consisting of black-glazed cups (BPT93 and 266) and three sherds of ‘Bristol Lime Gritted Ware’ (BPT265), a type first identified from Water Lane in 1971 (Burchill 1992). A sherd from a Nether Stowey jar (BPT280) need be no later. Three contexts (125, 130 and 264) identified as intermediate fills contained similar pottery, including Falfield black-glazed cups (BPT266). A sherd of Italian Maiolica probably from Montalupo was recovered from evaluation context (130) and dates no later than 1650 but might be as early as 1575. A fragment from a stoneware vessel from context (264) was difficult to identify with certainty but it is possibly from a Frechen drinking jug (BPT286) dating between 1550 and 1600. Contexts [111] and [227], which probably represents the backfilling of the ditch, could not be distinguished on ceramic grounds from pottery in the primary fills of the ditch.

Pottery from late 17th- and early 18th-century contexts was typical of the wares found on any Bristol site. Local tin-glazed earthenware (BPT99) and yellow slipware (BPT100) dominated along with the ubiquitous Late post-medieval Redware (BPT264). The largest group (85 sherds) was recovered from the fill of cesspit (233). This contained a number of tin-glazed and yellow slipware vessels of late 17th-century date along with white salt-glazed stoneware (BPT186) and ‘Scratch Blue’ ware (BPT179) manufactured between 1720 and 1780.

Period 6

Context [202] contained transfer-printed wares (BPT278) along with other 19th or 20th-century Bristol and Staffordshire wares (BPT340). A sherd of BPT 200, a stoneware with ‘improved’ glaze, dates to after 1835.
Discussion

The pottery was typical of that found throughout Bristol from the 12th century onwards and generally offered few surprises though the presence of waste material in a ‘Redcliffe’ fabric was unexpected. Unlike the medieval pottery waste from Redcliff Hill, St. Peters Church and St. Thomas Street, which were found as concentrated dumps, the Gloucester Lane material occurred as a scatter throughout a number of contexts. The fabric of the Gloucester Lane waste material is similar to the sherds recovered from Redcliff Hill and St. Thomas Street but its location some distance from those sites might suggest it is from a different, more local kiln source. There are a number of documentary references to crockers living and probably working in the Old Market area during the 14th century and it is possible that the present material is a sample of their output. As a postscript, recent fieldwork carried out at the site of no. 53 Old Market in 2005 has recorded a large number of pottery waste-sherds and kiln furniture of a similar date that almost certainly accrued from a kiln nearby (Bryant and Potter 2006, 10).

The tallage of Edward II levied in 1313 recorded that one Roberti le Crokere was living in the Market, but little other useful information was recorded (Fuller 1894, 171; Price 1979, 57). The fact that potters were still living and almost certainly working in Old Market at the end of the 14th century is shown by the will of William Steyl, ‘crokker’ and burgess, proved 15th November 1396 (Wadley 1886, 50; Price 1979, 58). Steyl was a man of some substance who left a number of properties in the Market. The description of ‘shops next to the lane to Elebrig’ would place some if not all of his property at the western end of modern Old Market; unfortunately it is not absolutely clear from the transcription of Steyl’s will that pot making was taking place at any of the premises, although it would seem reasonable that it was.

The similarity between fabrics from different parts of the city can be explained if, as is likely, all potters working in the area were obtaining clay from the same area. Iain Gerrard (pers. com.) has suggested that this source lay somewhere in the Kingswood coalfield possibly in the Downend area. The pottery from ditch [231] would seem to support the interpretation that it relates to the Civil War period. That the ditch was open for a relatively short time is demonstrated by the similarity of the ceramic material recovered from its primary and secondary fills. Unfortunately from a dating point of view most of the pottery can only be broadly dated to after 1600; however, the absence of fabrics typical of Bristol sites after about 1660 would suggest the ditch had gone out of use and been backfilled by this date.

Although the cesspit clearly post-dates the ditch, the form and decoration of a number of the tin-glazed vessels recovered from its fill show it was probably in use by the later 17th century. The total absence of later 18th-century wares suggests it had gone out of use by c.1760.

The scabbard lining by Ticca Ogilvie

A portion of a scabbard lining (Fig. 8) for a thin blade, possibly a rapier, was recovered from the primary fill (278) of the Period 3 ditch. The scabbard comprised a single piece of leather, with the remains of a seam up the centre, folded around a pair of thin wooden fillets that were swollen together.

The leather part of this object is almost certainly calf skin. The pattern or grouping of follicles is very similar to calf or cattle, the thickness of skin slightly less than 2 mm being typical of calf rather than the 4–6 mm thickness of mature cattle. The equal size of follicles and few coarse follicles also indicates that it was not mature cattle, sheep or goat. Calf was the most common species used for the making of scabbards since 1350 when the Guild of Furbishers forbade the use of any other species in the making of scabbards. The grain side faces inward and is more typical of an inner lining, suede being not very weather proof for the outside of a scabbard.
Wrinkles in the leather are indicative of use. The seam up the centre, only slightly off-centre, was originally joined with a flesh or grain stitch, also typical of scabbards. A diamond-headed awl almost certainly made the stitch holes that are cut rather than pierced, with a 1 mm diameter. The stitches are 2–3 mm apart in pairs roughly 5 mm apart.

There is a triangular-shaped cut at one end which may have been to allow the leather to be tucked into an adjoining element, possibly the chape of the scabbard, without a bulge.

The wood belongs to the group of diffuse porous hardwoods. It has numerous (>20) multiseriate, extremely broad rays, visible with the naked eye in both tangential and transverse perspectives. The pores are mostly single. A few schleriform perforation plates are visible at the end of vessels. The most likely species are beech (Fagus spp.) or sycamore (Platanus spp.).

**Environmental evidence** by Julie Jones

Three samples were recovered from the primary fill of the ‘L’-shaped, flat-bottomed ditch [231]. Evidence from the ditch fills suggest that it was open for only a short period and was rapidly backfilled with rubble and with the excavated clay used to form the rampart once the defences were no longer required. It is likely that within 30 years most of the outer defensive works around the city were obliterated. The plant macrofossil remains preserved in the primary ditch fill therefore allow a reconstruction of the local vegetation of this feature to be made during this short period.

The samples were wet sieved to a 250 micron mesh size, with the floats then sent to the author for analysis. These were examined wet under low-powered magnification with macrofossils extracted for identification. In view of the abundance of seeds and fruits in sample 3, estimates were made of the numbers of certain taxa present. The results are shown in Table 1. Nomenclature and habitat information is based on Stace (1991). Although all the samples came from the primary fill of ditch...
Table 1. Gloucester Lane, Bristol. Plant Taxa recovered from primary fill of Civil War ditch [231]  

<table>
<thead>
<tr>
<th>Context</th>
<th>Sample no</th>
<th>Sample size (litres)</th>
<th>Size of float (ml)</th>
<th>Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>228</td>
<td>294</td>
<td>239</td>
<td>3</td>
<td>DGHWp</td>
</tr>
<tr>
<td>260</td>
<td>194</td>
<td>152</td>
<td>5</td>
<td>CDn</td>
</tr>
<tr>
<td>278</td>
<td>128</td>
<td>100</td>
<td>1</td>
<td>D</td>
</tr>
</tbody>
</table>

**Ranunculaceae**

*Ranunculus acris/repens/bulbosus* Meadow/Creeeping/ Bulbous Buttercup 1 36 133 DG

*Ranunculus flammula* Lesser Spearwort 5 671 MPRw

*Ranunculus sardous* Hairy Buttercup 1 CDW

**Cannabaceae**

*Humulus lupulus* L. Hop 71 HS, fen-carr

**Moraceae**

*Ficus carica* L. Fig 1 #

**Urticaceae**

*Urtica dioica* L. Common nettle 239 142 740 DGHWp

**Chenopodiaceae**

*Atriplex* spp. Orache 15 17 288 CDn

*Chenopodium album* L. Fat-hen 4 CDn

*Chenopodiaceae* indet 5 CD

*Chenopodium rubrum/glaucum* Red/Oak-leaved Goosefoot 1 CDs

**Caryophyllaceae**

*Stellaria media* (L.) Villars Common Chickweed 1 CD

**Polygonaceae**

*Persicaria maculosa* Gray Redshank 1 Cdo

*Polygonum aviculare* L. Knotgrass 121 CD

*Rumex acetosella* L. Sheep’s Sorrel 2 Ho, CG, a,sandy

*Rumex conglomeratus* Murray Clustered Dock 2 BGw

*Rumex pulcher* L. Fiddle Dock 11 Gd

*Rumex spp* Dock 3 16 DG

**Malvaceae**

*Malva* sp Mallow 1f 3 DW

*Malva sylvestris* L. Common Mallow 140 D

**Brassicaceae**

*Brassica/Sinapis/Raphanus* sp Mustard/Rape/Cole etc 4 229 CD#

*Capsella bursa-pastoris* (L.) Medikus Shepherd’s Purse 1 1020 Co

*Sinapis arvensis* (fruits -lower part of beak) 8 CD

**Rosaceae**

*Aphanes arvensis* L. Parsley-piert 4 CGd

*Crataegus monogyna* Jacq Hawthorn 1 HSW

*Malus* sp (pips) Apple 1 HSW

*Malus* sp (endocarp fragments) Apple 3 HSW

*Rubus sect. Glandulosus* Bramble 20 DHSW

*Wimmer & Grab*
Table 1. (contd.)

<table>
<thead>
<tr>
<th>Context</th>
<th>228</th>
<th>260</th>
<th>278</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample no</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Sample size (litres)</td>
<td>10</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Size of float (ml)</td>
<td>22</td>
<td>20</td>
<td>400</td>
</tr>
<tr>
<td>Habitat</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FABACEAE**

*Ulex sp* (spine)  Gorse  
7  EGWo

**EUPHORBIACEAE**

*Mercurialis annua* L.  Annual Mercury  24  7  61  CD

**VITACEAE**

*Vitis vinifera* L.  Grape-vine  1  #

**APICAEAE**

*Aethusa cynapium* L.  Fool’s Parsley  16  8+f  54  C

**SOLANACEAE**

*Solanum dulcamara* L.  Bittersweet  4  DHS

**LAMIACEAE**

*Lamium purpureum* L.  Red Dead-nettle  7  10  21  CD

**CAPRIFOLIACEAE**

*Sambucus nigra* L.  Elder  15  22  DHSWn

**VALERIANACEAE**

*Valerianella dentata* (L.)Pollich  Narrow-fruited Cornsalad  1  CD

**ASTERACEAE**

*Bellis perennis* L.  Daisy  1  G

**CYPERACEAE**

*Carex spp*  Sedge  3  4  2  GMPRW

*Isolepis setacea* (L.)R.Br  Bristle Club-rush  1  FMPEw
Table 1. (contd.)

<table>
<thead>
<tr>
<th>Context</th>
<th>Sample no</th>
<th>Sample size (litres)</th>
<th>Size of float (ml)</th>
<th>Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

POACEAE

<table>
<thead>
<tr>
<th>Species</th>
<th>Sample no</th>
<th>Sample size (litres)</th>
<th>Size of float (ml)</th>
<th>Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Glyceria fluitans</em> (L.) R.BR.</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>82</td>
</tr>
<tr>
<td><em>Hordeum</em> sp (charred)</td>
<td>2</td>
<td>2</td>
<td></td>
<td>#</td>
</tr>
<tr>
<td>Poaceae indet</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total:** 409 279 6731

Notes and Key

Notes:

1. Other Remains

<table>
<thead>
<tr>
<th>Remains</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buds</td>
<td></td>
</tr>
<tr>
<td>Caddis fly larvae</td>
<td></td>
</tr>
<tr>
<td>Charcoal</td>
<td></td>
</tr>
<tr>
<td>Cladoceran ephyppia</td>
<td></td>
</tr>
<tr>
<td>Insect remains</td>
<td></td>
</tr>
<tr>
<td>Leech cocoons</td>
<td></td>
</tr>
<tr>
<td>Moss</td>
<td></td>
</tr>
<tr>
<td><em>Planorbis leucostoma</em></td>
<td></td>
</tr>
<tr>
<td>Slag/clinker</td>
<td></td>
</tr>
<tr>
<td>Wood fragments/twigs</td>
<td></td>
</tr>
</tbody>
</table>

2. Key

Habitats

<table>
<thead>
<tr>
<th>Habitat</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: Aquatic</td>
<td>a: acidic</td>
</tr>
<tr>
<td>B: Bankside</td>
<td>d: dry soils</td>
</tr>
<tr>
<td>C: Cultivated/Arable</td>
<td>n: nitrogen rich soils</td>
</tr>
<tr>
<td>D: Disturbed</td>
<td>o: open habitats</td>
</tr>
<tr>
<td>E: Heath/Moor</td>
<td>p: phosphate rich soils</td>
</tr>
<tr>
<td>F: Fens/Bogs</td>
<td>s: coastal</td>
</tr>
<tr>
<td>G: Grassland</td>
<td>w: wet/damp soils</td>
</tr>
<tr>
<td>H: Hedgerow</td>
<td># cultivated plant/of economic importance</td>
</tr>
<tr>
<td>M: Marsh</td>
<td></td>
</tr>
<tr>
<td>P: Ponds, ditches - stagnant/slow flowing water</td>
<td></td>
</tr>
<tr>
<td>R: Rivers, streams</td>
<td></td>
</tr>
<tr>
<td>S: Scrub</td>
<td></td>
</tr>
<tr>
<td>W: Woodland</td>
<td></td>
</tr>
</tbody>
</table>

3. Scale of abundance:

<table>
<thead>
<tr>
<th>Scale of abundance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>rare</td>
<td>vegetative material occurring only once</td>
</tr>
<tr>
<td>occ</td>
<td>vegetative material occurring only a few times</td>
</tr>
<tr>
<td>freq</td>
<td>vegetative material occurring regularly</td>
</tr>
<tr>
<td>v. freq</td>
<td>vegetative material occurring in every portion of the sample examined</td>
</tr>
<tr>
<td>abun</td>
<td>vegetative material occurring in field of view all the time and dominating the sample</td>
</tr>
</tbody>
</table>
the degree of organic preservation varied, with context (278) producing over 6,700 well-preserved seeds and fruits from the 400 ml float. The organic content of the other two samples, although only taken from locations several metres away, was very low, the floats containing a higher degree of mineral matter with inclusions of coke or clinker. A similar, although reduced suite of macrofossils was recovered from these samples and in context [260] in particular it was noted that there was a higher degree of seed fragmentation. This suggests that the variation recorded in these ditch fills indicates that conditions may have varied over a relatively short distance, particularly relating to impeded drainage therefore causing greater water retention in parts of the ditch, which in turn appears to have affected post-depositional preservation of organic matter.

The three samples contained a similar suite of macro remains, the majority of which are interpreted as representing the local environment of the ditch. One group of plants, prominent in context (278), would have grown in the ditch itself and suggest that for the short time that it was open, this section would have contained standing water. Particularly abundant are the fronds of duckweed (Lemna), a small flowering plant which floats freely so allowing this species to form a continuous carpet on the water's surface. It is characteristic of still quiet waters and doesn't root in mud. Also common was floating sweet-grass (Glyceria fluitans) which lives in stagnant or slow-flowing shallow waters or on mud. Further evidence for standing water in context (278) comes from freshwater life in the form of abundant water-flea egg cases (cladoceran ephyppia), freshwater crustaceans which abound in most stretches of water and form the plankton of ponds and ditches (Clegg 1965) together with caddis fly larvae and leech cocoons. Examples of the water snail Planorbis leucostoma (white-lipped ram's-horn snail) also suggest weedy ditch conditions as these herbivore species rely on water-weeds for sustenance (Janus 1979). The damp ditch sides would also have provided a suitable habitat for sedges (Carex), lesser spearwort (Ranunculus flammula), hemlock (Conium maculatum) and gipsywort (Lycopus europaeus).

Most of the species found in the samples, however, would have grown in the area surrounding the ditch where the ground had been disturbed from construction of this defensive work and its associated rampart. These taxa are annual species, quick growing ephemerals which are typical of habitats where they can quickly gain a foothold in the loose soil and become established. They include shepherd’s purse (Capsella bursa-pastoris), groundsel (Senecio vulgaris), annual mercury (Mercurialis annua), knotgrass (Polygonum aviculare) and species of orache (Atriplex) and mustard/rape cole (Brassica/Sinapis/Raphanus). Perennials would also have quickly become established, grasses (Poaceae) being particularly abundant and likely to have formed a major component of the local vegetation with other ground cover species such as greater plantain (Plantago major), selfheal (Prunella vulgaris), buttercup (Ranunculus acris/repens/bulbosus) and dock (Rumex). Areas of nutrient rich ground around the ditch would also have supported patches of nettles (Urtica dioica), with scrubby growth including elder (Sambucus nigra), bramble (Rubus sect Glandulosus) and hawthorn (Crataegus monogyna). The occurrence of hop (Humulus lupulus) is interesting – evidence for this scrambling perennial climber has not been found in Bristol before and together with bittersweet (Solanum dulcamara), a plant of similar habit and typical of damp woods and scrub, would have twined through the scrubby vegetation at the ditch side. Hedge woundwort (Stachys sylvatica), a medium creeping perennial, prefers shaded habitats and would have grown on the ditch sides in association with this scrubby vegetation.

Conclusion
The overall picture of the local environment of this section of the defences at Gloucester Lane is one of a ditch where drainage conditions varied, certain stretches containing standing, perhaps
shallow water and others remaining drier. The vegetation around the ditch would have been a mixture of rough grassland with ground cover herbs, with more patchy vegetation perhaps in areas such as the rampart, supporting annual species where the ground was more open. Other areas would have supported scrubby growth of shrubs such as elder and bramble. There are a few additional taxa such as grape (*Vitis vinifera*), fig (*Ficus carica*) and possibly apple (*Malus*). Although the last may have grown locally, these and the charred barley (*Hordeum*) grain are unlikely to have formed part of the natural vegetation and represent chance disposal of food remains into the ditch.

**The faunal remains** by Lorrain Higbee

Approximately 2 kg of animal bone were recovered from the site; this is quantified in Table 2 by the number of identified specimens per species (or NISP) by period. The entire assemblage was subjected to assessment by rapidly scanning and the following information recorded; species, skeletal element, age related features, completeness for biometric analysis, as well as more general observations on butchery, taphonomy and pathology. This information was entered into a database and is available in the site archive. The assemblage was reasonably well preserved and only three fragments were recorded as poorly preserved. These fragments exhibited weathering in the form of surface exfoliation. Butchery and other surface details were clear and defined, and only a small number of fragments from 17th-century layer [256] displayed gnaw marks.

Most of the assemblage was recovered during the normal course of hand-excavation and a small proportion (213 g) was retrieved from sample residues. The majority of bone was recovered from the 17th-century soil horizon (Period 2) cut by the defensive ditch. Smaller quantities of bone were recovered from features dated to Period 5 (cesspit and drain) and Period 6 (modern pipe trench).

Approximately 48 per cent of the total number of fragments could be identified to species; the remaining 52 per cent were undiagnostic fragments, approximately half of which could be assigned to general size categories (e.g. cattle-sized). The range of species represented was limited to domestic species in particular cattle, sheep (or goat) and pig. Less common species include horse, dog and cat. Two amphibian bones and a few fish vertebrae were also recovered.

<table>
<thead>
<tr>
<th>Species</th>
<th>*Period 3</th>
<th>Period 2</th>
<th>Period 5</th>
<th>Period 6</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td>7</td>
<td>10</td>
<td>3</td>
<td>2</td>
<td>21</td>
</tr>
<tr>
<td>Sheep/goat</td>
<td>2</td>
<td>10</td>
<td>2</td>
<td>–</td>
<td>13</td>
</tr>
<tr>
<td>Pig</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>–</td>
<td>5</td>
</tr>
<tr>
<td>Horse</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>Dog</td>
<td>3</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>3</td>
</tr>
<tr>
<td>Cat</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Frog/Toad</td>
<td>1</td>
<td>1</td>
<td>–</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>Fish</td>
<td>5</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Cattle-sized</td>
<td>2</td>
<td>7</td>
<td>–</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Sheep-sized</td>
<td>5</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Unidentifiable</td>
<td>5</td>
<td>21</td>
<td>–</td>
<td>–</td>
<td>26</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
<td><strong>58</strong></td>
<td><strong>8</strong></td>
<td><strong>5</strong></td>
<td><strong>90</strong></td>
</tr>
</tbody>
</table>
Period 2
A relatively large quantity of bone was recovered from contexts predating the Civil War defences. Cattle and sheep or goat bones are common and both joints of high meat value (limb bones) and waste elements (foot bones) were represented. Three pig bones and a single amphibian limb bone are the only other species positively identified.

Period 3
a) Hand-recovered
Nineteen bone fragments were recovered from the various fills of the Civil War ditch; cattle bones are common and included fragments of pelvis, tibia, astragalus, a 1st phalanx and a loose molar tooth. Epiphyseal fusion timing indicates that these cattle bones were all from beees (cattle under 3 years of age). Butchery evidence took the form of both chop and cut marks, the location and direction of which suggest that feet were disarticulated at the ankle and major meat joints were further reduced into more manageable meat cuts. Three bones from a small, gracile dog were also recovered from ditch contexts. They included a complete pelvis, scapula and metatarsal. Other bone fragments from the ditch included a sheep/goat mandible and loose pig incisor tooth. All other bone fragments could only be assigned to size categories.

b) Sample residues
A small number of diagnostic bone fragments were identified from the 213 g of bone recovered from sample residues. This material included small bones such as carpals, tarsals, phalanges, loose teeth and unfused epiphyses. In addition the partial skeleton of an adult cat and several bones from a newborn kitten were identified from the primary fill of the east-west ditch alignment (sample number 3). Parts of the adult skeleton recovered included skull fragments, loose teeth, cervical and thoracic vertebrae, and phalanges. The kitten was represented by fragments of pelvis, ulna and scapula. In addition to the above, five fish vertebrae and a single amphibian (frog/toad) long bone were also identified.

Period 5
Eight bone fragments were recovered from two 18th/19th-century contexts. This material includes bones from the three main stock species and, in addition, one horse axis vertebra. One of the cattle bones, a radius, had been sawn through the mid-shaft using a serrated blade. The distal femur from a young calf was also identified and this indicates the general availability of veal.

Period 6
Diagnostic bone fragments from a modern pipe trench [238] included two cattle bones, a 1st phalanx and proximal ulna.

Conclusion
The small size of the animal bone assemblage means there is little potential for further study. However, a comparison with material recovered from other Civil War defences in Bristol, in particular those which reuse medieval defences, may provide more of an insight into the provision of meat during this important period of English history.
Discussion

The palaeoenvironmental evidence from the ditch showed that it would only have been open for a short period of time before being rapidly backfilled, mostly with earth thrown up for the associated rampart. Evidently the diet of the defenders was not unduly restricted as seeds of fig, grape and apple were recovered from the primary fill (278) as well as a standard assemblage of animal bones that together attest to the availability of fruit and meat. Bones from a small gracile dog, an adult cat, a new born kitten and a frog paint a more prosaic picture. The paucity of pottery and clay-tobacco pipe recovered from the ditch is not unusual wherever such features were backfilled rapidly. The single fragment of a scabbard may not appear to reflect the scale of the fighting that took place around this site in 1645, although if consideration is given to the small quantity of the primary fill that was recovered then the implications are thought-provoking.

The tip lines of the fill deposits showed that the associated rampart would have stood on the southern and eastern sides. The fairly thin primary fill was sealed beneath two thick layers of sterile clay sandwiching a layer of rubble; such dense clay can only have come from the original excavation of the ditch. Pieces of moulded plaster within the rubble layer would suggest the demolition of a dwelling rather than an outbuilding.

The shape of the ditch and the nature of its fills bore a close resemblance to those exposed in an excavation at Southgate Street, Gloucester, in 1983 where a similar sequence of backfill material within Civil War defences was recorded (Atkin 1987, 12).

In March 1647 the House of Commons ordered that the garrison of Bristol was to be reduced and the outer ramparts and minor forts should be ‘slighted’ (Latimer 1900, 217). Following the upheaval caused by the two sieges it is reasonable to suppose that a general willingness to return to a normal way of life prevailed in Bristol as it would have done elsewhere (Harrington 2004, 5). However, the resurgence in hostilities through 1648 and again in 1651 may have had an influence on the urgency with which the Gloucester Lane ditch was backfilled. The pink-mortared walls [270] and [280], founded directly over the backfilled ditch, represent the post-war, re-building phase of the late 17th century when new tenement boundaries were established. A date can be allocated for the construction of these walls sometime between 1660 and 1700.

Taken with the recovered finds evidence, the most convincing explanation for the ditch at Gloucester Lane is that it was part of the defensive outworks constructed east of Lawford’s Gate. Its purpose was to guard the main routes into the city from London and Gloucester but probably not to protect the outer suburb.

Archaeological recording of Civil War features in Bristol has mainly been centred on the more prominent elements of the City defences such as the Portwall redoubt at Tower Harratz (Cox 1997) and the Royal Fort on St Michaels Hill (King forthcoming). On Brandon Hill, Civil War earthworks are landscaped within a public park, but elsewhere suburban growth has obliterated above-ground remains. At the present time, only isolated glimpses of Civil War features in the Old Market area have been located. In March 2000, during a watching brief carried out at the site of nos. 48–54 West Street, a deep linear feature was observed in section, running parallel with the street frontage (Insole 2000). No firm dating evidence was recovered from the feature, yet it may be that this was also part of the defensive outworks. In December 2003 workmen digging a trench for a water main through the junction of West Street and Old Market truncated a burial (Mordue 2004). The location of this burial posed many questions and the answer is still not certain because the position of the remains suggested at first glance that the body was that of a Civil War casualty placed within the 17th-century backfill material of the city’s boundary ditch. An excavation to the rear of nos. 22–30 West Street in August 2004 (King 2008) recorded part of a large cut-feature which, although heavily disturbed, had similarities in design and dating evidence to the ditch at Gloucester Lane.
The excavation of this one small site has provided a glimpse of the type and quality of artefact preservation that may survive in the near vicinity if similar Civil War features are located there. Even if it is only implied from the evidence, the demolition of buildings on a large scale outside Lawford’s Gate should help to characterise the 17th-century archaeology from other sites along West Street, even though no documentary evidence has (as yet) been identified to corroborate this theory.

Acknowledgements

The writer is grateful to Matt Thatcher and Mark Ryder of Russell Construction and Alistair Jackson of Oxford Architects for their assistance; Bruce Williams of Bristol & Region Archaeological Services for managing the project. Bob Jones, the City Archaeologist, for monitoring the work; Malcolm Atkins of Worcestershire County Council for his comments; Reg Jackson, Ticca Ogilvie, Julie Jones, Lynne Keys, Lorrain Higbee and the late Rod Burchill for their specialist reports; Rachel Heaton, Natalie Kennedy, Kevin Potter, Patrick Powell, Sean Wallis and volunteer Dinny Wilkinson for their hard work on site; Dave Stevens for site surveying and Ann Linge for her patience and work on the illustrations.

Bibliography

Published

Fuller, E., 1894. ‘The tallage of 6 Edward II (Dec 16, 1312) and the Bristol Rebellion’, Trans. BGAS 19, pp. 171–226.
RCHME 1964, Newark on Trent: The Civil War Siegeworks, London: HMSO.
Sharp, M., 1982. Accounts of the Constables of Bristol Castle, Bristol Record Society 34.

Unpublished
BRO P/St P & J/D/3b.
BRO 25016/3/22–23.
King, A., Forthcoming, Archaeological Excavations at the Royal Fort, University of Bristol, St Michael’s Hill & Tyndall Avenue, Bristol 2010.