# BRISTOL & AVON ARCHAEOLOGY



# Volume 26

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Cover: Illustration by Samuel Loxton in 1920 of the Remount Depot huts in use as temporary dwellings (courtesy of Bristol Reference Library, X1720).

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### EXCAVATIONS AT THE FORMER MAIL MARKETING INTERNATIONAL SITE, BRISTOL, 2005–2008 – EVIDENCE FOR MULTI-PERIOD OCCUPATION IN THE HISTORIC SETTLEMENT OF BEDMINSTER

### **By Andrew Young and Donna Young**

With contributions by Jane Bircher, Mark Carney, Harriet Foster, Lisa Grey, Alejandra Gutiérrez, Lorrain Higbee, Alison Locker, Ivan Mack, Peter Mackey, Elaine Morris and Jane Timby

#### SUMMARY

The former Mail Marketing International premises on the south side of West Street in Bedminster, Bristol was investigated in several excavation areas revealing significant evidence of previous human activity extending from the prehistoric period through to the 21st century. Small but significant late Neolithic/early Bronze Age flint and pottery assemblages indicated an occupation site in the near vicinity, whilst structural features and artefacts suggested an enclosed rural agricultural settlement was established during the later Iron Age. A series of subsequent fields or enclosures laid out during the 2nd to 4th centuries AD reflected the Iron Age pattern of land division and indicated the continuation into the Romano-British period of a stable, well-established agricultural settlement. The Romano-British enclosures appear to have been organised along the route of a minor Roman road thought to follow the approximate course of West Street. Thereafter a hiatus in activity over the site occurs well into the medieval period; evidence for early medieval settlement-related activity is restricted to a small collection of residual 11th century pottery sherds. The site was not intensively occupied again until the 12th-15th centuries, when successive ditched enclosures were established and associated extensive pit-cutting activity took place. Indeterminate earthfast and stone structures represented by postholes, beam slots and an isolated drystone masonry footing were erected during this period. The post-medieval and modern periods saw the establishment of an increasingly formalised pattern of construction and settlement culminating in the development of a series of regular tenements fronting West Street, some latterly replaced with modern industrial structures.

#### **BACKGROUND TO THE EXCAVATIONS**

Now a suburb of the City of Bristol, historically Bedminster was an important settlement in the north of the county of Somerset. The placename evidence points to a Saxon origin and is supported by documentary sources including the Domesday Survey (1086), which indicates a locally important manor and ecclesiastical settlement held by the King was well established by that time, giving its name to the Manor of Bedminster (Burchill 2003, Corcos 2010). The West Street name and those of East Street and North Street derive from the three open fields arranged around a triangular green or market place situated in the heart of medieval Bedminster at the junction of the three streets. West Street itself extends along the crest of the ridge atop the north western slope of the Malago Vale and reputedly follows the route of an earlier, minor Roman road that ran to the southwest towards Mendip (La Trobe-Bateman 1999). This report concerns the results of a staged programme of archaeological area excavations and selective trial excavations undertaken at intervals during 2005-2006 and 2008 in order to mitigate the impact of redevelopment at the former premises of Mail Marketing International, established in the 1960s on the southern side of West Street (centred on O.S. Nat. Grid ST 5822 7116, Fig. 1). The site-specific geology comprises Mercia Mudstones with weathered surface exposures of red-brown and greygreen clays (BGS 2004). The site lies some 2km southwest of Bristol city centre and extends over approximately 1.25 hectares at c24.5m above Ordnance Datum.

The Mail Marketing International site (MMI) had been variously investigated by preceding trial excavations, the earliest in 1998 (Yorkston 1998), when evidence of medieval occupation dating from the 11th century onwards was recorded in the main carpark, now occupied by the St Monica Very Sheltered Housing development (VSH). The wider site was investigated in 2003 (Young 2003, trenches 1–10) revealing evidence for multiphase occupation and settlement of late Iron Age, Romano-British, medieval and post-medieval date, the highest concentration notable in evaluation trenches located immediately adjacent to the West Street frontage. Features and deposits exposed in the northeast of the site were limited and principally represented elements of post-medieval tenement buildings.

The investigations initially were restricted to the footprint of the St Monica Very Sheltered Housing development (VSH, BHER 22135), where a single trial excavation trench (trench 11) was opened and expanded to



Fig. 1 Site location and areas excavated.

wider area excavation. Following this, the remainder of the Mail Marketing International site (MMI, BHER 22159) was investigated in a series of excavation areas aligned along the West Street frontage (MMI areas 2A, 2B, 2C and 2F) and in three trial excavation trenches (trenches 12, 13 and 14) located in areas not previously evaluated. This resulted in a final area excavation, Airpoint Block C (BHER 24602), undertaken in 2008.

#### THE RESULTS

The results for individual excavation areas are described separately. Thereafter, the evidence for all areas is integrated in the discussion that follows. Five broad periods of activity were identified over the site as a whole; Period I: Prehistoric; Period II: Romano-British; Period III: Medieval; Period IV: Post-Medieval (16th–18th centuries); Period V: Modern (19th–21st centuries).

#### St Monica Very Sheltered Housing (VSH)

This excavation area (Fig. 2) lay in the main carpark in the northeast of the former Mail Marketing International site.

#### Period I: Prehistoric

An initial prehistoric phase (*Phase 1.1*) identified by a collection of twenty-nine residual flint artefacts, including diagnostic scrapers and piercers, indicated settlement-related activity on or near the site during the later Neolithic and early Bronze Age. An extended period of diminished activity followed until the later Iron Age (*Phase 1.2*), when the site was once again occupied. A significant assemblage of mid to late Iron Age pottery, containing fragments from at least four undecorated vessel types, was recovered from relict soil 1122/1125/1135 in the west of the site. The soil extended towards a recut boundary ditch (cuts 1113/1273/1282 and cuts 1194/1275/1270) extending partway over the site on a northeast to southwest orientation. A scattering of small

postholes (cuts 1171, 1196 and 1230) observed only as isolated cuts in relict soil layer 1122/1125/1135 remain undated.

#### Period II: Romano-British

Romano-British activity broadly dated by pottery and other artefacts to the 2nd to 4th centuries AD was subdivided stratigraphically into three phases.

The earliest phase (Phase II.1) was represented by a probable boundary ditch (cuts 1124/1139/1149) that extended partway over the site from the southwest enclosing the land to the north and east. Three pits of indeterminate function (cut 1145, cut 1166/1284 and cut 1259) opened within the enclosure together yielded a small quantity of locally manufactured pottery fragments commonly used throughout the 2nd-4th centuries, as well as a whetstone (SF18) and a residual thumb scraper of late Neolithic or early Bronze Age date (SF4). The similar alignment and near proximity of this ditch to the earlier Phase I.2 Iron Age boundary feature (ditch 1113/1273/1282) pointed to the continuity of an established pattern of land division. Two narrow intercutting gullies or structural slots (cut 1192/1134 and cut 1193) sited some 4m east of the Phase II.1 enclosure ditch were opened during the second Romano-British phase (Phase II.2). The gullies partly destroyed Phase II.1 pit 1259 and were in turn truncated by a later pit (cut 1197), one of two such features, the other, cut 1159, opened during the final Romano-British phase (Phase II.3).

#### Period III: Medieval

Two broad phases of medieval activity are indicated from the artefacts retrieved. These comprise an earlier phase dating to the 12th–14th centuries AD (*Phase III.1a–c*) and a later phase spanning the 13th–15th centuries AD (*Phase III.2a and b*). The small collection of residual 11th century



Fig. 2 Area VSH after excavation.

pottery sherds suggests unidentified domestic activity in the vicinity.

Two parallel features, a broad ditch (cut 1178/1185/1299) and adjacent fenceline defined by a linear arrangement of posthole settings within a narrow trench (cut 1167/1255) were established during the earliest medieval phase (Phase III.1a) in the south of the site and together formed a substantial boundary enclosing land to the north and west. A perpendicular gully (cut 173/1160/1177/1141/1199) subdivided the enclosure, possibly demarcating the boundary between separate tenements, and an adjacent 4m long stone-filled slot (cut 1184) identified the location of an indeterminate earthfast timber structure. An undated pit (cut 1290) located alongside ditch 1178/1185/1299 was included in this phase, as it was largely destroyed during the construction of Phase III.1b ditch 1257/1288. The construction of this east to west oriented ditch and an adjoining small drainage gully (cut 1189) on its northern side represented an apparent reorganisation of the local landscape, destroying the Phase III.1a boundary features. Both ditch and gully silted naturally save for a significant quantity of mixed stone rubble that filled the upper reaches of the ditch at its eastern end, perhaps deposited in a deliberate attempt to backfill the ditch or to consolidate the surface at that location. A fragment of limestone saddle quern (SF23) was recovered from the rubble and a number of late 12th-14th century pottery sherds were retrieved from the silted fill in base. A right-angled arrangement of four sub-circular pits (cuts 1218, 1123, 1112 and 1280) was located to the immediate north of the boundary. Three of the group were similar in size with near vertical sides and flat bases, whilst the fourth, pit 1218 was larger, with an uneven concave profile. The volume of compacted sandstone and limestone rubble that filled this pit indicated it had been deliberately backfilled and consolidated. Collectively, the quantity of animal waste and pottery fragments recovered from the features, including residual 11th century sherds and a possible curfew cover, suggested they were rubbish pits.

The *Phase III.1b* reorganisation of the landscape appears to have been relatively short-lived, as the original northeast to southwest orientated boundary line subsequently was re-established with the erection of a mixed stone rubble wall (*Phase III.1c*, wall 1187), largely robbed out during the later medieval period (*Phase III.2b*).

Wall 1187 was standing into the later medieval period, as attested by the accumulation of *Phase III.2a* soil layer 1107/1114/1219 against its faces. Several diagnostic 13th– 15th century pottery sherds were retrieved from the layer and from the fills of two gullies (cut 1175/1154/1170 and cut 1225) opened on a perpendicular alignment to wall 1187. The parallel gullies were sited some 4m apart and probably defined perpendicular tenement boundaries. A substantial circular pit (cut 1143) located some 2.5m to the west of the walled boundary (1187) yielded a small number of similarly dated pottery fragments and a quantity of sub angular limestone and sandstone rubble, not unlike that forming the fabric of wall 1187. Thereafter, later medieval activity on the site diminished markedly (*Phase III.2b*); wall 1187 was robbed out (cut 1248) and the tenement ditches left to silt up.

#### Period IV: Post-Medieval

No structural evidence for activity of post-medieval date was found, but a residual collection of domestic pottery types dating to the period was recovered from later features and deposits, indicating activity in the near vicinity.

#### Period V: Modern

Two phases of modern activity were recorded over the site. The first (Phase V.1) was represented by the remnants of a late Victorian or early Edwardian tenement recorded in the northeast and comprising flagged stone floors (1210/1213/1222/1237) and kerbs (1211/1239) bounded by a metalled yard surface (1209) and associated garden soils (1206/1207). Reference to historic Ordnance Survey plans indicate the building was erected sometime after the compilation of the 1886 First Edition and corresponds well with a structure shown on the 1904 Second Edition, as does an associated concrete platform (1292) located to the southwest. A number of other features, including postholes (cuts 1250, 1252, 1262, 1264 and 1266), pits (cut 1121 and cut 1180/1182), a service trench (cut 1246) and gullies (cut 1227 and cut 1201/1203) of 19th century or early 20th century date were also exposed. The tenement building subsequently was demolished (Phase V.2) and retaining walls 1130 and 1231 erected. The area defined by the walls was backfilled and consolidated during the 1960s and sealed with a thick concrete surface (1212), used as the main carpark for the wider Mail Marketing International site.

#### Mail Marketing International Area 2A (MMI 2A)

This area (Fig. 3) was centrally located on the West Street frontage.

#### Period I: Prehistoric

No structural evidence for Neolithic or Bronze Age activity (*Phase I.1*) was recorded, however, the recovery of a

small assemblage of flint indicated activity close by. Iron Age activity (*Phase 1.2*) was equally restricted to a small collection of residual pottery sherds in later contexts.

#### Period II: Romano-British

Two undated soil features (features 15064 and 15065) sited in close proximity to each other in the extreme north of the area were attributed to the Romano-British period (*Phase II.1*) on the basis of stratigraphy, as both were truncated by *Phase III.1* medieval pit 15119.

#### Period III: Medieval

Two broad phases of medieval activity were recorded over the area. Features and deposits attributed to the earlier phase (Phase III.1), predominantly represented by a series of scattered pits, were dated by artefacts to the 12th to 14th centuries. Pits 15119, 15122, 15165 and 15202 were dispersed over the northern half of the area, whilst a closer grouping of small pits (cuts 15125, 15228 and 15268) had been opened in the east adjacent to pit 15290, a larger rectangular cutting. Cut marks on the skull, mandible and long bones of the articulated remains of an adult horse interred in this pit were consistent with skinning and pathological changes to the vertebrae suggested damage caused by longterm traction from its use as a draught animal, possibly part of a team. The recovery of a quantity of loose animal teeth and bone fragments from a contemporaneous soil deposit (15011) suggested the processing of animal carcasses was a common activity. A final two features included in this phase on the basis of stratigraphy were the remnant of a sandstone surface (15206) and gully 15257, largely destroyed by a later medieval pit (Phase III.2 pit 15196). This pit was one of a number (cuts 15106, 15159, 15180, 15196 and 15206) dating to the 13th to 15th centuries opened over the area, one of which (pit 15206) contained the articulated remains of a second large animal, possibly that of a cow or horse. A short length of northeast to southwest orientated ditch with rounded terminals (cut 15127/15204) had been opened in the west of the site, opposing the northeast terminal of a second possible ditch on the same alignment (cut 15133) revealed just inside the area.

#### Period IV: Post-Medieval

Two phases of post-medieval activity were evident within the area. The earlier phase dated to the 15th to 17th centuries (*Phase IV.1*), spanning the late medieval/ post medieval transition, at which time a large, squared, man-made pond (cut 15232, Fig 13.1) was in use in the southeast of the area. The gently graded northeast side of the pond (cut 15232) had been metalled (15264/15284) for ease of access to the water. By the 18th century (*Phase IV.2a*), two adjacent rectilinear masonry structures had been erected partly over the now infilled pond, the remainder of which had been sealed with deposits 15090 and 15091. The structures subsequently were robbed out (*Phase IV.2b*) cuts 15082 and 15256) and an irregular rubbish pit (15297) opened alongside, cutting the soil deposits and *Phase III.1* medieval horse burial 15290.



Fig. 3 Area MMI 2A after excavation.

#### Period V: Modern

A series of buildings (buildings 3–5) and associated network of services were constructed on the site during the late 18th or early 19th centuries, the latter (building 5) sealing *Phase IV.2b* robber trench 15082 and remnant masonry 15151. A stone cistern with vaulted brick roof and internal waterproof lining was incorporated into building 3 on the West Street frontage and a second similar cistern was located in building 4 to the rear. It was unclear whether an adjacent stone-built well (15274) predated the building or was a contemporary internal feature. Building 5 was set back from the West Street frontage in the southwest of the excavation area and comprised a rectangular structure with adjoining toilet. This building was extensively remodelled during the late 19th and 20th centuries, at which time (*Phase V.2*) it was extended (as building 6) up to the West Street frontage.

#### Mail Marketing International Area 2B (MMI 2B)

This area was sited on the West Street frontage to the immediate northeast of MMI 2A.

#### Period I: Prehistoric

Two phases of prehistoric activity were identified. The earlier phase (*Phase 1.1*) was dated to the early to middle Bronze Age by the small collection of coarse grog-tempered pottery fragments retrieved from the base of a narrow gully



Plate 1 Area MMI 2B during excavation, looking north.

(cut 15468/15459) that cut oval pit 15520/15522 in the extreme southeast of the area. Only a short length of the northeast to southwest oriented gully survived, truncated in both directions by a pair of opposing ditches (cut 15461 and cut 15437/15466) opened during the later prehistoric phase (Phase I.2, Fig 8.2). These ditches, and a second opposing pair (recut ditch15438/15630 and ditch 15435/15516/15532) extending on a parallel alignment some 14m to the north, acted as boundary features defining a series of enclosures that subdivided the local landscape during the mid to late Iron Age period (Phase 1.2). The 3m gap between the opposing terminals of each pair of ditches provided access points over the boundary between enclosures, whilst a broadly linear arrangement of postholes (cuts 15561, 15391, 15548, 15399, 1553, 15540 and 15546) extending alongside ditch 15435/15516/15532 reflected an associated earthfast timber structure, perhaps a fenceline. Scattered pits 15626 and 15396 had been opened within the enclosures, the latter yielding conjoining sherds from a Middle Iron Age storage jar.

#### Period II: Romano-British

A single phase of Romano-British activity (*Phase II.1*) dating to the 3rd century AD was recorded adjacent to the West Street frontage, where a discrete grouping of postholes (cuts 15404, 15554 and 15622) and small pits (cuts 15403, 15556, 15617, 15619 and 15632) was located. Despite their close proximity, no clear indication of the form and/ or function of a possible structure at the location could be determined. Finds of particular interest included part of a bone knife handle (SF597) recovered from the secondary fill of pit 15403, similar types of which have been recorded



Fig. 4 MMI 2B after excavation.

from Roman Southwark in London, and an iron finger ring with large ovoid bezel (SF583) from the latest fill of the same pit.

#### Period III: Medieval

Two phases of medieval activity, both involving significant pit-cutting activity, were identified. The earlier phase dated to the 12th to 14th centuries (Phase III.1), during which time several large rubbish pits (cut 15566/15594/15565/15587 and cuts 15614, 15431, 15557 and 15529), some intercutting, were opened over the northern half of the area. Collectively, the pits contained quantities of domestic pottery and food waste; the faunal remains included chicken and fish bone and sea urchin spines, alongside representatives of the larger domesticates (horse, cow and pig) commonly found on rural sites. A number of small rubble-filled pits (cuts 15477, 15510, 15610, 15585 and 15469) of indeterminate function were also opened during this phase and shared a similar distribution to the rubbish pits. A single post-setting with in-situ packing (cut 15578), perhaps a location marker, was also identified in very close proximity to the pits. The pits appear to have been opened in a discrete area within a larger enclosure, defined in part to the south by a northwest to southeast oriented recut ditch (cuts 15446/15484 and 15486/15488). The spatial organisation of the (Phase III.2, 13th to 15th centuries) later medieval pits differed slightly from that of their earlier counterparts. All but four of the variously sized pits (cuts 15409, 15410, 15427, 15450, 15481, 15482, 15483, 15533, 15559, 15563, 15573, 15584, 15589, 15590, 15591 & 15603) occupied a broadly linear zone set back from, but parallel with, the West Street frontage. The four exceptions comprised three pits dispersed over the south of the area (cuts 15416, 15432 and 15483), the latter a highly irregular feature of indeterminate function that cut the Phase III.2 boundary ditch (cut 15446/15484). The final pit (cut 15427), a circular shaft in excess of 1.2m in depth, possibly indicated the former position of a substantial earthfast timber on the southeast boundary. The recovery from pit 15591 of a worked red deer antler tine (SF540), used either as a clod breaker, or as a draw hoe to form seed drills, together with the retrieval of a complete mandible from an immature fallow deer from waterlogged deposits in shaft 15427 pointed to culling of deer during this period, rather than the collection of shed antler in spring.

#### Period IV: Post-Medieval

The pit-cutting activity within the area continued in restricted form into the post-medieval period, when a few scattered pits (*Phase IV.1* cuts 15340, 15550, 15583 and 15629), some intercutting, were opened close to the West Street frontage. The pit-cutting activity had ceased by the second post-medieval phase (*Phase IV.2*), save for two clay-lined, lime-slaking pits (cuts 15442 and 15444) established on the frontage, truncating *Phase IV.1* pit 15629. These pits were used to provide the lime required for the lime-based mortar mix that bonded the masonry used in the construction of building 7, set back from the frontage in the east of the site. The changing character of Bedminster from rural to urban became increasingly evident thereafter and by the late 18th century *Phase IV.2* building 7 had been modified, as *Phase IV.3*, building 8, and parallel structure, building 9, erected alongside.



Plate 2 Area MMI 2B Phase IV.2 lime-slaking pit 15452, looking southwest.

#### Period V: Modern

The urbanisation of Bedminster, and of the excavation area, continued into the 19th century when the Lamb Inn Public House (*Phase V.1*, building 10) with its associated structures and services was constructed on the West Street frontage, destroying several medieval pits. The public house and other buildings remained in use with some modifications (e.g. structure 11) well into the 20th century (*Phase V.2*), before finally being demolished and replaced with temporary structures (sheds) in the latter part of that century.

#### Mail Marketing International Area 2C (MMI 2C)

This area (*Plate 3, Fig. 5*) was located on the West Street frontage in the extreme north of the Mail Marketing International site.

#### Period I: Prehistoric

A small assemblage of residual flint objects, including a Neolithic arrowhead (SF562), pointed to an initial phase (*Phase 1.1*) of unspecified prehistoric activity in the near vicinity. No associated structural features were recorded. A second prehistoric phase (*Phase 1.2*) dating to the later Iron Age was represented by a right-angled arrangement of four small pits (cuts 15758, 15777, 15787 and 15815) partly exposed in the south of the area and by a substantial northwest to southeast orientated boundary ditch (cut 15870/15872) opened some 8m to the east.

#### Period II: Romano-British

Romano-British activity dating from the 2nd century through to the first half of the 4th century AD was recorded over the area. The construction of *Phase II.1* ditch 15851/15854/15866/15874 redefining the (*Phase I.2*) Iron Age boundary, pointed to the continuation of an established

and stable local pattern of land division. The significant quantity of pottery recovered from the Romano-British ditch suggests the boundary was a long-lived feature abandoned by the later 3rd century (Phase II.2) when a small rectilinear structure was partly founded in the top of the now infilled ditch. The earthfast structure was constructed on the same alignment as the preceding ditch and defined on three sides by stone-filled slots (cut 15813/15868/15856, cut 15862 and cut 15834). The structure appears short-lived, as it was subsequently replaced with a perpendicular arrangement of postholes (Phase II.3 cuts 15877, 15826, 15811 and 15804), possibly a fenceline. Finds from posthole 15811 included diagnostic pottery sherds of 4th century date, as well as an unusual late Neolithic kite-shaped arrowhead (SF562). To the west, an indeterminate cut feature (15805), all but destroyed during later pit-cutting activity, yielded a large assemblage of similar 3rd-4th century pottery, suggesting it was contemporary with the posthole alignment.

#### Period III: Medieval

In marked contrast to the adjacent excavation area (MMI 2B), evidence for medieval activity in the current area was restricted to only a very few cut features, dated by diagnostic pottery and other find types. An isolated posthole or small pit (cut 15799) that extended beyond the southeast baulk indicated an initial phase (*Phase III.1*) of 14th century activity. A subsequent phase of 15th century activity (*Phase III.2*) focused in the southeast of the area was represented by



Plate 3 Area MII 2C intercutting later Iron Age and Romano-British ditches (phase 1.2 cut and Phase II.I cut, looking east.

relict soil 15678 and by a circular posthole with in-situ postpacking (cut 15853) and narrow rectangular slot 15717, from which a quartered silver penny of 11th–13th centuries date was recovered (SF552). Both cut features truncated parts of the *Phase II*.2 Romano-British rectilinear structure.

#### Period IV: Post-Medieval

The area remained rural in character throughout the postmedieval period (16th–18th centuries). Earlier activity (*Phase IV.I*) involved an extended phase of pit-cutting activity, during which several large intercutting pits of indeterminate function were opened and filled (cuts 15794/15796, 15843, 15882,15884, 15720 and 15792), focused on a discrete location in the south (Fig. 13.3). By the 18th century, the pit-cutting activity had ceased and the area was given over to agriculture (*Phase IV.2*). The poorly preserved remains of an animal house with rammed floor and integral brick-lined drainage channel (walls 15656 and 15665 and drain 15848/15661) was recorded in the west of the area and a stone-lined well (15775) had been sunk in the east.

#### Period V: Modern

By the early 19th century, a significant change in landuse from agricultural to residential was evident. A rank of tenement buildings, each with a cellar/basement accessed at the rear by an external staircase, was erected on the West Street frontage (*Phase V.I*, buildings 13, 14 and 15). The tenements were constructed to the same basic ground plan with neighbouring buildings laid out as the mirror image of one another and remained in use well into the 20th century (*Phase V.2*). Building 15 underwent major alterations over this time; much of the internal layout was altered and the external staircase removed when the building was extended to the rear with the addition of a brick-built utility room and later, outside lavatory and coal store. The function of the squared masonry structure (15863) sunk into the ground at the rear of building 13 was not determined.

# Trial Excavation Trenches 12 (Area MMI 2E), 13 (Area MMI 2F) and 14 (Airpoint Block C)

No evidence of prehistoric or Romano-British activity was identified in the trial excavation trenches, however all three revealed structures and deposits dating to the medieval (*Period III*) and post-medieval (*Period IV*) periods. No further intrusive archaeological investigation was required in area MMI 2E, as the archaeological remains identified in trench 12 were buried at sufficient depth to be unaffected by the proposed development and were *preserved in-situ*. The remains recorded in trenches 13 and 14 (Areas MMI 2F and Airpoint Block C respectively) survived at shallower depth and could not be preserved *in-situ*.

#### Mail Marketing International Area 2F (MMI 2F)

The footprint of this area (*Fig. 6, Plate 4*) located immediately adjacent and to the southwest of area MMI 2A, was split in level and, accordingly, was investigated in two parts referred to here as MMI 2F WEST and MMI 2F EAST.



Fig. 5 Area MMI 2C after excavation.

#### Period I: Prehistoric

No structural evidence dating to the prehistoric period was recorded and artefactual evidence was restricted to two residual retouched flakes (SF627 and SF635) that pointed to unspecified *Phase 1.1* early Bronze Age activity in the vicinity.

#### Period II: Romano-British

No artefacts or structural features dating to the earlier Romano-British phase of activity (*Phase II.1*, 2nd–3rd centuries) recorded elsewhere within the wider Mail Marketing International site were identified. Later Romano-British activity (*Phase II.2*) was confined to area MMI 2F WEST and represented by a few isolated cut features dated to the later 3rd and 4th centuries. These included a small, rubble-filled pit of indeterminate function (cut 16202) and a post-pit with double setting and disturbed remnants of in-situ post-packing (cut 16186). These features, and a smaller posthole (cut 16079), probably were sited within a large enclosure defined in part by ditch 16192 extending into the area from the southeast and ending at a rounded terminal.

#### Period III: Medieval

No evidence of *Phase III.1* medieval activity dated to the 12th–14th centuries elsewhere on the site was recorded at the current location. Artefacts recovered from the structural features and deposits identified spanned the 13th–15th centuries (*Phase III.2*) and were restricted to area MMI 2F WEST. Here, an initial phase of indeterminate pit-cutting activity (*Phase III.2a*, cuts 16135, 16167 and 16181) occurred within a narrow enclosure defined by parallel boundary/

drainage ditches 16127/16198 and 16207 that extended into the area from the southwest. The enclosure appears a short-lived feature in the landscape, as both ditches were disturbed (by pits 16090 and 16140 respectively) during a succeeding phase of similarly dated pit cutting activity (*Phase III.2b*). Several pits of varying size and form were opened (cuts 16054, 16090, 16129, 16140, 16189, 16195, 16205 and 16213); finds commonly recovered from the group included a quantity of butchered animal bone (cow, sheep and pig). Several large iron fittings (SF618-SF627) possibly from an item of furniture were also recovered, from pit 16054. Thereafter, the accumulation over much of the area of relict soil 16101/16102/16136/16164 pointed to a hiatus in activity at the end of the medieval period (*Phase III.2c*).

#### Period IV: Post-Medieval

The hiatus in activity over the area appears short-lived, as pottery sherds retrieved from the stone-lined base of a well/ cistern sunk in area MMI 2F WEST indicated it was once again being utilised early in the 16th century (*Phase IV.1a*, Fig 13.4). The 4m diameter structure (well/cistern 16051) cut relict soil 6101/16102/16136/16164; the deposit was also truncated by a small number of dispersed cut features in the same area, comprising two large pits (cuts 16212 and 16137/16183), squared slot 16091 and two intercutting small pits/postholes (16145 and 16147). The well/cistern was deliberately infilled during the 17th century (*Phase IV.1b*) and a discrete soil layer (16165) deposited; the latter yielding a fragment of stem from a serpentine glass goblet (SF611) dated 1600–1650 AD. No evidence for later post-medieval activity (*Phase IV.2*, 18th century) was recorded.







Plate 4 Area MMI 2F. General view of Phase IV.1a well/cistern 16051, looking south.

#### Period V: Modern

In area MMI 2F WEST, the ground plan of Phase V.1 tenement building 20 closely resembled that of the 19th century tenements in area MMI 2C to the northeast, but for the lack of a cellar/basement. Rather, the building had a watertight cistern (structure 21), possibly a later addition. A broad and deep ditch or trench (16104) with somewhat irregular edges in plan extended over detached area MMI 2F EAST on a perpendicular alignment to the tenement and may have marked a boundary feature. A few scattered cut features of uncertain date in the vicinity were included in this phase on the basis of stratigraphy; squared cuts 16087 and 16204 and linear feature 16193 were opened inside the tenement plot, whilst adjacent postholes 16099 and 16121 occurred beyond the boundary. The tenement, with some modification, remained in use well into the 20th century (Phase V.2), during which time an extensive drainage and sewage system was established over both areas MMI 2F WEST and EAST. In area MMI 2F WEST, cistern 21 was disturbed during the sinking of manhole 16063; the adjoining conduit (16061) intersecting with earlier conduit 16066 that extended south-westwards and through the wall of building 20 to link with an external drain (16199). Associated structures and conduits constructed in area MMI 2F East included structures 16150, 16172, 16173 and 16153, the latter sited at the northeast end of pipe trench 16152. An isolated posthole (cut 16089) and north to south orientated slot of indeterminate function 16122 were also opened in this area, cutting Phase V.I features.

#### Airpoint Block C

This area (Fig. 7 and Plate 5) was excavated in 2008 as a separate exercise after the redevelopment of the majority of the Mail Marketing International site had been completed. The excavation area was opened on the premises of a former garage at No. 103a West Street and this, and an adjacent tenement, No. 103, were incorporated into the wider redevelopment design for the site. A building record

made of No. 103 West Street in advance of demolition is summarised here.

Whilst the assessment stage of the project was completed (Young 2009), the final analysis was not commissioned. The following is therefore, based on the results of that assessment.

#### Period I: Prehistoric

No artefactual or structural evidence for prehistoric activity was recorded at this location.

#### Period II: Romano-British

A pair of intercutting ditches (*Phase II.1*, 280 and 281) crossed the site on a northeast to southwest orientation parallel to modern West Street. Four Romano-British pottery sherds dating to the 2nd-4th centuries AD were recovered from the fills of the earlier, larger ditch (280) truncated on the northwest side by a narrower gully (281) that also yielded a single generic Romano-British greyware sherd. A small assemblage of similarly dated and largely residual (75%) Romano-British pottery sherds were also retrieved. The (*Phase II.1*) ditches subsequently were sealed by *Phase II.2* relict soil 285, the accumulation of which reflected an extended period of diminished activity over the area towards the end of the Roman period.

#### Period III: Medieval

Two phases of medieval activity, the earlier dating to the 12th-14th centuries, were recorded over the area. A small enclosure delineated by a series of narrow truncated gullies (features 283, 282, 141 and 241) was established initially (Phase III.1a), although the irregular alignment and shallow depth of the gullies meant it was unclear how cut 141 located at a possible entrance at the southwest corner of the enclosure fitted into this group. The remnant of a second possible structure defined by perpendicular slots 162 and 287 was indicated amongst a range of contemporary earthfast features, mainly scattered small pits (cuts 180, 181, 186, 194, 196, 205, 222, 237 and 254) located outside the small enclosure. A soil layer (288) subsequently accumulated sealing the slots and some of the pits after they fell out of use (Phase III.1b), whilst other pits were truncated during the construction of narrow stone culvert 214 in the southeast. A group of larger pits (cuts 167,197, 201 and 286) arranged in a linear grouping along the north-south axis of the area were opened (Phase III.1c) around the middle of the 13th century, truncating several of the Phase III.1a features. A contemporary smaller pit (cut 147) formed a single outlier to the west. Ditch 284, opened during the second phase of medieval occupation (Phase III.2, 13th-15th centuries), bisected the area and probably defined one side of a medieval tenement that extended south-eastwards from the West Street frontage. The lack of securely dated features to either side of the boundary suggested a period of otherwise restricted activity, however the spatial organisation of a medieval posthole group (cuts 184, 192, 223, 246, 265, 269 and 271) apparently respecting the ditch, points to contemporary structural activity. A severely truncated remnant of medieval



Fig. 7 Airpoint Block C after excavation.

drystone masonry (189) is also included in this phase, on the basis of stratigraphy.

#### Period IV: Post-Medieval

No structural features associated with the first phase (*Phase IV.1*) of post-medieval activity were identified, rather, the accumulation of a thick soil horizon (102) that entirely sealed the medieval features pointed to a prolonged period of diminished activity during the 16th and 17th centuries in this part of West Street. The second post-medieval phase (*Phase IV.2*) reflected the reoccupation of the site during the 18th century when a building was erected on the West Street frontage. The ground plan of the building, constructed with lime-mortared sandstone masonry (walls 106, 107 and 119) was not clearly defined, as much of the structure had been destroyed during subsequent activity. It appeared to have been floored in part with sandstone setts 104/105, replacing an earlier compacted mortar floor (116/129).

#### Period V: Modern

Various structures associated with the occupation of the site by a garage were recorded, including two closely adjacent storage tanks (tanks 1 and 2) set within brick-lined chambers (structures 108 and 109) on the West Street frontage. A further stone-lined pit (structure 120) with an oily residue coating the bitumen floor was set back from the road in the



Plate 5 Airpoint Block C Phase 111.1a medieval pit 194 cut by Phase 111.1b stone culvert 214 with Phase 111.1c pits 197 and 201 in the distance, looking east.



Fig. 8 1-area MMI 2A southwest facing section of Phase IV.1 pond 15232: 2- area MMI 2B northeast/northwest facing section of Phase 1.1 gully 15459 and pit 15520 and Phase I.2 ditch 15461: 3-area MMI 2C Phase IV.1 southeast facing section of intercutting pits 15720, 15784, 15796, 15843 and 15881: 4-area MMI 2F southeast facing section of Phase IV.1a well/cistern 16051

southeast, whilst a similar wall (structure 121) suggested a parallel structure extending beyond the excavation area in the southwest. Other modern features included a service trench (113) possibly replacing an earlier small culvert (114) exiting the north of the site and a brick-built manhole/ inspection box (103) revealed alongside a lead water pipe (138) in the northeast baulk section. A further service trench (123) was noted in the opposing south-western baulk section and a large cut (263) of indeterminate function truncated the *phase IV.I* post-medieval soil horizon and underlying deposits in the extreme west of the site.

#### THE SPECIALIST ANALYSES

The following details the results of the specialist analyses of the artefacts and ecofacts from the excavations at VSH and at areas MMI 2A, 2B, 2C and 2F, but excludes the final analysis of data recovered from Airpoint Block C, as this was not commissioned; however the specialist assessment indicated that the artefacts and ecofacts recovered provided complimentary data consistent with the material already analysed from across the site.

#### **Prehistoric Pottery**

#### **By Elaine Morris**

#### Early-Middle Bronze Age

A single body sherd (73g) from an Early-Middle Bronze Age vessel, identified by fabric and vessel wall thickness, was recovered from a prehistoric ditch (G.107, context 15458 in ditch 15459). The handmade vessel had been irregularly fired on the exterior and incompletely fired or unoxidised on the interior surface and core. Ironisation has hardened this otherwise normally soft and soapy fabric type.

The fabric contains a common amount (20-25%) of poorly-sorted, angular grog (crushed pottery fragments), measuring 4mm or less in size, which had been added as temper to a very fine sand or silty clay matrix containing grains of quartz measuring less than 0.1mm in size. The vessel wall of this sherd measures 17-18mm thick. The combination of these two attributes, coarse grog-tempering and thick vessel wall, indicates that this sherd is most likely to have derived from an Early to Middle Bronze Age vessel. Therefore, the sherd could have originated from a domestic Beaker, Food Vessel, biconical vessel or Trevisker-style vessel, types found in the Somerset area as at Norton Fitzwarren (Woodward 1989, fabrics 1-3, figs. 18-19; 1990, fabrics 381-385, figs. 88-92, table 7). The presence of a single sherd in this context suggests that there may have been a Bronze Age enclosed settlement in this area rather than a cemetery of funerary urns.

#### Late Iron Age

A total of 173 sherds (3087g) of handmade Late Iron Age pottery, including a single sherd of Droitwich briquetage container (3g), were examined. The majority of sherds had been redeposited in later features or layers but at least 70 sherds were recovered from features interpreted as Late Iron Age in stratigraphical position and through the pottery dating (Table 1). This modest assemblage is in extremely good condition despite the attachment of an infusion of iron oxides onto the exterior surfaces of all sides of most sherds; fortunately this 'ironisation' effect is only a few millimetres deep which means that nearly all sherds can be assigned to a defined fabric type. The mean sherd weight of 19g for the assemblage indicates that these sherds are generally large overall, but the range of individual sherd sizes varies from 2g to 251g. Several rim and base sherds could be identified to vessel form and all but one reconstructed to determine its diameter. Evidence of surface treatment application and subsequent use were also observed. Altogether, the information indicates that this modest collection of Late Iron Age pottery is in very good condition. The pottery was analysed and recorded following the current guidelines containing visual charts for standardisation and definitions of attributes recommended for the analysis and reporting of later prehistoric pottery in Britain (PCRG 1995, 1997), and improved where necessary. An Excel spreadsheet database of the detailed pottery attributes is available in the archive.

#### **Fabrics**

Thirteen pottery fabric types within six fabric groups have been defined in this assemblage (Table 1). None of these fabrics has been subjected to petrological analysis. The most common pottery fabric group by weight is composed of three variations of calcareous inclusions including two with calcite temper (C1 and C2) and one that has Oolitic and fossil shell-bearing limestone (C3) inclusions (Table 2). The second most common fabric group contains mainly fossil shell and there is only one fabric type in this group (S1). The less common fabric groups comprise three variations of calcite and quartz sand clay matrices (CQ1, QC1, QC2), two with grog-temper added to quartz sand clay matrices (GQ1, GQ2), and one which is simply sandy (Q1).

All but one of the pottery fabrics could have been produced from resources found within 7km of Bedminster. Outcrops of Carboniferous Limestone contain appropriate veins of precipitated calcite (Allen 1998; Kellaway and Welch 1948), which could have been crushed and added as temper to make fabrics C1 and C2. The Lias deposits could have provided the Oolitic and shell-bearing limestone (C3) and fossil shell fabric (S1), while the mixed fabrics of calcite and quartz sand are likely to have been from sediments derived from the Carboniferous Limestone and Trias deposits. Grog-tempered pottery could have been produced anywhere; there is nothing to link it specifically to a local source, nor to prove that it had been traded to the settlement. Grog-tempered pottery has been found in Late Iron Age assemblages in the area, as at Bagendon (Clifford 1961; Spencer 1983, fig. 2) and Ditches hillfort (Trow 1988, 64, argillaceous-tempered ware). The two sherds of coarse sand fabric (Q1) probably originated from one or more Durotrigian or later Iron Age coarser sandy fabric vessels from south Dorset (Davies 1987, 151; Lancley & Morris 1991, 122-3).

		FABRIC GROUPS AND TYPES														
									G	rog &	Q.	F.				
FEATUR	E	С	alcare	eous		Calc	& Qua	rtz Sand	Q	uartz	Sand	Shell		Vesic	ular	
TYPE	CONTEXT	BRIQ	<b>C1</b>	C2	C3	CQ1	QC2	QC1	GQ1	GQ2	Q1	<b>S1</b>	Vesic 1	Vesic 2	Vesic 3	Total
		CT	CT	CT	CT	CT	CT	CT	CT	CT	СТ	CT	СТ	СТ	CT	CT
alaaning	1100	CI	CI	CI	CI	CI	CI	CI	CI	CI	CI	CI	1	CI	CI	1
cleaning	1100	-	-	_	-	-	_	_	_	_	-	-	1	2	-	2
layer	1107	-	-	-	-	_	-	-	-	_	_	_	_	2	-	2
ditch	1108	-	-	-	-	_	1	_		-	-	_	_	-	_	1
ditch	1150	-	1	-	-	-	_	-	-	-	-	-	-	_	-	1
SOII	1100						Z						6		1	0
norizon	1122	_	_	_	_	-		-	_	_	_	_	0	_	1	,
borizon	1125	_	_	_	-	_	-	_	_	_	-	_	_	3	_	3
hackfill	1125	_	_	_	_	_	_	_	_	_	_	_	1	_	-	1
laver	15071	_	1	_	_	_	_	_	_		2	_	_	_	_	3
laver	15310	_	1				_	-	_	_	-	_	_	_	_	1
nit/gully	15340		2	1	3		_	_	_	-	_	_	_	_	_	6
pitguity	15350		2	1	5	_	_	_	_	_	_	18	_	_	_	19
pit	15356			1			_		1	_	_	-	_	_	_	1
nit	15376		1	_			_	_	_	_	_	_	_	_	_	1
laver	15392		_	_		_	_	_	_	_	_	4	_	_	-	4
laver	15395	_		_	_	_	-	_	_	-	_	1	-	-	-	1
ditch	15405		_	_	_	1	-	_	_	-	_	_	-	-	-	1
ditch	15436	_	1	_	_	_	-	_	_	-	_	-	_	-	-	1
ditch	15515	_	8	_	_	_	-	_	_	_	_	-	_	_	_	8
nit	15555	_	-	_	_		_	_	_	_	_	1	_	_	-	1
pit	15577		1	_	_	_	_	_	_	-	_	_	_	_		1
pit	15674	_	1		-	_	_	_	_	_	_	_	_	-	_	1
pit	15675	_	_	_	_	1	_	_	_	-	_	64	_	_	-	65
ditch	15679	_	_	_	_	_	_	-	_	1	-	-	_	_	_	1
nit	15776	1	_	-	_	-	-	_	_	_	-	3	_	_	-	4
posthole	15780	_	-	_	_	1	_	_	_	_	_	_	-	_	_	1
cleaning	15807	_	_	_	_	1	-	-	_	_	_	-	-	-	-	1
ditch	15812		1	_	_	_	-	-	_	-	_	_	_	-	-	1
ditch	15820	_	-	8	_	_	-	_	_	-	-	_	_	-	-	8
ditch	15835	_		3	-	13	_	_	_	_	-	_	_	_	_	16
ditch	15855	_		2	_	15	_	-	_	_	-	_	_	-	-	2
ditch	15865	_	_	-	_		_	6	_	1	_	_	_	-	-	7
TOTAL	15005	1	18	15	3	17		3 6	1	2	2	91	8	5	1	173

Table 1 Quantification of Iron Age pottery by fabric type (weight in grammes).

More than one type of Late Iron Age calcite-tempered ware has been found in assemblages on both sides of the Severn Estuary through petrological analysis (Allen 1998) and these fabrics are not dissimilar to Middle-Late Glastonbury ware Group 3 pottery (Peacock 1969). It is, however, uncertain how many locations of production there may have been throughout this later Iron Age period but it has been determined that there was more than one. Therefore, while the calcite-tempered ware pottery found at Bedminster could have been made locally, there is a strong possibility that it may represent a type of regionally traded pottery.

#### Calcareous Fabric Group

C1 common to very common (20–30%), well-sorted, angular fragments of calcite, clearly displaying cleavage structure, measuring  $\leq 2mm$  with rare, sub rounded, re-crystallised fragments of calcite up to 3mm.

C2 common to very common (25–30%), moderatelysorted, angular calcite,  $\leq 4$ mm with the majority  $\leq 3$ mm, in a clay matrix containing rare (1–2%), rounded to sub rounded quartz,  $\leq 0.8$ mm; coarser fabric than C1.

C3 common to very common (25–30%), poorly-sorted, angular to rounded grey limestone, ooliths and some fossil shell.

FABRIC GROUP	СТ	% CT	WT	% WT
Briquetage	1	0.6%	3	0.1%
Calcareous				
(non-fossil shell)	36	20.8%	1457	47.0%
Calcareous and				
Quartz Sand	26	15.0%	418	13.5%
Grog-tempered				
and Quartz Sand	3	3%	63	2.%
Quartz Sand	2	1.2%	7	0.2%
Fossil Shell	91	52.6%	1103	35.6%
Vesicular				
Texture 1	8	4.6%	25	0.8%
Vesicular				
Texture 2	5	2.9%	16	0.5%
Vesicular				
Texture 3	1	0.6%	10	0.3%
TOTAL	173	100%	3102	100%

Table 2Quantification of Iron Age pottery including briquetageby fabric group.

#### Calcareous and Quartz Fabric Group

The three fabric types in this group are each represented by two alpha codes to indicate their primary and secondary visual inclusions respectively.

**CQ1** moderate (10–15%), well-sorted, angular to sub angular calcite,  $\leq 1$  mm, in a clay matrix containing moderate (10–15%), moderately-sorted, sub rounded to rounded, coarse to medium quartz,  $\leq 0.8$ mm.

QC1 common (20%), moderately-sorted, very coarse quartz,  $\leq 1.5$  mm, in a clay matrix with sparse (3–7%), rounded calcareous matter,  $\leq 2$ mm.

**QC2** common (20–25%), sub rounded quartz,  $\leq 0.8$ mm with the majority  $\leq 0.4$ mm, and sparse (5%), angular calcite inclusions,  $\leq 1.2$ mm; the infrequency of calcite suggests that it is not actually temper but the angularity suggests that it is deliberately added temper in contrast to the sub rounded shape of the quartz.

#### Grog-tempered and Quartz Fabric Group

**GQ1** moderate (10%), moderately-sorted, angular grog temper,  $\leq 2$ mm, in a clay matrix containing sparse (5–7%), sub rounded to rounded, medium quartz,  $\leq 0.5$ mm and rare (1%), angular to sub angular calcite,  $\leq 2$ mm.

**GQ2** moderate (10%), poorly-sorted, angular grog temper,  $\leq$  4mm, in a clay matrix containing sparse (7%), sub rounded to rounded, coarse to medium quartz,  $\leq$  0.8mm and sparse (3%) angular to sub angular calcite,  $\leq$  2mm.

#### Quartz Fabric Group

Q1 Dorset Durotrigian Iron Age coarse sandy ware fabric (Davies 1987, 151; Lancley and Morris 1991, 122–3).

#### Fossil Shell Fabric Group

S1 abundant (40–50%), poorly sorted, sub angular to sub rounded fossil shell and fossiliferous, re-crystallised, calcitic limestone rock,  $\leq 4$ mm with the majority  $\leq 1$ mm.

#### Vesicular-texture Fabric Group

**Vesic 1** abundant (40–50%), rounded to angular vesicles,  $\leq 2$ mm across with the majority  $\leq 1$ mm, in a slightly sandy clay matrix containing rare (1–2%) sub rounded quartz,  $\leq 0.5$ mm and rare (<1%) rounded quartz, c. 1mm across; possibly the same fabric as S1.

**Vesic 2** very common (30%), angular vesicles,  $\leq$  3mm; extremely similar to calcite-tempered fabric C2

**Vesic 3** common to very common (20–30%), well-sorted, angular vesicles, measuring  $\leq 2$ mm with rare, sub rounded vesicles up to 3mm; this is likely to be a vesicular variation of fabric C1.

#### Vessel Forms

Nine rim types, one distinctive shoulder shape, and two base types were defined (Table 3). Four of them are typical of Late Iron Age assemblages in the Bristol Channel-lower Severn Valley region, with types R1, R3 and R5 being rather more reminiscent of Middle to Late Iron Age pottery. The commonest form, a beaded rim jar with high, softly-rounded shoulder (R2; Fig. 9,2-6), was also recovered on the west side of the region at Sudbrook, Llanmelin and Whitton (Spencer 1983, class A) and Lydney Park, where it is referred to as the bead-rimmed flowerpot and comfortably assigned to the first century BC to mid-first century AD based on the presence of a late La Tène II brooch (Wheeler and Wheeler 1932, 93-4, fig. 24, 1-4, 11). At least two examples, one made from a 'coarse black ware with shell' and the other a 'light grey ware', were found at Salmonsbury (Dunning 1976, 97, fig. 14, 7 & 102, fig. 16, 6) on the east side of the region. This same vessel type, but found in sandy fabrics, belongs to the Cadbury Castle Ceramic Assemblage 9 dated to c. 100 BC-AD 100 (Barrett, et al. 2000, 23, figs. 20, 10 & 15; 21, 1-2, 4, 6, 7, 9; 30, 2-4). Rim type R1 (Fig. 9,1) is very similar to R2 but lacks the beaded-effect and is thickened internally, a combination of attributes, which suggest that the form may have been the precursor of the beaded rim jar. Plain and decorated versions of this shape are typical of the Middle to Late Iron Age period Lydney-Llamelin style zone found on both sides of the Severn estuary (Cunliffe 1991, fig. 4.6), as at Lydney Park (Wheeler and Wheeler 1932, figs. 24, 6 & 25, 20), and were made from calcite-tempered fabric (Spencer 1983, fig. 1, class B; Allen 1998, fig. 4, 17). Type R4 is a lid-seated jar (Fig. 9,8) and appears to be very similar to one, also made in a calcite-tempered fabric, from Lydney Park (ibid, fig. 24, 5). The largest vessel in the assemblage is a type R3 (Fig. 14.7), made from the fossil shell fabric. This is a common later Iron Age form of jar. Similarly, vessel type R5 (Fig. 9,9) is a very simple, convexprofile or void shaped jar, a common later prehistoric vessel type which could also date from anytime during the later Iron Age. The fact that the one example in this assemblage

FEATURE	FEATURE	CONTEXT	FORM TYPES											
ТҮРЕ			<b>R</b> 1	<b>R2</b>	<b>R</b> 3	<b>R4</b>	<b>R</b> 5	R6	<b>R7</b>	<b>R8</b>	<b>R9</b>	A	<b>B1</b>	B2
cleaning	-	1100	-	-	-	-	-	-	-	-	-	-	-	-
layer	-	1107	-	-	-	-	-	-	-	1	-	-	-	-
ditch	1149	1108	_	-	_	-	-	-	-	-	-	-	-	-
ditch	1149	1150	-	1	-	-	-	-	-	-	-	-	-	-
soil horizon	-	1122	1	-	_	-	_		-		1	-	-	-
soil horizon	-	1125	-	-	_	-	_	_	-	_	-	-		-
backfill	1248	1137	-	_	-	_	_	_	-	_	-	_	_	_
layer	-	15071	1	-	_	-	-	_	-	-	-	-		_
pit/gully	15348	15349	-	1	-	_	-	-	-	-	-	_	1	_
pit	15396	15350	-	_	1*	-	-	-	_	-	-	-	1	1
layer	-	15392	-	-	1*	-	-	-	-	-	-	-	-	-
ditch	15516	15515	-	2	-	-	-	-	-	_	_	-	-	-
pit	15578	15577	-	-	-	1	-	-	-	-	-	-	-	_
pit	15758	15675	-	-	-	_	1	-	-	-	_	-	-	-
posthole	15853	15780	-	_	-	-	-	-	_	_	-	1	_	_
ditch	15813	15812	-	1	-	-	-	-	-	-	-	-	-	-
ditch	15854	15835	-	1	-	_	-	1	-	-	-	-	2	-
ditch	15866	15865	-		-	-	-	-	1	-	-	-	-	-
TOTAL			2	6	2	1	1	1	1	1	1	1	4	1

Table 3 Frequency of form types by count only (\* same vessel).

was also made from the same fossil shell fabric as R3, rather than a calcite-tempered one, strongly suggests that it too is a long-surviving form and fabric pairing which was used throughout the second half of the first millennium BC. In contrast, type R6 (Fig. 9,10), the pronounced beaded rim jar made from a coarser calcite-tempered fabric is probably just an enlarged version of type R2 which was consistently made from finer calcite-tempered fabric. Form type R7 (Fig. 9,11) is curious; it is an upright and everted rim jar typical of the Late Iron Age in the Somerset and Dorset area based on the dating of Durotrigian Late Iron Age sandy fabric, handmade jars of the same form type (Wainwright 1979; Brown 1991, fig. 161, 19–20; Seager Smith and Davies 1993, 231, fig. 122, Type 1; Barrett, *et al.* 2000, fig. 30, 7–9). However, the Bedminster example is grog-tempered.

The two short rim types from necked jars (R8 and R9; Fig. 9,16–17) are similar to types from Middle-Late Iron Age activity at Blaise Castle (Rahtz & Brown 1958–9, fig. 37, 32) and Cadbury Castle ceramic assemblages 6–7 (Woodward 2000, types JB2, fig. 149, 3–5 & JB4.2, fig. 149, 3).

One body sherd (Fig. 9.12) derived from a calcite and quartz sand fabric handmade vessel with pronounced shoulder appears to have come from a bowl. This form, which is short and graceful in stature, is frequently found in the same ceramic assemblages as the R2 jars, dated to the first century BC to first century AD, as at Butcombe (Fowler 1968, fig. 57, V), Salmonsbury (Dunning 1976, grey ware fabrics, figs. 16, 3 & 19, 1) and Cadbury Castle (Woodward 2000, figs. 21, 5). Similar versions of this bowl type, displaying tooled cordons at the neck to shoulder join and made from calcite-tempered fabric, were recovered from Magor Pill in the Severn Estuary Levels (Allen 1998, fig. 4, 20 & 22).

The majority of bases are plain and flat in profile (B1; four vessels) but one different example (B2; Fig. 9,13), made from the fossil shell fabric, is more similar to Middle Iron Age pottery due to the 'frilly' effect of a clay spur left on the exterior lower edge of the base angle. Type B1 bases were found in both calcite (C1, C2, CQ1) and fossil shell (S1) fabrics.

#### Rims

**R1.** pulled bead and internally thickened rim displaying possible lid-seating on convex-profile, nearly neckless jar (Fig. 9,14).

**R2.** flat-topped or nearly beaded, rounded, expanded, short rim on well-sprung, barrel-shaped, necked jar (Spencer 1983, class A) (Fig. 9,2–6).

**R3.** short, upright rim with flattened exterior surface or facet on necked jar with sloping profile (Fig. 9,7).

**R4.** lid-seated, slightly everted, short rim on necked jar of uncertain profile (Fig. 9,8).

**R5**. bevelled rim from neckless, convex or ovoid-profile jar (Fig 9,9).

**R6.** beaded rim on high-shouldered, neckless, barrel-shaped jar (Fig. 9,10).

R7. everted rim, necked jar (Fig. 9.11).

**R8**. short, upright, flat-topped rim on necked jar with uncertain profile (Fig. 9,16).



Fig. 9 Iron Age Pottery.

**R9.** squared, slightly everted to upright, short rim on necked jar with uncertain profile (Fig. 9,17)

#### Shoulder

**A.** pronounced, rounded shoulder located immediately at base of vessel neck (Fig. 9,12).

#### Bases

B1. simple, flat base.

B2. splayed-profile, flat base (Fig. 9.13).

#### Surface Treatment, Decoration and Firing Conditions

Amongst the 173 potsherds, c40% had burnished exterior surfaces, one had its interior burnished and one had both surfaces burnished. The vast majority of these burnished vessels were also unoxidised to a grey to black colour (incomplete oxidisation), which created a dark and shiny appearance to the pots. Burnishing on the exterior is usually associated with closed form jars and used to keep moisture out of the pot or to enhance its appearance, while interior burnishing is a characteristic of liquid serving vessels or bowls. One R1 jar, four of the R2 jars and the single R6 jar, all of them calcite-tempered, were burnished on the exterior, while the fossil shell fabric types R3 and R5 were not burnished. Examples of oxidised, unoxidised and irregularly-fired fossil shell fabric pots were identified indicating that these had been fired in an open, bonfire.

The small, shouldered bowl (Fig. 9,12) was burnished only on the exterior surface, which suggests that it had been used to serve other types of food. Not all bowls were burnished on the interior. This pot had unusually controlled firing conditions which appeared as a sandwich-effect with the heart of the core being unoxidised, the margins oxidised and then the exterior and interior surfaces being again unoxidised which implies that the bonfire had been covered with turfs to eliminate continued oxidisation during the final firing stage.

Two body sherds in the finer calcite-tempered fabric displayed evidence of single line tooled decoration (not illustrated). It is uncertain what design motif had been created using this distinctive technique, which is not the same as incising which cuts through a leather-hard fabric; tooling simply depresses the fabric surface rather than cutting it and tends to be broader in effect than incising. Both of these sherds were burnished on the exterior, unoxidised (incompletely oxidised) and of similar wall thickness (5–8mm); they may be from the same vessel.

#### Vessel Sizes and Functions

Seven of the vessels could be reconstructed to rim diameter. The R1 rim, three of the R2 rims and the R7 rim belong to small vessels (diameters ranging from 100-180mm) of which four had been used as cookpots based on the presence of either burnt residues on the interior or soot on the exterior (Fig 9,14-15). One of the R2 rims and the R6 rim derived from medium-sized vessels (200-280mm); the former was both pitted and abraded on the interior and the latter had a thick deposit of either limescale or burnt milk on the interior of its thick walls from just below the rim all the way to the flat base sherds. Pitting out of calcareous fabric inclusions on the interior surfaces of sherds indicates that acidic contents had been held in a vessel and the pitting itself can hasten abrasion which may be the result of stirring or cleaning. The R3 jar, however, was clearly a dry storage jar with its moderately thick walls (70-100mm) made to support this large diameter (320mm) vessel. A similar function was likely to have been the primary role of jar type R5, but this can only be inferred by the closed form profile, vessel wall thickness range of 90-130mm. One of the sherds decorated with a single line of tooling had been used as a cookpot based on the presence of both interior pitting and burnt residue. Altogether, 29% of the sherds displayed some evidence of use and demonstrates that this assemblage had been part of the cultural material of a typical Late Iron Age settlement.

#### Droitwich Briquetage

It is unusual to identify Droitwich briquetage or ceramic salt drying and transportation containers this far from the source in Worcestershire (Morris 1985, 1994). The single, sandy fabric fragment appears to be the furthest southern location of any example. Prior to the Bedminster excavation, no examples had occurred south of the River Avon; this sherd indicates that the occupants of the Late Iron Age settlement at Bedminster took part in the Droitwich salt trading network.

#### Conclusions

In summary, the range of pottery recovered as part of the later prehistoric settlement activity at West St., Bedminster is consistent with a date late in the Iron Age. Three vessel types could date as early as the Middle Iron Age, but the majority are clearly Late Iron Age forms. One type, the small beaded rim jar, may have been contemporary with the final Iron Age activity at Blaise Castle as there is a single, unstratified example illustrated (Rahtz & Brown 1958–9, fig. 37, 21). However, it is most likely that all of the prehistoric activity took place after the abandonment of that hillfort location. A scenario that has this abandonment occurring at the time of the establishment of the Bedminster settlement is preferred.

The assemblage is clearly domestic in nature due to the frequency of vessels displaying evidence of use. Both jars and bowls were present in this pre-Roman Late Iron Age assemblage, which was typical of other assemblages in the wider Bristol-Severn region, based not only on form but also fabric. The majority of pots are small jars measuring less than 200mm in diameter, but two examples of mediumsized vessels and a single large jar of 320mm diameter were also recorded. The smaller vessels had frequently been used as cookpots with others having been used to store either water or milk. The largest pot was likely to have been a dry storage jar. Therefore, the vessel types, sizes and functions represent the range of pots expected of a Late Iron Age settlement assemblage, an assemblage made from fabrics typical of the Bristol-Severn Estuary region. The unusual discovery of a small sherd from a Droitwich salt container demonstrates that this Late Iron Age community participated in a wider network of trading activities.

#### **Catalogue of illustrated Pottery**

- 1 R1; fabric C1; burnished on exterior; unoxidised firing condition; sooted on exterior; 5% of 180mm diameter present; Pottery Record Number 1001, context 15071, layer.
- 2 R2; C1; burnished on exterior and upper rim; unoxidised; pitted and abraded on interior; 7% of 220mm; PRN 1005, 15349, pit/gully 15438.
- 3 R2; C1; burnished on exterior; unoxidised; burnt residue on interior; 25% of 140mm; PRN 1023, 15515, ditch 15516.
- 4 R2; C1; burnished on exterior; unoxidised on exterior and in core, irregularly fired on interior; 5% of 220mm; PRN 1025, 15515, ditch 15516.
- 5 R2 C1; burnished on exterior; unoxidised on exterior and in core, irregularly fired on interior; 6% of 180mm; PRN 1038, 15812, ditch 15813
- 6 R2; CQ1; oxidised on both surfaces, unoxidised core; less than 5% of diameter present; PRN 1045, 15835, ditch 15854.

- R3; S1; unoxidised; 21% of 320mm; PRNs 1012 & 1017, 15350 & 15392, pit 15396 & layer.
- 8 R4; C1; burnished on exterior and upper rim; unoxidised; less than 5% present; PRN 1027, 15577, pit 15578.
- 9 R5; S1; irregularly fired exterior, unoxidised core, oxidised interior; less than 5% present; PRN 1029, sample 555, 15675, pit 15758.
- 10 R6, B1; C2; burnished exterior; unoxidised; limescale or burnt milk on interior; 12% of 260mm rim & 16% of 160mm base; PRNs 1039–1042, 15835, ditch 15854.
- 11 R7; GQ2; possibly burnished on rim zone; unoxidised; sooted at neck; 7% of 140mm; PRN 1047, 15865, ditch 15866.
- 12 Shoulder; CQ1; burnished on exterior; irregularly fired on exterior and interior, unoxidised core as a result of multiple firing conditions; PRN 1036, 15780, posthole 15853.
- 13 Spurred base; S1; irregularly fired exterior, unoxidised core and interior; 16% of 120mm; pitted on interior; PRN 1011, 15350, pit 15396.
- 14 Form R1; fabric Vesic 3; burnished on exterior; unoxidised firing on exterior and in core, irregularly fired on interior; 5% of 180mm diameter rim present; Pottery Record Number 1055, context 1122, soil horizon.
- 15 R2; C1; burnished on exterior; unoxidised throughout; soot on exterior; 5% of 120mm; PRN 1062, 1150, ditch 1149.
- 16 R8; Vesic 2; burnished on exterior and top of rim; unoxidised throughout; 5% of 160mm; PRN 1052, 1107, layer.
- 17 R9; Vesic 1; oxidised on exterior, unoxidised on interior and core; less than 5% of rim present; PRN 1060, 1122, soil horizon.

#### **Romano-British Pottery**

#### **By Jane Timby**

#### Introduction and methodology

The various phases of archaeological work resulted in the recovery of 809 sherds of pottery weighing c12.6kg dating to the Romano-British period. Pottery was recovered from 117 recorded contexts several of which contained later material. The sherds are generally speaking relatively well-preserved with a number of quite large pieces including some joining sherds from single vessels, but also with some abraded and less well-preserved pieces. The overall average sherd weight of 15.6g reflects the relatively good condition.

The assemblage was sorted into fabrics based on a combination of firing colour and the nature (texture, hardness) and inclusions (type, size, frequency) of the pastes. Continental and regional traded wares were coded using the National Roman reference series codes (Tomber and Dore 1998). Other wares, presumed to be largely of local origin, were coded specific to this report and are described below. These were quantified by sherd count and weight for each context. The resulting data is summarised in Table 4. Rim sherds were coded to form type and measured

	FABRIC	DESCRIPTION	Wt	Wt %	No	No %	EVE	EVE %
Imports	CGSAM	Central Gaulish samian	81	0.6	11	1.4	0	0.0
	SGSAM	South Gaulish samian	11	0.1	1	0.1	0	0.0
Regional	ALH RE?	Alice Holt grey ware	85	0.7	1	0.1	0	0.0
	DOR BB1	Dorset black burnished ware	1797	14.3	132	16.3	249	20.3
	NFO CC	New Forest colour-coated ware	38	0.3	2	0.2	EVE 0 0 249 0 20 7 12 27 0 0 6 20 168 103 14 10 0 15 15 167 7 191 8 0 54 52 21 0 0 15 15 167 7 191 8 0 54 5 167 7 191 8 0 54 5 167 7 191 8 0 15 15 167 7 191 8 0 15 15 167 7 191 8 0 15 15 167 7 191 8 0 15 15 167 7 191 8 0 15 15 167 7 191 8 0 168 103 14 10 0 15 15 15 167 7 191 8 0 168 103 14 10 0 15 15 15 15 15 15 15 15 167 7 191 8 0 168 103 14 15 15 15 15 15 167 7 191 8 0 168 103 15 15 15 15 15 167 7 191 8 0 14 10 0 15 15 15 15 15 167 7 191 8 0 15 15 15 15 15 15 15 15 15 15	0.0
	OXF RS	Oxford colour-coated ware	119	0.9	11	1.4	20	1.6
	OXF WS	Oxford white-slipped mortaria	30	0.2	1	0.1	7	0.6
	SAV GT	Savernake ware	1530	12.1	5	0.6	12	1.0
	SOW BB1	South-west BB1	94	0.7	4	0.5	27	2.2
	SOW OX	South -west oxidised	30	0.2	2	0.2	0	0.0
	SOW WS	South-west white-slipped	2	0.0	1	0.1	0	0.0
	SVW OX	Severn Valley ware	985	7.8	38	4.7	6	0.5
	VER WH	Verulamium mortarium	266	2.1	1	0.1	20	1.6
Local	BB1COPY	BB1 greyware copies	878	7.0	69	8.5	168	13.7
	BW1	black sandy ware	539	4.3	60	7.4	103	8.4
	BW2	black sandy (quartz and sandstone)	33	0.3	2	0.2	14	1.1
	BW3	sandy black ware	257	2.0	44	5.4	10	0.8
	BWF	fine black ware	2	0.0	1	0.1	0	0.0
	BWFMIC	fine black micaceous ware	9	0.1	2	0.2	0	0.0
	BWMIC	black micaceous ware	158	1.3	18	2.2	15	1.2
	CC	misc colour-coated ware	37	0.3	5	0.6	15	1.2
	GYMIC	grey micaceous ware	1617	12.8	77	9.5	167	13.6
	GY	misc greyware	154	1.2	9	1.1	7	0.6
	GY1	well-fired greyware	1997	15.8	169	20.9	191	15.6
	GY2	light grey sandy ware	108	0.9	11	1.4	8	0.7
	GY3	hard sandy with iron and flint	67	0.5	6	0.7	0	0.0
	GY4	well-fired, almost vitrified, greyware	566	4.5	43	5.3	54	4.4
	GY5	dense granular sandy reduced ware	497	3.9	25	3.1	52	4.2
	GY6	medium-fine sandy ware	184	1.5	17	2.1	21	1.7
	GY7	grey sandy ware	68	0.5	5	0.6	0	0.0
	GY8	pimply grey ware	75	0.6	10	1.2	0	0.0
	GYF	fine grey ware	99	0.8	12	1.5	15	1.2
	MICAOX	micaceous oxidised ware	87	0.7	6	0.7	22	1.8
	MORT	fine whiteware mortaria	16	0.1	1	0.1	5	0.4
	OXID	various oxidised medium-fine sandy	77	0.6	5	0.6	0	0.0
	WSLIP	white-slipped oxidised ware	10	0.1	1	0.1	18	1.5
TOTAL			12603	100.0	808	100.0	1226	100.0

Table 4 Quantification of the Roman fabrics by count and weight.

for diameter and the percentage present measured (estimated vessel equivalence (EVE)). The data was entered onto an MS Excel spreadsheet a copy of which is deposited with the site archive.

In the following report the fabrics and forms are described followed by a discussion of the pottery in relation to the site. The final summary puts the pottery into its regional context.

#### Description of fabrics and associated forms

The assemblage has been divided into continental imports, regional imports and other wares presumed to be largely of local origin. Continental imports are restricted to sherds of samian tableware. Regional imports are better represented and account for 39.1% by weight of the complete Romano-British assemblage, 24.2% by count. In terms of sherd count Dorset black burnished wares dominate this group. The remaining 60.2% comprise the local wares. A significant proportion of these are reduced grey wares many or all of which are likely to come from the poorly documented North Somerset industries.

#### Continental Imports

Samian Some 12 sherds of samian were recorded most of which appear to be of Central Gaulish origin. A single decorated sherd of South Gaulish samian from a bowl Dr 29 came from context (15865). The Central Gaulish sherds were all plain including examples of dish Dr form 31 and cups Dr 33 and Dr 27. The sherds were quite scrappy contributing just 0.7% of the assemblage by weight, 1.5% by count.

#### Regional imports

Alice Holt greyware (Tomber and Dore 1998, 138). A single grey sandy ware from a large handmade storage jar came from context (15175). This is probably an Alice Holt product.

**Dorset black burnished ware** (DOR BB1) (*ibid.*127). One of the commonest wares present, DOR BB1 account for 14.3% by weight, 16/3% by count. The forms present span the 2nd through to the 4th century. Jars account for 52.4% (EVE) for the DOR BB1 repertoire (Fig. 10,3) and plain-rimmed dishes for a further 25%. Other forms present include flat rim bowls (6.5%) (Fig. 10,17) grooved rim bowl (1.2%) and conical flanged rim bowls (14.6%). Several of the jars are sooted through use.

**New Forest colour-coated ware** (NFO CC) (*ibid*. 141). Two sherds of New Forest colour-coated beaker were recovered from context (15310)

**Oxford colour-coated ware** (OXF RS) (*ibid.* 176). Eleven sherds of OXF RS were recorded. Of the four rims present, three are from dishes Young (1977) type C45, one is from a flanged bowl (*ibid.*) type C51.

**Oxford white-slipped mortarium** (OXF WS) (Tomber and Dore 1998, 176). A single sherd from a mortarium came from posthole 16145.

Savernake ware (SAV GT) (*ibid.* 191). Five sherds, all from large storage jars are present with a large rimsherd from 15612 (Fig. 10,10). Other sherds came from 15494, 15812 and 15820 and suggest a 1st to 2nd-century date although large jars tend to survive quiet well.

South-west black burnished ware (SOW BB1) (*ibid.* 129). Limited to four sherds only all from jars (Fig. 10,19).

**South-west white-slipped ware** (SOW WS) (ibid. 192). A single white-slipped sherd with two plain oxidised pieces (SOW OX). This ware was generally current from the later 2nd–3rd centuries.

**Severn Valley ware** (SVW OX) (*ibid.* 148). A moderately small group which contributes 7.8% by weight of the total Roman assemblage. Several sherds from a narrow necked jar from context (15679) have a calcareous lining from holding or heating water. Other than jars the only other featured sherds are from tankards.

**?Verulamium-type mortaria** (VER WH) (*ibid.* 154). A hard, white, sandy ware mortarium spout from 15679 with a similar texture to the coarser Verulamium products. The vessel is stamped twice either side of the spout with a single stamp (Fig. 10,6; and1).

#### Local wares

**BB1 copies.** A black ware with a mid-grey core. A fine, hard, sandy ware with macroscopically visible fine mica. Used to make copies of DOR BB1 forms, mainly jars with both acute and oblique lattice (Fig. 10,12). Also present are flat rim bowls (Fig. 10,11), plain-rimmed dishes and conical

flanged bowls. The illustrated flat rim bowl has a post-firing hole through the wall.

**BW1** A medium-fine sandy ware, slightly micaceous. The paste contains a sparse to moderate frequency of ill-sorted angular quartz, occasional larger grains 1–2 mm in size and a scatter of black iron. Mainly used for jars and occasionally other forms such as Fig. 10,15.

**BW2** A black ware with a grey core. The paste contains a moderate density of coarse grains of sub-angular to rounded quartz and quartz sandstone up to 4 mm in size.

**BW3** A wheelmade black sandy ware with a brownish core. Similar to early Roman North Wiltshire black sandy ware (Cirencester TF 5 (Rigby 182,153)).

BWF fine black ware. Limited to a single bodysherd.

**BWMIC** A black sandy ware with a sparkling micaceous surface. The paste contains a moderate frequency of well-sorted fine quartz sand less than 0.5 mm. A finer variant also exists (BWFMIC).

CC miscellaneous colour-coated ware. Includes a shallow flanged rim bowl (Fig 10, 16).

**GY1** A mid-grey, well-fired sandy ware with a slightly rough feel and a lighter grey core. The matrix contains a sparse scatter of visible rounded quartz and a light scatter of black rounded grains of iron and occasional rounded argillaceous inclusions. Used to make jars, flasks and dishes (Fig. 10,14, 20–21).

**GY2** A lighter grey, hard, sandy ware with a lighter core. Very well fired. Possibly falls within the Congresbury range of wares.

**GY3** A mid grey with a dark blue-grey core with white specks. The paste contains a rare frequency of white angular flint, rare quartz grains and a sparse scatter of black iron ranging from very fine up to 1 mm.

**GY4** A very hard, well-fired ware, almost proto-stoneware. Grey surfaces with a red-brown to grey brown core. Very slightly micaceous clay but with no macroscopically visible inclusions. The matrix is very compact with a scatter of fine round quartz visible at x20 magnification.

**GY5** Thick-walled black to dark grey ware with a dense granular texture. The core is black with red-brown margins. The paste contains a common frequency of sub-angular to angular, ill-sorted white quartz less than 1 mm in size. Mainly features as jars some with burnished line decoration either as latticework or wavy lines (Fig. 10,13).

**GY6** Mid to dark grey, fine sandy ware with a slightly rough sandy feel, Dark grey or dark brown core. The matrix contains a fine moderate frequency of well-sorted white quartz less than 0.5 mm in size. Used for hook rim (Fig. 10,18) and everted rim jars.

GY7 Brownish-grey with a dark red-brown core and black margins. A hard, well fired fabric with a rough feel. The

paste contains a well-sorted, moderate frequency of clear sub-angular to angular quartz sand less than 0.5 mm in size with occasional rounded, white, calcareous grains of similar size. Occasionally with burnished line decoration.

**GY8** Very hard, slightly pimply grey ware generally with a red-brown core and light grey inner core. The slightly micaceous paste contains a moderate frequency of ill-sorted quartz sand 0.5–1 mm size and finer, accompanied by a sparse scatter of dark shiny black grains (?iron). Almost crumbly texture. Although featured sherds are absent sherd are largely from jars some with burnished line decoration.

**GYF** a fine grey ware with no macroscopically visible inclusions. The only featured sherds are two jars.

**GWMIC** Fine-medium grey sandy ware with a distinctively micaceous fabric. Used to make various jars and dishes (Fig. 10, 4–5, 7–9).

**MICAOX** a finely micaceous, oxidised ware. Occurs as an indented beaker (Fig. 10,2) with sherds from 15835 and 15855.

**MORT** a single sherd from a whiteware mortaria with a smooth white surface. Flat flange with a hooked under lip.

**OXID** various oxidised wares. Limited to five unfeatured body sherds.

**WSLIP** a fine oxidised sandy ware with a white slip. Limited to a single flagon rim from context (15841).

#### Site chronology and status

Some 809 sherds of Romano-British date were recorded from 117 individual contexts of which 28 appear to have produced exclusively Roman or earlier material. The remaining contexts also contained medieval or later material suggesting that a significant amount of the Roman pottery is redeposited.

Of the 28 Roman contexts, 20 produced single or less than five sherds usually in non-distinctive fabrics. The earliest groups appear to be early 2nd century although there are a few sherds of 1st century origin, notably the South Gaulish samian and some of the LIA-ERO native wares (Morris above). This includes the assemblages from context (15865), pit 15617 (15612) with the Savernake ware, posthole 15811 (15810) and context. (15820). Contexts which appear to be slightly later dating to the late 2nd or 3rd-century date include (15807) (cleaning over ditch 15813) and pit 15402.

Three contexts produced notably large assemblages dominated by Roman sherds but in all cases with one or two medieval pieces present. These could well be Roman in date with some contamination. The three groups are context (15835) with 65 Roman sherds of 2nd century date; ditch 15871 (fill 15679) with 97 Roman sherds, again mainly 2nd century but with two medieval sherds and context (15855) with 55 sherds of 2nd-century currency and one medieval piece. Larger assemblages (10 sherds or over), but apparently residual, include contexts 15000 (general cleaning), pit 15119 (15062), cut 15122 (15067), pit 15159 (15148), deposit (15218), cleaning layer (15310), pit 15396 (15350), pit 15403 (15352), pit 15413 (15357), pit 15585 (15374), pit 15469 (15375), pit 15409 (15383), layer (15418), pit 15427 (15426), pit 15410 (15457), cleaning (15650) and pit 15805 (15674).

It would appear that the site has been occupied from the later Iron Age, possibly with a hiatus in the later 1st century. There is no evidence at present of continuity between the Iron Age and the Roman phase of occupation but the quantity of pottery is low. The first major groups of Roman pottery date to the 2nd century with a small element continuing into the 3rd century. The pottery would suggest that occupation continued into the 4th century, but in effect most of this material appears in the medieval horizons suggesting that all the later Roman levels have been obliterated by later activity.

The Oxfordshire red slipwares are unlikely to date much before the 4th century and are in all instances residual. Sherds, for example, came from contexts 15418, 15375, 15716, 15148, 15218 and 15067. Also indicative of later Roman occupation are vessels from the later phases of the Dorset BB1 industry such as jars decorated with oblique latticework and conical flanged rim bowls (15513, 15405). There is no obvious material present indicative of late 4th century occupation.

The composition of the assemblage suggests this is a fairly rural establishment, probably a farmstead or similar. Continental imports are extremely poorly represented with no amphorae or other imports typical of this period. Samian contributes 1.5% by count, which is typical of smaller rural sites in this region. The vessel profile is also typical of a rural establishment where jars dominate at 70.4% followed by bowls/ dishes at 21.7%. The remaining 7.9% is made up of mortaria, lids, beakers, tankards and a single flagon.

#### Conclusions

This assemblage is of considerable interest because it has come from an area of Bristol about which little is known archaeologically. A scatter of Roman activity has been documented south of the River Avon including rural settlement, stray finds and two villas (Boore 1999, fig. 2). Roman occupation has also been documented from at least two other suburbs of Bristol, Lawrence Weston (Boore ibid) and Filwood Park (Cox 1998), which is also south of the Avon.

The much larger pottery assemblage recovered from Lawrence Weston similarly spans the Roman period. The range of traded wares present seems quite similar with sherds of New Forest and Oxfordshire colour-coated ware, possible Alice Holt, Congresbury ware, Severn Valley ware and Dorset black burnished ware.

Black burnished wares account for around 24% of the assemblage at Lawrence Weston compared to 17% at Bedminster. Like Bedminster there was a preponderance



Fig. 10 Roman Pottery.

of greywares largely presumed to be from the Congresbury kilns, North Somerset.

The settlement at Filwood Park also appears to be a 2nd-4th century farmstead and possibly again of a similar nature to the settlement producing the pottery from Bedminster although in the latter case there also seems to be a preceding mid-late Iron Age phase. Again in broad terms a similar range of wares present, with evidently some samian and a few traded wares, suggests a site of similar status. Lack of quantification makes direct comparison difficult. Despite the proximity of the sites to the Bristol Channel they do not seem to be benefiting from access to any local markets tapping into any trade using this route. The site at Sea Mills, where a far more diverse range of imported material has been found, largely dates to the early Roman period and is probably of military origin. In its later occupation Sea Mills seems to be relying far more on local products and regional supplies similar to those found at the Bristol sites.

#### Catalogue of illustrated sherds (Fig. 10)

- Handmade beaded rim wide-mouthed jar. Vesicular surfaces where limestone inclusions have leached out. Patchy firing. Context. 15835.
- 2 Indented beaker. Hard, fine, mid orange ware with a thin mica slip. Fabric: MICAOX. Context. 15835.
- 3 Everted rim jar with burnished line decoration. Fabric: DOR BB1. Sooted exterior. Context. 15835.
- 4 Narrow-necked jar with a slight shoulder carination. Burnished exterior with a zone of burnished line decoration. Fabric: GWMIC. Context. 15835.
- 5 Wide-mouthed flagon or bowl? Fabric: GWMIC. Ditch 15871, context. 15679.
- 6 Spout from a whiteware mortaria, probably a Verulamium product. Stamped either side of the spout with two extant impressions on one side and one on the other. The stamp appears to be a single die impressed twice and is illiterate. Ditch 15871, context. 15679.
- 7 Everted rim wheelmade jar decorated with a burnished lattice. Some external sooting. Fabric: GWMIC. Ditch 15871, context. 15679.
- 8 Plain-rimmed dish with an external groove below the rim. Fabric: GWMIC. Ditch 15871, context. 15679.
- 9 Narrow-necked jar decorated with triple burnished line chevrons. Fabric: GWMIC. Ditch 15871, context. 15679.
- 10 Large handmade storage jar. Fabric: SAV GT. Pit 15617, context. 15612.
- 11 Flat rim dish with a post-firing hole through the wall. Fabric: BB1COPY. Context. 15812.
- 12 Wheelmade everted rim jar decorated with burnished line lattice. Sooted exterior. Fabric: BB1COPY. Context. 15855.
- 13 Narrow-necked jar decorated with burnished wavy lines. Fabric: GY5. Context. 15855.
- 14 Curved wall dish. Fabric: GY1. Cleaning layer. 15142.
- 15 Conical bowl (or lid) decorated with radiating burnished lines on the interior surface. Fabric: BW1. Deposit 15172.
- 16 Shallow, hemispherical flanged bowl. Fabric: CC. Orange fabric with a red colour-coated surface. Context 15820.
- 17 Flat rim dish with burnished line decoration. Fabric: DOR BB1. Cleaning over ditch 15813, context 15807.
- 18 Wide-mouthed jar with an overhung rim. Fabric: GY6. Cleaning over ditch 15813, context 15807.
- 19 Everted rim jar. Fabric: SOW BB1. Pit 15119, context.15062.
- 20 Bifid rim narrow necked jar/flask. Fabric: GY1. Pit 15852, context 15676.
- 21 Bifid rim narrow necked jar/flask. Fabric: GY1. Layer 16050.

#### **Post-Roman Pottery**

#### By Alejandra Gutiérrez

#### Introduction

A total of 2,400 sherds of medieval and later pottery (40.8kg) were recovered from excavations on the former Mail Marketing site, West Street (areas 2A, 2B, 2C, 2F and VSH). The pottery was sorted into fabrics with the aid of a binocular microscope (x10), counted and weighed. In general, the sherds were too small to allow any calculation of the minimum number of vessels present; complete profiles were also scarce. The fabric types identified are listed and described below. Most of the pottery is of medieval date (65% of all the sherds), followed by post-medieval (20%) and modern wares (15%).

For the purpose of this report pottery from all areas has been studied together, although quantification by area is available in the archive. A breakdown of pottery by area is shown in Table 5.

#### Medieval-late medieval fabrics

A total of 1453 medieval pottery sherds, weighing 22.1kg, were identified in a range of fabrics as follows:

#### Fabric AA0. ?medieval

Chaff-tempered coarseware. Dark grey fabric with black surfaces. Only one fragment found.

#### Fabric AA1. Bristol? Mid-11th to mid-12th centuries

Dark grey core, brown to red surfaces. Well sorted inclusions of quartz, limestone, calcite and sandstone; rare fragments of chert. Hand-made coarsewares. Similar to Bristol Fabric C and Bristol Pottery Types (BPT) 2, 3, 10 and 309 (Vince 1988; Ponsford 1998, 137).

#### Fabric CALC1. Medieval

This fabric is very similar to fabric AA1, but it has a higher content of calcite. It is very possible that it is just one or two vessels in fabric AA1, but with higher calcite content.

## **Proto Ham Green (PHGR).** Bristol. 12th century (Vince 1988, 258)

Black to grey, sometimes with a yellowish or red skin. Abundant rounded quartz <0.3mm; sparse rounded dark brown ironstone grains <0.3mm; sparse rounded calcareous inclusions <0.3mm. Hand-made coarsewares.

### Ham Green coarsewares (HGRCW). Bristol. Mid-12th to 13th centuries (Vince 1988, 258)

Black throughout, usually with red surfaces. Very similar to Proto Ham Green but with finer temper, including abundant sub-angular quartz <0.2mm; sparse calcareous grains <0.5mm. Hand-made coarsewares.

## Ham Green jugs (SS). Bristol. 12th–13th centuries (Barton 1963; Ponsford 1991)

Grey core; buff or white margins; pink, orange or buff interior surface. Inclusions of well-sorted quartz, limestone and clay pellets. Hand-made and finished on low wheel. Green glaze on exterior surface and over the interior of the rim only. Bristol (Redcliffe) ware (AAA). Bristol. 13th-15th centuries (Vince 1988, 260; Ponsford 1998)

Light, cream-firing fabric, usually pale yellow throughout, sometimes with a light grey core. Inclusions of quartz and quartzite up to 1.2mm, clay pellets <1mm, rare sandstone up to 7mm, iron ore 0.2mm across; sometimes inclusions include rounded limestone up to 0.3mm. The main difference with Ham Green glazed wares is that Bristol ware jugs are wheel-thrown. Green glaze on exterior, sometimes with applied clay strips.

**'Bath A' (U4).** Bristol or Avon Valley? Late 11th-13th centuries (Vince 1979)

Usually grey core, buff margins and grey surfaces. Micaceous fabric with moderate glassy quartz <2mm; very rare flint/chert <3mm; sometimes with rare calcareous inclusions. Smoothed-over surfaces. Hand-made, well finished coarsewares. Occasional green glaze on exterior surfaces.

Minety-type ware (MT). North Wiltshire. 12th-early 16th centuries (Vince 1988, 262)

Grey core, buff or orange interior surface. The main inclusion is abundant Oolitic limestone which leaves a characteristic round void when burnt out during firing; occasional chert/ flint. All inclusions are ill-sorted and mainly <1mm, but also up to 2mm. Hand-made jars and jugs, wheel-thrown late 14th century–early 16th centuries. Exterior green glaze over very rough surfaces; combing decoration on exterior wall.

#### LIM1. Non local fabric.

Grey core, buff or orange surfaces. The main inclusion is abundant, poorly sorted limestone <2mm; rare glassy quartz <0.5mm. Hand-made coarsewares.

South-East Wiltshire (SEW). Late 11th-13th centuries (Vince 1984)

Black or white core, pink or light brown surfaces. Inclusions: angular quartz <1.3mm, sparse brown chert/flint, rounded iron ore up to 0.2mm. Hand-made. Clear glaze on the exterior; applied cordons on exterior wall.

South Somerset chert-tempered (U1). Mid -11th to 13th centuries

Hard, smooth fabric. Abundant, poorly sorted polished quartz <2mm, occasional brown and/or white chert, sometimes limestone is also present. Handmade and finished on a turntable. A single sherd present.

Nash Hill (NH), Lacock, Wiltshire. 13th-14th centuries (McCarthy 1974)

Hard, sandy fabric, predominately oxidised. Wheel-thrown jug; brown glazed on exterior surface.

Malvern Chase medieval glazed ware (MAM). Worcestershire. 14th–16th centuries (Vince 1977)

Orange or light brown throughout. Occasional inclusions of igneous rock of varying sizes, usually 2–3mm, but up to 8mm across; moderate quartz. Transparent partial glaze, usually with dark green spots; later (mid-16th century onwards) production glazed in brown. Wheel-made.

AREA	POTTERY DATE	CRY SHERDS		WEI	GHT
		No.	%	g	%
2A	medieval	308	66.4	4343	58.7
2A	pm	114	24.6	2415	32.7
2A	modern	39	8.4	617	8.3
2A	unid	3	0.6	18	0.2
	total	464		7393	
2B	medieval	591	70.9	8151	65.3
2B	pm	167	20.0	3429	27.5
2B	modern	71	8.5	832	6.7
2B	unid	5	0.6	68	0.5
	total	834		1240	
2C	medieval	159	42.6	1807	31.4
2C	pm	87	23.3	2357	41.0
2C	modern	124	33.2	1587	27.6
2C	unid	3	0.8	2	0.0
	total	373		5753	
2F	medieval	292	74.5	4547	62.1
2F	pm	75	19.1	2391	32.6
2F	modern	23	5.9	329	4.5
2F	unid	2	0.5	59	0.8
	total	392		7326	
VSH	medieval	181	53.7	3323	42.0
VSH	pm	60	17.8	1100	13.9
VSH	modern	96	28.5	3495	44.1
	total	331		/918	

Table 5 The pottery by area and date.

Cistercian-type ware (CISTW). South Gloucestershire, Hereford and South Somerset. 16th century

At least three fabrics are present; the first (South Glos) is dark brown throughout, with sparse inclusions of quartz and quartzite up to 1mm and rounded iron ore up to 0.4mm; very thick dark brown/black glaze all over, except on underside of the base, where only a purple wash is visible. A second fabric (Hereford?) is a much finer redware, with no inclusions visible, covered by a dark brown glaze. The third (South Somerset; C8) is a less hard sandy redware with no visible inclusions, covered with a dark brown glaze. Wheelmade, thin-walled vessels.

**Tudor Green (TG)**. Surrey/Hampshire border. Mid-15th to mid-16th centuries (Pearce and Vince 1988; Pearce 1992). White, very fine fabric with characteristic thin walls. Wheel-made, green glazed.

Medieval South Somerset glazed wares (C6). 13th–15th centuries

Orange throughout, sometimes with a light grey core. Very fine fabric, with no inclusions visible. Jugs, glazed on exterior surface only. Wheel thrown.

Late medieval South Somerset glazed wares (C7E and C27). 15th–16th centuries

Orange throughout, sometimes with a light grey core. Very fine fabric, with no inclusions visible (fabric C7E) or with some quartz sand (fabric C27). Mainly jugs, wheel thrown, with twisted handles; also cisterns. C27 with some trailed slip on exterior surface.

#### Imports

#### South-West France (Saintonge-type) green glazed ware. France, mid-13th to mid-14th centuries

Fine micaceous white fabric with occasional white or transparent quartz (0.2-3.0 mm). Exterior green glaze. Wheel-made.

#### Early North French ware. Medieval

Fine green-glazed whiteware with some quartz grains, some polished <3mm in a micaceous fabric.

Classic Valencian lustreware. Spain, end 14th-end 15th century (Gutiérrez 2000, 28-40)

Fine orange fabric with lighter margins. No inclusions visible. All-over tin-glazed with painted decoration.

Seville-type amphora. Seville area, southern Spain. 13th-15th centuries (Hurst 1977, 98-103)

Sandy fabric with mica inclusions. Wheel-made coarsewares with ribbed walls. Wheel-made.

#### Raeren stoneware. 1450-1600

Fine grey fabric with an external transparent glossy salt glaze, sometimes speckled with brown areas.

#### Sources and wares present

The only chaff-tempered sherd (fabric AA0) recovered from the excavation is unstratified (1 sherd, 22g). The sherd has a black micaceous fabric with black surfaces and heavily sanded base (it was potted standing on a sanded surface). So called 'grass-' or chaff-tempered vessels were used in Somerset in the prehistoric, pre-Saxon and mid/late Saxon period (Rahtz 1974). Although this type of pottery is very scarce in the county, discrete groups of sherds have been attributed to possible 5th- to 7th-century contexts at South Cadbury, Glastonbury Tor, Cannington Cemetery and Cadbury-Congresbury, some of them containing a variety of inclusions (such as quartzite) and including also possible fragments of oven lining and daub (Rahtz 1974, 108-109). Recent re-assessments stress the possibility that most of these may be prehistoric or at least that any clear distinction with prehistoric material is blurred and far from clear (Fulford et al 1992, 155; Rahtz 2000, 291). Among the mid/late Saxon group are sherds from Cheddar Palace where fabric AA was dated to the 10th century and this group includes vessels with sagging bases (Rahtz 1979, 310, 314). Elaine Morris has rejected the sherd from the Mail Marketing site as prehistoric due to the 'layering' texture of the fabric. The shape of the base, flat rather than sagging, would indicate that it is not Saxon either, but doubt must remain about its dating given the lack of stratigraphical context.

Otherwise the earliest medieval pottery on site is fabric AA1, very similar to Bristol C as defined by Vince

(1988) and dated to the mid-11th century (P1). Most of the medieval wares are of local source and are well known in the town, including Ham Green and Bristol wares, both coarsewares and glazed jugs, and Bath A wares. Unsurprisingly these local wares dominate the assemblage in the medieval phase. The assemblage is very fragmented but among the decorated sherds, some Ham Green jugs bear familiar decoration in the shape of applied bands and pellets of clay (contexts 15154, 15013), one in the shape of a snake (P6); a stabbed beard was also found (context 16065). Rouletted motifs and bases (context 15527, 16103, 15676) and stepped necks (context 1111) are traditionally associated with a possible earlier type of jug (type A; Ponsford 1991), although in this case they do not appear in sufficient numbers nor in isolation from later types so it is not possible to confirm their dating here.

Bristol ware jugs sometimes bear thumbed strips around the rim (contexts 15140, 15524, 16084) (**P8**) or dot-andring impressions around the spout (context 16106). A single small base sherd showed some soot on the exterior and may belong to a cooking pot rather than a jug (context 15142). A sherd that seems to have been cut into a triangular shape was found in a modern layer (15377) and may show that even broken old sherds found in the garden in the 19th century could be re-used, perhaps in games as a counter.

Among the earliest regional imports are products from Wiltshire; fabric Lim1 has no known local parallels and may also be a Wiltshire product due to the inclusions present. Minety-type wares include both hand-made and wheelmade vessels and are the main regional import during the medieval period; forms present include both rounded jars and jugs (**P14–15**), plus an unstratified bunghole. From South-East Wiltshire there are only four sherds of tripod pitchers, partially glazed, of the 12th century.

Slightly later medieval regional products include Malvern wares, in the coarser medieval fabric and later glazed fabrics. These start to arrive to Bristol at the end of the 14th century (Ponsford 1998, 138). The only identifiable forms are those of a dripping pan (unstratified in context 15310), several jars, some with a thumbed band around the neck (context 16083), a pancheon with a pouring lip (Context 15492) and a possible pipkin (**P28–29**).

The remaining regional products are less numerous, including a single sherd of a Nash Hill jug. Surrey whitewares comprise jugs and a possible mug (Tudor Green). Somerset glazed wares, mainly jugs but also a cistern with a bunghole (context 15762) and a pancheon (context 15762) among the later medieval vessels. Cistercian-type wares are represented by the typical small jugs and cups, although a costrel was also found (**P35**).

Quantification of all the medieval fabrics is shown in Table 6. A few sherds were unstratified (13.7% of all the medieval sherds), whereas there is some contamination when medieval sherds appear in earlier prehistoric and Roman contexts (1.5%); there are also residual sherds mixed with later material in post-medieval and modern phases of the site (22.2%). This shows evidence of the continuous re-use of the site and especially of re-cutting of features.

#### Imported medieval pottery

Among early imports French pottery is dominant. Saintonge unglazed wares (23 sherds, 126g) and green-glazed jugs and costrels (17 sherds, 139g) are the most common of these, but its presence is not rare in Bristol, where they are often associated with local medieval wares. Most of the Saintonge wares derive from unstratified or modern contexts, and only a handful are associated with medieval pits and other layers (contexts 1114, 15046, 15457, 15512, 15526, 16126, 16175). At least three vessels have a fabric similar to Saintonge vessels but profiles do not fit within the more popular range of jugs known during this period (P16-20); one of these vessels was found across two different contexts infilling two different pits (contexts 15526 and 15527). All vessels are decorated jugs. The first one (P16) has an external mottled green glaze; this jug has a tubular handle and corrugated neck (context 15527). This may be the same jug as that decorated with cut-glass decoration and a few spots of yellow glaze on the exterior surface only (P17). The third jug (P18) has a collar rim with an applied head and is green glazed externally. The rilled strap handle (P19) may belong to any of these jugs. The closest parallel is a ridged wall sherd with tubular spout from Narrow Quay (Good 1987,

no. 27), identified also as a Saintonge jug. A single sherd from a north French jug was also found but in 19th-century context 15513.

A single Merida-type ware from Portugal (1 sherd; 5g) was found in medieval pit 15430. This is a plain, undiagnostic wall which most probably belongs to the typical standing costrel, a common import to Britain during the medieval and post-medieval period (Gerrard *et al* 1995). The form does not change through time, but on the basis of the stratigraphy this sherd is most likely medieval rather than any later.

Spanish pots during the medieval period are represented only by two vessels. An early coarseware from southern Spain with characteristic ribbed walls was found unstratified (context 15517) (1 sherd; 20g). These early containers are infrequent imports, having been recorded only at about a dozen sites in the country, mainly in the south (Hurst 1977, 98). The second Spanish vessel is a common import; the single sherd belongs to a small flanged bowl of Valencian lustreware (1 sherd; 9g); the vessel has lost all decoration except for a concentric blue line (**P20**). It was a residual find in context 16128.

Of the later medieval imports the first German stonewares appear in the form of Raeren drinking jugs (3 sherds; 39g).

FABRIC		SHE	RDS	WEI	GHT
		No.	%	g	%
Bristol ware	AAA	412	28.4	5021	22.7
Bath A	U4	244	16.7	2913	13.1
Ham Green cw	HGRCW	207	14.2	2609	11.8
Ham Green jugs	SS	165	11.4	2801	12.6
Minety-type	MT	108	7.4	2627	11.9
Cistercian wares	CISTW	52	3.6	439	2.0
Malvern wares	MALVERN	36	2.4	2310	10.4
AA1	AA1	32	2.2	497	2.2
LIM1	LIM1	26	1.9	241	1.1
Late medieval Somerset wares	C7E	22	1.5	668	3.0
Proto Ham Green	PHGR	16	1.1	240	1.1
Malvern medieval	MAM	14	1.0	209	<1
Minety-type late	MT LATE	12	<1	192	<1
Late medieval Somerset wares	C27	12	<1	231	<1
Medieval Somerset wares	C6	9	<1	219	<1
Tudor Green	TG	9	<1	115	<1
CALC1	CALC1	8	<1	88	<1
South-East Wilts	SEW	4	<1	60	<1
LIM2	LIM2	4	<1	31	<1
Bath A wheel-made	U4 late	3	<1	48	<1
South Somerset chert-tempered?	U1?	1	<1	33	<1
Chaff-tempered	AA0	1	<1	22	<1
Nash Hill	NH	1	<1	12	<1
Imports:					
Saintonge	SAINTONGE	40	2.8	265	1.2
W French imports	W FRANCE	9	<1	183	<1
Raeren stoneware	RAEREN	3	<1	39	<1
N French import	N FRANCE	1	<1	3	<1
Valencia	VALENCIA	1	<1	9	<1
Seville amphora	SEVILLE	1	<1	20	<1
Merida-type	MERIDA	1	<1	12	<1
TOTAL		1453		22154	

Table 6 Quantification of medieval fabrics showing total number of sherds, weight and percentages of the total.

All the sherds are either unstratified or derived from modern contexts (15000, 15418 and 16211).

Post-medieval fabrics (c1550–1700) A total of 497 sherds (11.6kg) of post-medieval pottery was found in a range of fabrics (*Table 7*):

**Bristol ware lime-gritted** (AAAL). Bristol. 17th century (Vince 1988, 260; Ponsford 1998) Lime-gritted Bristol ware (BPT265).

Bristol/Staffordshire slipwares (KK, M). Late 17th–18th centuries.

Buff throughout. Moderate iron oxide, <0.25mm, is present. Trailed dark brown slip over white slip under amber glaze.

Malvern Chase 'pink' ware (MAP). Worcestershire. Late16th–early 17th centuries (Vince 1977).

Light orange or pink throughout, with a darker? iron wash or ?slip on surfaces. Sparse quartz and igneous rock inclusions. Transparent partial brown glaze. Wheel-made.

Somerset glazed wares (C7). 16thC-post-medieval (Coleman-Smith and Pearson 1988; Gutiérrez 2007).

Generally orange throughout, but occasionally with grey core or surfaces. No visible inclusions. Wheel-made. Included in this group are fabrics C7 (plain lead glazed wares), C2 (with an all-over white slip) and C3 (decorated with trailed white slip).

**Border ware.** Surrey/Hampshire border. 1500–1700 (Pearce 1992).

Abundant fine quartz sand (0.05-0.15 mm). Green-glazed on interior and exterior.

## North Devon gravel-tempered wares (E). Late 17th–18th century (Allan 1984).

Grey or orange core, grey interior margin and surface, orange exterior margin and surface.

Super abundant quartz up to 6mm; abundant milky quartz up to 3mm; sparse limestone up to 2mm; moderate slate <5mm; moderate chert <6mm. Green glaze on interior surface.

Anglo-Netherlands tin-glazed wares. 17th century.

Buff, very fine fabric with no inclusions visible. White tin glazed on interior surface, with painted decoration; yellowish, lead-glazed exterior.

Manganese-stippled English delftware. Several sources. 17th century.

No inclusions visible. All-over tin glazed.

Tuscan polychrome maiolica. Florence area, 1550–1650 (Ventura 1991).

Very fine buff fabric with no inclusions visible. All-over tin-glaze and polychrome painted decoration. Wheel-made.

Merida-type ware. Portugal, medieval and post-medieval (Hurst et al 1986; Gutiérrez 2000).

Characteristic red micaceous fabric, with no surface treatment and no decoration. Earlier, medieval examples have sometimes a brown fabric. Wheel-made.

Beauvais earthenware. France, 16th century.

Fine white fabric with occasional rare large angular quartz and iron ore fragments. Yellow glazed. Wheel-thrown.

Seville-type olive jar. Seville area, southern Spain. 16th–18th centuries (Gutiérrez 2000).

Sandy fabric with mica inclusions. Wheel-made coarsewares, with occasional glaze. Wheel-made.

Seville Morisco ware. Seville, Spain. 16th century (Gutiérrez 2000).

Fine buff fabric with no inclusions visible. Wheel-made, glazed in a variety of fashions. Wheel-made.

FABRIC		SHE	SHERDS		GHT
		No.	%	g	%
Somerset glazed wares	C7, C1-3	327	65.8	7894	67.8
Bristol/Staffordshire slipwares	KK, M	75	15.1	1237	10.6
North Devon gravel-tempered wares	Е	42	8.5	1485	12.8
Malvern Chase 'pink' ware	MAP	8	1.6	140	1.2
Border ware		5	1.0	38	<1
Bristol ware lime-gritted	AAAL	1	<1	11	<1
Delftware	DELFT	2	<1	16	<1
Imports:					
Frechen stoneware		6	1.2	10	<1
Italian maiolica		6	1.2	127	1.1
Seville		5	1.0	12	1.1
Anglo-Netherlands delft		4	1.0	17	1.5
Beauvais		2	<1	18	<1
Merida-type		2	<1	19	<1
Westerwald stoneware		2	<1	12	<1
N Italian marbled ware		1	<1	14	<1
TOTAL		497		11641	

Table 7 Quantification of post-medieval fabrics showing total number of sherds, weight and percentages of the total.

#### Sources and wares present

During the post-medieval period there is a change in emphasis in the sources of pottery supplying the town. South Somerset products are now the dominant products, either plain glazed wares or decorated with sgraffito and slips. The predilection seems to be for the plainer forms as only 21 sherds (6% of all Somerset wares) were found bearing any decoration at all (**P30-33**). Slip and sgraffito appear mainly on bowls and pancheons, but also on jars and chamber pots. Plain glazed forms (or at least sherds where no decoration is visible) include jugs, chaffing dishes, cisterns and also colanders. Although several sources may be included here (such as Donyatt, Wanstrow and Nether Stowey) the fine texture of the fabric is not enough to distinguish between them by eye (Allan 1984; 1999; Good 1987, 36–38; Gutiérrez 2007).

A single sherd from a lime-gritted Bristol pancheon of the 17th century was found in pit 15794. By this date the ubiquitous local products of the period are slipwares of buff coloured fabric (made in an identical manner in Staffordshire) decorated with a typical feathered slip; these represent 15% of all the post-medieval wares; a couple of examples bear plain, unfeathered slips (**P40–41**). The two main forms manufactured (plates and cups/porringers) appear in equal volume (at least by weight; by sherd count closed forms with their delicate thin walls appear in larger numbers). Among this group only one plate showed a sooted undersurface showing it had been placed near a fire.

North Devon gravel-tempered wares were mainly utilitarian vessels, including crocks and pancheons (Allan 1984, 150), but of the fragmented group from this site only a couple of handled jars and bowls have been recognised (**P42**). Post-medieval Malvernian wares decreased in importance during the medieval period and only a couple of pancheons and jugs are present.

Among the Border ware, a fuming pot with a pierced wall was found in a modern context (15513); this is a very uncommon form (too small to illustrate), even at the production site, and it was also a shape new to the pottery industry in the late 16th century (Pearce 1992, 41, 94).

There are only two delftwares that are not considered imports (see below): a mug and a small storage jar, both are tin-glazed all-over. The mug has a speckled manganese decoration and the jar has blue bands on the exterior surface (**P37–38**). Both are typical of the 17th century (Archer 1997, 242, 381) and the blue-decorated jar type is known to have been produced at Bristol (Price 2005).

#### Imported post-medieval pottery

The only French imports of this period are two small sherds of Beauvais jugs, of the common type with yellow glaze of the 16th century.

Among the delftwares, four Anglo-Netherlandish dishes are possible imports (4 sherds; 178g). The source of these products is impossible to distinguish by eye in the early 17th century, although it has been suggested that a dark orange fabric, such as some of these examples, indicate a Netherlands source (Cotter 2001, 229). All are tin-glazed on the inside and covered with a yellowish lead glazed on the exterior surface; painted motifs are either purple or blue (**P39**).

Stonewares of this period include only six small sherds of Frechen and two of Westerwald, most probably all drinking jugs. Six of them were found unstratified or in modern layers, the other two, including a strap handle, came from post-medieval pit fill 15763 and layer 16119.

Spanish imports are represented by three vessels (5 sherds; 129g). An almost complete Plain White small bowl or *escudilla* from Seville was found across two different contexts (**P21**) (for terminology see Gutiérrez 2000). The other sherd is that of an olive jar of the type dated to the 16th–18th centuries (Gutiérrez 2000, fig 2.37), but this is too small to illustrate.

There are two further Merida-type wares from Portugal during this period (2 sherds; 19g). A small jug with burnished decoration (too small to illustrate; from context 15146, fill of pond 15232) is typical of the 15th-17th centuries; as opposed to the more frequent costrel, this type of jar has a more restricted distribution in England, being found chiefly at main ports (Gutiérrez forthcoming). The second sherd is that of a green-glazed lebrillo or large pancheon (P27). This form has a characteristic imprint around the rim, left by the rope which held the wide pot together until the clay dried; this type of vessel was also produced in Seville workshops, but the orange fabric with large mica flecks of this example is characteristic of the Portuguese potteries. The typical Merida-type lebrillo found in England is unglazed and of small diameter (20-60cm) so that the rope imprint is not present. Vessels of this type have been recorded in numbers from 16th- and 17th-century contexts at southern ports, especially Exeter, Plymouth and Southampton (Allan 1984, no's 2746 and 2751; Allan and Barber 1992, no's 8-11; Gutiérrez forthcoming, figure 3), but the larger, greenglazed pancheons are rarer.

Italian imports are represented by five different vessels (7 sherds; 141g): four late maiolicas and one marbled ware. The late maiolicas have the typical fine buff fabric and all-over tin glaze. The group includes two Montelupo dishes of the end of the 16th century with polychrome decoration, one of them with the motif of radiating spiral lines (Ventura 1991) (P22), the second decorated with the 'net' pattern of radiating flowers around a central lozenge (P23). Two Ligurian maiolica dishes were also recovered, both with identical buff fine fabric. P24 is a berettino dish with all-over blue tin glaze and darker blue decoration; P25 is blue decoration on white tin glaze. The last Italian vessel is a marbled ware costrel from North Italy (P26); this has an additional green colour that would date it to the end of the 16th or 17th century rather than any earlier (Blake 1981, 105). The sherd is one of the horizontal handles in the shape of a human head; this shape is not very common, especially in England, where either plain handles or those in the shape of a lion head predominate. All of these wares are either unstratified or residual in later contexts.

Whereas Spanish and Portuguese coarsewares are not uncommon in Britain, having been found in more than 100 sites across the country, finds of Seville tin glazed wares have a more limited distribution and are thought to be the result of direct contact with Spaniards (Gerrard *et al* 1995, 284). This limited trade in glazed ceramics from Seville may be a direct consequence of the city focusing its production almost exclusively on the Americas (Gutiérrez 2003). Overall, this type of plain tin-glazed ware has been found in about 20 sites in Britain, all concentrated in the southern half of the country. Examples are already known from Bristol, although they are scarce (Ponsford and Burchill 1995). Equally scant are findings of Italian wares from the town; late maiolica has also been found there, for example St Nicholas' Almshouses, King Street, produced a similarly decorated dish (Barton 1964, fig. 66, no. 2). The Ligurian maiolica is rarer across Britain, having been found just on 16 sites in the country (Hurst 1991, 214).

#### Modern Wares (1700+)

A total of 370 sherds (7kg) of modern wares were quantified in the following fabrics:

Modern red earthenwares (Fabric C20). 18th-19th centuries

Hard, red or brown fabric. Occasional quartz and limestone inclusions. Honey or brown lead glazed, sometimes mottled. Very similar to Bristol Pottery Type 336 (Jackson 2002) and Somerset fabric C20 (Gutiérrez 2007).

English delftware. Several sources. 18th century

No inclusions visible. All-over tin glazed and painted decoration.

**Refined wares**: redware, blackware, creamware, pearlware, bone china, porcelain, white stoneware, modern yellow ware, Victorian majolica, brown tea pots.

**Brown stonewares**. Included here are lead-glazed wares (Bristol-type) and also brown glazed stonewares of the 19th century.

This is a small assemblage of modern wares, of which about a third is unstratified (122 sherds; 4.1kg). Four main groups of wares are included in this phase (Table 8). The first is that of modern red earthenwares (74 sherds; 3.9kg), locally produced and of utilitarian function. Forms identified are bowls, pancheons, flower pots and possible animal feeders (**P46**). About one third of all the sherds were unstratified, whereas the rest only appear in numbers in area VSH, incorporated into the garden soil and fills of gully [1201/1203] and feature [1180/1182].

English delftware was produced at Bristol as well as at other centres across Britain (Archer 1997). Among the 18th-century vessels found in this period are two plain ointment jars (2 sherds; 25g) and a dish with red and blue floral decoration (2 sherds; 68g) (**P43–45**).

Refined wares are the main tablewares of the period, being the products of large-scale potteries employing techniques which were increasingly industrialised. Numbers recovered are relatively low for such a large area excavated. The only group represented in numbers are the pearlwares, which occupy 40% of all the sherds from this period.

The third group is that of modern brown stonewares, used mainly as utilitarian containers for diverse types of liquid ranging from alcoholic beverages to ink. Only 16 sherds were found (a mere 4.3% of all the modern wares by sherd count)

The modern assemblage is made up exclusively of domestic vessels although not all seem to predate the mid-19th century when larger industry arrived in the area. The latest wares on site are the shell-edge pearlwares; these are of a late type, with painted decoration rather than moulded, and date to the end of the 19th century (contexts 15207 and 1200). Pearlware decorated with painted bands may spread into the 20th century also (3 sherds; 11g). Of the middle of the 19th century are the brown-printed pearlwares (6 sherds; 58g). Slightly earlier are the green- and pink-printed pearlwares (8

GROUP	FABRIC	SHE	RDS	WEI	GHT
		No	%	g	%
Red earthenwares	C20	73	19.9	3924	56.2
Tin-glazed	Delftwares	7	1.9	65	0.9
Refined wares	Pearlware	148	<1	1234	<1
	Creamware	44	40.4	382	17.7
	Porcelain	39	12.0	378	5.5
	Bone china	20	10.7	108	5.4
	White stoneware	6	5.5	367	1.5
	Victorian majolica	3	2.5	57	2.6
	Modern yellow ware	3	1.9	29	2.2
	Blackware	2	1.6	12	5.3
	Brown teapot	2	<1	19	<1
	Refined redware	2	<1	30	<1
Brown stonewares	Modern brown stoneware	9	<1	182	<1
	Bristol-type stoneware	7	<1	154	<1
	Modern grey stoneware	1	<1	45	<1
	TOTAL	366		7080	

Table 8 Quantification of modern wares showing total number of sherds, weight and percentages of the total.

sherds, all unstratified); and also belonging to the first half of the 19th century are several sponged-decorated vessels; this was cheap and affordable type of tableware represented here by jugs, a saucer, chamber pot and a mug/cup (6 sherds; 40g).

#### Catalogue of illustrated sherds (Figs. 11-15)

#### From medieval pits

**P1** Fabric AA1 (18 sherds). Grey core and brown surfaces. Sooted exterior surfaces, except for the neck area. From context 1168, fill of medieval pit 1280, area VSH.

**P2** Bath A jar (9 sherds). Light grey core and grey or light brown surfaces. Sooted exterior surfaces, except for the neck area. From context 1168, fill of medieval pit 1280, area VSH.

**P3** Ham Green coarseware jar (2 sherds). Dark brown fabric with darker surfaces. Sooted exterior surface (except for the neck). From context 15150, fill of medieval pit 15159, area 2A.

**P4** Ham Green coarseware jar (2 sherds). Dark brown fabric. Sooted/burnt exterior surface (except for the neck). From context 15375, fill of medieval pit 15469, area 2B.

**P5** Ham Green coarseware jar. Dark brown fabric. From context 1133, fill of medieval ditch 1185/1178/1299, area VSH.

**P6** Ham Green coarseware bowl. Dark brown fabric. Sooted/ burnt exterior surface. From context 1111, fill of medieval pit 1112, area VSH.

**P7** Ham Green jug. Dark grey fabric. Green glaze on exterior surface; applied band of clay in the shape of a ?snake. From context 15478, fill of medieval pit 15477, area 2B.

**P8** Bristol ware small jug. Grey fabric with buff exterior surface. Mottled green glaze on exterior surface (not reaching to the base). From context 15447, fill of medieval pit/gully 15484, area 2B.

**P9** Bristol ware jug (2 sherds). Dark grey fabric with light grey margins. Green glaze on exterior surface. Wide thumbed band around rim. From context 15524, fill of medieval pit 15573, area 2B.

**P10** Bristol ware jug (3 sherds). Light pink fabric. Patchy and mottled green glaze on exterior surface. From context 15094, layer sealing pit 15093, area 2A.

**P11** Bristol ware jug. Very light grey fabric. Mottled green glaze on exterior surface. From context 15369, fill of medieval pit 15529, area 2B.

**P12** Bristol ware jug. Grey fabric with light pink interior margin and surface. Green glaze on exterior surface. From context 15383, fill of medieval pit 15409, area 2B.

**P13** Bristol ware jug. Very light grey and buff fabric. Mottled green glaze on exterior surface. From context 1162, fill ditch 1185/1178/1299, area VSH. **P14** Minety-type tripod pitcher. Grey fabric with buff surfaces. Slashed strap handle with some green glaze. From context 1133, fill of medieval ditch 1185/1178/1299, area VSH.

**P15** Minety-type jug. Grey fabric with buff interior surface and orange exterior surface. From context 15394, fill of medieval pit 15450, area 2B.

**P16** Saintonge? jug? Corrugated wall and tubular spout (it is difficult to orientate the sherd; the opening could also belong to a tubular a handle). Highly micaceous off-white fabric, mottled green-glazed only on exterior surface. Seven sherds from context 15527 (fill of medieval pit 15557).

**P17** Saintonge? jug. Corrugated wall with a band of cut-glass decoration. Highly micaceous off-white fabric, green-glazed only on part of exterior surface. One sherd from 15562 (fill of medieval pit 15562), three sherds from 15526 and one sherd from 15527 (fill of medieval pit 15557), area 2B.

**P18** Saintonge? jug. Collared rim with applied head; the head has very schematic features represented by simple horizontal impressions. Highly micaceous off-white fabric, green-glazed only on exterior surface. From context 15210, area 2A.

**P19** French jug. Rilled strap handle (probably the handle of one of the vessels above). Highly micaceous off-white fabric, green-glazed only on exterior surface. From context 15716, fill of post-medieval pit 15881, area 2C.

#### Later pottery

**P20** Valencian lustreware flanged *escudilla* or small bowl. 15th century. Fine orange fabric, all-over white tin glaze. Lustre decoration gone; blue line around the top of the wall. From context 16128, area 2F.

**P21** Plain White ('Columbia Plain') *escudilla* or small bowl. Seville, 16th century. Fine buff fabric, all-over white tin glaze. A couple of drips of green/brown lead glaze on the both surfaces are accidental. From contexts 15762 (3 sherds) and 15763 (1 sherd), fill of pits 15884 and 15792, area 2C.

**P22** Late maiolica dish. Montelupo, end of the 16th century. Fine buff fabric, all-over white tin glaze. Painted decoration on internal surface of broad lines (orange and yellow) radiating from the centre of the dish and finer strokes (blue) (*'spirali e monticelli'*). Context 15763, fill of pit 15792, area 2C.

**P23** Late maiolica dish, with characteristic disc base. Montelupo, second half of the 16th century. Fine buff fabric, all-over white tin glaze. Painted decoration on both surfaces. Internal surface ('*losanghe*' or 'net' motif): blue lozenge on the centre of the base and around the wall, alternating with flowers (green, yellow and brown); main motifs are drawn in wide lines of blue; finer blue lines are used to fill in space; the edge of the rim is painted with a yellow and orange band. External surface: concentric purple lines. Rim from context 15310, base sherd from context 15395, fill of pit 15482, both area 2B. **P24** Berettino dish. Liguria, second half of the 16th century. Fine buff fabric, all-over blue tin glaze. Painted decoration on both surfaces. Internal surface: thin concentric and wavy lines around the rim and small flowers on the wall. External surface: interlocking arcs. Identical parallels from Italy show complete dishes with 'a quartieri' decoration, where the dish wall has been divided into several decorative sections alternating small flowers and larger acanthus leaves (as illustrated, for example, by Milanese 1993, fig. 3c and fig. 4a; Farris and Ferrarese 1969, 39–40). From context 16083, structure 16051, area 2F.

**P25** Blue-and-white maiolica. Liguria, end of the 16th century. Fine buff fabric, all-over white tin glaze. Painted decoration on both surfaces. Internal surface: blue wavy lines and spiral. External surface: interlocking arcs. From context 15310, area 2B.

**P26** North Italian marbled ware handle from a costrel. Liguria, first half of the 17th century. Very fine, very dark brown fabric. White and brown marbled slips on exterior surface, under transparent and green lead glaze. Transparent lead glaze on interior surface. The handle is in the shape of a human head, instead of the more common lion head or plain handle. From context 15209, fill of drain, area 2A.

**P27** Merida-type *lebrillo*. Portugal, 17th century. Red fabric with large mica flecks. Dark green lead glaze on the interior surface, not covering the whole of the rim. From context 15146, fill of pond 15232, area 2A.

**P28** Malvern ware pipkin/tripod jug. Brown fabric. From context 15254, fill of pond 15232, area 2A.

**P29** Malvern ware pancheon with pouring lip. Brown fabric and brown glaze on interior surface. From context 15492, fill of pit 15550, area 2B.

**P30** South Somerset (C7) dish. Brown fabric and brown glaze interior surface. From context 15492, fill of pit 1550, area 2B.

**P31** South Somerset (C7) pancheon with pouring lip. Brown fabric with grey core; green glazed interior surface. Three sherds from context 15714, area 2C.

**P32** South Somerset (C7) pipkin. Brown fabric; brown glazed interior surface and exterior of rim only. From context 15492, fill of pit 15550, area 2B.

**P33** South Somerset (C7) bowl. Grey fabric with brown exterior margin; green glazed interior surface only. From context 15560, fill of pit 15583, area 2B.

**P34** Cistercian ware. Dark brown fabric; very brown (almost black) dense glaze on interior and exterior surfaces. From context 15763, fill of pit 15792, area 2B.

P35 Cistercian ware costrel. Dark brown fabric with grey margins; very brown (almost black) dense glaze on interior and exterior surfaces. From context 15763, fill of pit 15792, area 2C.

**P36** Cistercian ware. Dark brown fabric; very brown glaze on interior and exterior surfaces. From context 15492, fill of pit 15550, area 2B.

**P37** Manganese speckled tin-glazed mug. Buff fabric. Colour speckled only on exterior surface. From context 15560, fill of pit 15583, area 2B.

**P38** Tin-glazed jar. Light orange fabric. White tin glaze all-over (except for the underside of the base). Painted parallel bands in blue on the exterior wall. From context 15392, area 2B.

**P39** Anglo-Netherlands delftware. Dark orange fabric. Tin-glazed interior surface, w with painted decoration in blue. Dull, matt lead glaze on exterior surface. From context 15560, fill of pit 15583, area 2B.

**P40** Bristol/Staffordshire slipware. Buff fabric with clear glaze all-over (except for the underside of the base). Bands (unfeathered) of dark brown slip on exterior surface. From context 15193, feature 15193, area 2A.

**P41** Bristol/Staffordshire slipware. Buff fabric with clear glaze all-over (except for the exterior of the footring). Painted (rather than feathered) decoration of dark brown and ochre slips on exterior surface. Four sherds from context 15560, fill of pit 15583, area 2B

**P42** North Devon gravel-tempered crock/bowl. Green glazed on interior surface. From context 15140, area 2A

**P43** Tin-glazed ointment jar. Buff fabric. All-over white tin glaze. From context 15560, fill of pit 15583, area 2B.

**P44** Tin-glazed ointment jar. Buff fabric. All-over white tin glaze. From context 15139, interior of building 6, area 2A.

**P45** Tin-glazed plate. Buff fabric. All-over bluish tin glaze; flower motif painted in blue on the centre of interior surface; red band around the rim. From context 15351, fill of pit 15444, area 2B.

**P46** Modern red earthenware (C20). Red fabric. Interior brown glaze. From context 15351, fill of pit 15444, area 2B.

**P47** Porcelain toy tray, undecorated. From context 15650, backfill of well, area 2C.

**P48** Porcelain toy cup, two-handled and undecorated. From context 15680, backfill of well, area 2C

#### Ceramic Building Material

A single sherd from a medieval floor tile was recovered from context 1114 (area VSH). The sherd has a red, fine fabric with no visible inclusions (**P49**). The design is inlaid with white clay, under a transparent glaze; the underside preserves part of a scoop key. The pattern is that of a chequered shield, probably the arms borne by several families according to other surviving parallels (Lowe 2003, no. 478). Similar patterns are found in Somerset and Gloucester, including Cleeve Abbey, Bridgwater Friary, Glastonbury Abbey, Wells Cathedral and Gloucester Blackfriars, where it has been dated to the third quarter of the 13th century (Lowe 2003,



Fig. 11 Medieval local wares (fabrics AAI, Bath A, Ham Green and Bristol wares.

51). The presence of the tile may indicate a nearby religious building.

Among the medieval roof furniture there are only four sherds of medieval roof tiles (99g) and a possible louver (50g). This is a curved sherd with a cut-out hole, greenglazed all-over (context 15357). The tiles are all ridge tiles and have a green-glazed exterior surface. The fabric is a coarse version of the Bristol ware pottery fabric, making them 13th–15th century in date. They were found in contexts 16050 (area 2F), 15426 (area 2E), fill of medieval pit 15427) and 15155 (area 2A, a medieval soil layer). The presence of only ridge tiles, and their sparse numbers, would indicate the existence of a medieval building whose ridge was covered with ceramic tiles, but used an alternative material for the slopes of the roof, such as stone, slate or wooden shingles.

As for more recent building materials, roofing tiles were also present in the form of a few pantiles. These have the characteristic red, hard fabric and sinuous S profile and were found across several contexts (Table 9). Several 20th-century wall and floor tiles were also recovered, toge:ther with a few modern bricks; in general the bricks recovered were tiny slivers, and it was possible only in
	AREA	CONTEXT	SHERDS	WEIGHT (g)	
Medieval roof tile	2F	16050	1	72	
	2A	15155	2	16	
	2B	15426	1	11	
Medieval finial	2B	15347	1	50	
Medieval floor tile	VSH	1114	1	38	
				10	
Wall tile	2B	15310	2	49	Brown wall or floor tile
	2B	15310	1	22	Wall tile
	2B	15310	2	15	Wall tile; stamped 'Made in England in Tiles'
	2B	15310	1	10	Corner wall tile
Modern brick	2A	15128	1	17	
	2A	15090	1	50	
	2A	15147	1	0	5.2cm thick
	2B	15360	1	0	
	VSH	1114	1	5	
	2A	15140	1	75	5.7cm thick
	2B	15519	2	19	
	2B	15608	2	25	
	2B	1535	1	51	
	2A	1520	3	17	
	2A	15291	1	20	
	2A	15140	1	199	5.7cm thick
	2B	15352	1	3	
	2F	16107	1	4	
Modern roof tile	2F	16068	2	100	Pantile
	2F	16091	1	82	Pantile
	2C	15716	1	17	Pantile
	VSH	1106	1	3	Pantile
	2C	15676	2	68	Pantile
	2A	15000	1	3	Pantile
	2B	15514	1	9	Pantile
	2A	15291	6	315	Pantile
	2B	15380	1	113	Pantile
	2C	15676	2	429	Pantile
	2B	15596	2	164	Pantile
	2B	15352	1	12	Pantile
	VSH	1181	1	6	Pantile
	2C	15789	1	44	Pantile
	VSH	1100	2	118	Pantile
	2B	15351	1	439	Pantile
		1572	1	87	Machine-made.
					Stamped: SOMERSET TRADING Co Ld [FACE]
	VSH	1100	1	85	Nibbed flat tile
Drainage pipe		15362	0	0	Modern stoneware sanitary pipe

Table 9 Distribution of ceramic building material.

three instances to record any measurements; these are shown in Table 9.

## Other clay objects

Other clay objects recovered from the excavation are six marbles, three of them in plain red clay and the remaining three in mixed red and white clays. They are all unglazed. They appeared associated with another stone marble, all from context 15650, and also with a smaller bead made out of white clay (9mm diameter; pierced through the middle). The clay marbles are all of similar dimensions, with varying diameters of 20, 17 and 15mm. This context is of interest

since among the pottery recovered there is a tiny tray made of white stoneware, which is also a toy, probably to use in a doll's house (**P47**). Finds from this context are unstratified, but a further porcelain toy, this time in the shape of a tiny tea cup (**P48**), was found in context 15680, also of 19th-century date.

## Acknowledgements

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Fig. 12 Minety-type and French and Spanish wares.





Fig. 14 Merida-type, Malvern, Somerset and Cistercian wares.



Fig. 15 Tin-glazed wares, Bristol/Staffordshire slipwares, North Devon wares, modern redware, porcelain toys and medieval floor tile.

## **Animal Bone**

## **By Lorrain Higbee**

(NB. Archive Tables 1–4 referred to in the following text are available in the project archive, but are not reproduced here).

#### Introduction

A total of 4,395 fragments of animal bone were recovered from the site, this figure includes 1,150 fragments from a number of complete/partial skeletons and fragmented skulls. The largest stratified groups are from medieval and post-medieval contexts and these periods are the main focus of this report. The identified fraction is rather modest in size and for this reason no attempt has been made to further sub-divide the assemblage. Summary information on the small Iron Age, Roman and modern assemblages is also presented.

## Methods

The assemblage was analysed using standard methods after Davis (1992). This method involves the detailed recording of a selective suite of mammalian skeletal elements that generally show a good survival and recovery rate in most bone assemblages and also provide useful age and biometric data. Avian bones from the wing and leg were recorded using the zonal method after Cohen and Serjeantson (1996), but were only recorded if they retained at least one complete articular surface. Bones that could not be assigned to species have been quantified into general size categories and small splinters into general taxonomic categories (e.g. mammal and avian). This information is presented in order to provide an overall fragment count.

The above methods of quantification reduce the overrecording of fragmented material to give a truer indication of species proportions. The number of specimens identified to species (or NISP) was calculated for all taxa (Archive Table 1), but the minimum numbers of individuals (or MNI) was only calculated for the most common taxa (Archive Tables 3 and 4). The MNI was calculated by simply dividing the total number of fragments of each skeletal element by the number present in the body.

The following standard methods were used to distinguish between related taxa, and record age, biometric data and other relevant information: Bailon (1999); Boessneck (1969); Grant (1982); Grigson (1982); Halstead (1985); Hambleton (1999); Harcourt (1974); MacDonald (1992); O'Connor (1989); Payne (1973, 1985 and 1987); Payne and Bull (1988); Silver (1969); Von den Driesch (1976); Von den Driesch and Boessneck (1974). Details relating to mandibular wear stages and biometric data can be found in appendices 1 and 2 of the site archive.

Information on gnawing, butchery, pathology and non-metric traits was recorded where present. Butchery was recorded by type (i.e. chop, knife cut, sawn), position and orientation (using standard anatomical terms and orientation). Pathological conditions were categorised were possible and detailed descriptions made as to form and location. The following non-metric traits were also recorded where possible: reduction/absence hypoconulid; presence/absence of p2; presence of premolar foramina and characteristics of the mental foramina.

## Results

#### Recovery

approximately 72% of fragments were recovered by hand during the normal course of excavation and the remaining 28% were retrieved from sample residues. The sieved assemblage includes a large number of small unidentifiable fragments; indeed only 16% of fragments could be identified to species however, this fraction includes 33% of all identified bird bones, 75% of all small mammal bones, and all of the amphibian bones recovered from the site. The hand-recovered assemblage includes a greater number of large fragments and complete specimens, and this is reflected in the higher rate of identification (c.44%).

#### Preservation

The majority of fragments are in a good state of preservation, cortical surfaces are intact and surface details are clear

and easily observed. A small number of fragments (c.3%), most of which are from Iron Age and Roman contexts, are poorly preserved. These fragments generally have corroded, exfoliated or cracked cortical surfaces, and abraded edges. These types of damage are likely to have occurred as a result of surface exposure and could indicate that some bone is residual having been reworked or re-deposited from earlier contexts.

Gnaw marks made by domestic dogs were recorded on only 1% of post-cranial fragments. This is an extremely low incidence and suggests that the majority of bone waste was rapidly buried or that dogs were unable to access it. Given the number of complete/partial skeletons from pits it is not too surprising that these features were back-filled relatively quickly. If the skeletons listed in Archive Table 2 are removed from the equation, then the proportion of gnawed post-cranial bones increases slightly to 1.4%.

#### Spatial distribution

The majority of bone fragments were recovered from features and deposits located in areas 2A (27%) and 2B (38%) of the site. The remaining 35% is split between areas 2C, 2F and VSH. Pits produced some of the largest collections of animal bone; indeed 86% of the medieval assemblage and 60% of the post-medieval assemblage was recovered from this feature type (see Archive Table 2).

Summary of the Iron Age, Roman and modern assemblages The area of Bedminster is thought to have been a rural settlement during the Romano-British periods (Russell and Williams 1984). The animal bone evidence from the Mail Marketing site is limited but adds to the growing corpus of data from sites in Bristol, for example 45–53 West Street, Highwood House and Sea Mills.

Iron Age and Roman material was recovered from areas 2A-2C and VSH. Identified bones from the Iron Age assemblage include a cattle radius, pig incisor and the third phalanx from a horse. A single rabbit ulna was also identified and indicates later contamination due to burrowing. Sheep, cattle, pig, horse, house or wood mouse and frog bones have all been identified from Roman contexts. Loose teeth and mandibles from sheep and cattle are relatively common. Mandibles suggest the presence of sheep aged 2–4 years, adult and senile cattle. Two bones from a foal aged less than 15–18 months were identified from pit 15617 and one worked cattle metacarpal was recorded from context 15401.

Nineteen modern contexts produced animal bone; identified species include sheep, cattle, pig, dog, chicken and duck. Pig bones are relatively abundant and include the partial skeleton of a 21–27 month from feature 15223. A second partial skeleton was identified from pit 16142. In this instance the animal is an adult dog and has an estimated mean withers (or shoulder) height of 0.60m. Two bone objects were also recovered. They include a small button (SF571) and a ring from well fill 15680.

## The medieval and post-medieval assemblages

The medieval assemblage includes a wider range of species than that in the post-medieval assemblage, however, both are dominated by livestock species. Cattle, sheep and pig bones account for 72% of identified specimens (or NISP) from the medieval assemblage and 80% of the post-medieval assemblage (Table 10). The medieval assemblage includes a greater proportion of bones from other mammals, cNISP compared to c7% NISP for the post-medieval assemblage. However, bird bones make-up a slightly greater proportion of the post-medieval assemblage, although the range of species is less varied.

Looking more closely at the relative importance of livestock species, a clear pattern emerges . Cattle are the most abundant species in the medieval assemblage, at c.57% NISP, followed by sheep (c.28%) and then pig (c.14%). In the post-medieval assemblage sheep are the most abundant species at c.47% NISP, followed by cattle (c.40%) and then pig (c.13%). A similar pattern is suggested by the minimum number of individuals (or MNI) method of quantification (see Tables 3 and 4 and Fig. 3) however, in this instance the proportion of pig is significantly greater in the post-medieval assemblage at 20% MNI.

## **Livestock Species**

## Body parts represented

All parts of the beef carcass are represented in the medieval assemblage however, there are noticeable absences of certain parts from the mutton and pork carcass (Archive Table 3). These include the skull and bones from the upper hind limb (e.g. pelvis and femur). There are at least eight cattle in the medieval assemblage, six sheep and two pigs. In the postmedieval assemblage the skeletal element representation for both cattle and sheep suggests that whole carcasses are represented however, the pattern for pigs is limited to a small range of elements, notably loose teeth and mandibles (Archive Table 4). At least five sheep are represented in the post-medieval assemblage and this includes three partial skeletons from pit 15881 (Archive Table 2). At least three cattle and two pigs are also represented. The absence of certain sheep and pig bones from the assemblage may indicate differences in activity, procurement or disposal patterns; alternatively any absences may simply be accounted for by small sample size.

## **Butchery**

Marks made by butchery implements were observed on 12% of bones from livestock species, or 11.5% of medieval bones and 12.7% of post-medieval bones. Chop marks are the most common type of butchery evidence and the majority occur on cattle bones. This pattern suggests that butchery techniques varied depending upon the size of the carcass; beef carcasses were dismembered using a cleaver, whilst sheep and pig carcasses were dismembered using a knife, a technique that if carried out by a skilled butcher leaves very few marks on bones. There is little difference in the pattern of butchery marks between periods, although a



Table 10 Relative frequency of livestock and other taxa from the medieval and post-medieval assemblages. Amphibian bones excluded.

notable exception is the treatment of vertebrae. The majority had been chopped in half through the centrum and a small number from late medieval contexts had been chopped laterally to remove the transverse processes. Maltby (1979, 39) found that the method of dividing carcasses by splitting the vertebral column in half was uncommon in Exeter before the post-medieval period and a similar pattern is apparent for Bristol.

Two pinners' bones were recovered from the postmedieval assemblage (S.F. 522 and S.F. 631) and both are fashioned from the distal half of a cattle metatarsal. The process of pin manufacture was mechanised in the 18th century and this, together with the worn state of the objects, may explain why they were discarded. Examples have been recovered from London, Chelmsford and Kings Lynn (see MacGregor 1985, 171) and more recently from excavations at Portwall Lane in Bristol.

#### Age

Summary data relating to epiphyseal fusion of the postcranial skeleton, and tooth eruption and wear is provided in archive Tables 5 and 6. The fusion data suggests that most of the cattle and sheep from the medieval assemblage are adult animals and most of the pigs are immature animals aged c1year. The presence of one bone from a neonatal pig suggests that pigs may have been raised in close proximity to the site. The mortality pattern for post-medieval cattle is similar to that recorded for medieval cattle, although there is some suggestion that fewer animals reached full skeletal maturity and some were culled as calves. The pattern for postmedieval sheep also suggests that younger animals were selected for slaughter, whilst the fusion data for pigs shows little overall difference. This basic pattern is confirmed by the data on tooth eruption and wear, which shows a peak of slaughter amongst adult cattle, and the presence of sheep aged 2-4 years and young pigs.

#### Size

Summary descriptive statistics for the most common measurements taken on the bones of livestock species are presented in Archive Table 7. Means and ranges are all within established parameters for medieval and post-medieval livestock (see for example Higbee forthcoming b). Measurements with a high co-efficient of variance include the diameter of the distal humerus trochlea (or HTC), the breadth of the distal tibia (or Bd) and the width of the third molar (or Wa). Urban meat markets are supplied with animals from a number of different herds/flocks and these may include different breeds of animals, thus some variation is inevitable. However, it is interesting that medieval sheep show the least variation; this is because sheep were primarily valued for their wool during this period so there was little need to improve body mass. In general medieval sheep show very little variation in overall dimensions throughout the medieval period (Trow-Smith 1957; Grant 1988; O'Connor 1995). By way of contrast, post-medieval sheep tend to be larger than their medieval counterparts (Maltby 1979; Albarella and Davis 1996) and this can generally be linked to improvements through selective breeding to produce larger, more muscular animals for meat production.

Withers (or shoulder) height estimates suggest that medieval cattle were on the whole smaller than their postmedieval counterparts; they have a mean withers of 1.09m (range 1.02m-1.20m) compared to 1.17m (range 1.15m-1.20m) for post-medieval cattle. A withers height estimate of 0.57m was obtained from one complete medieval sheep bone. These estimates are all within established parameters for medieval and post-medieval livestock from other sites in Bristol.

#### Pathology and non-metric trait

A cattle metacarpal from the post-medieval assemblage had noticeably asymmetric distal condyles. Splaying of this type is usually associated with traction animals, however no direct link has yet been established (Bartosiewicz et al 1997). Premolar foramina were noted on four out of seven medieval sheep mandibles and one out of two post-medieval sheep mandibles (see Halstead et al 2002). One (out of two) post-medieval cattle third molar was noted with a missing distal cusp (or hypoconulid). Both of these non-metric traits are thought to have a genetic origin, however, the significance is little understood at present.

#### Other mammals

## Horse

Horses are the fourth most abundant mammal species in the medieval and post-medieval assemblages- they account for 7% NISP and 4% NISP respectively. Most of the medieval horse remains occur as isolated bones, the only exceptions to this are two fragmented skulls from pit 15450 and a complete skeleton from pit 15290 (Archive Table 2). The skeleton is that of an adult male aged c.4½ years-10 years (after Levine 1982) and has an estimated withers height of 12.2 hands. Estimates for horse bones from other medieval contexts suggest a range of between 10–14.2 hands. The Mail Marketing animals would all be classed as ponies by modern standards.

Degenerative changes were noted on vertebrae from the lower thoracic and lumbar region of the individual from pit 15290. These changes take the form of exocytosis on both the cranial and caudal borders of the ventral aspect of the vertebral body. The most severely affected are the fifth and sixth lumbar vertebrae, which are fused (or ankylosed) together as a result of new bone formation. The changes have a slightly asymmetrical distribution, being noticeably worse on the right-hand side of body. The pathological evidence suggests that the animal was used for heavy work and the asymmetrical distribution suggest that the physical stresses acting on the spine varied, possibly as a result of the individual's position within a larger team (Jaques and Dobney 1996, 5). It is uncertain whether or not this animal died naturally or was deliberately culled due to disease or injury, however cut marks were noted on the posterior aspect of the ascending ramus of the mandible, which would suggest that the carcass was skinned but not further utilised.

## Dog and cat

Most of the dog and cat bone from the medieval and postmedieval assemblages are disarticulated bones from adult animals. The only exception to this is the partial skeleton of a  $1\frac{1}{2}$  year old from medieval pit 15450.

#### Deer

Two species of deer have been identified from the medieval assemblage; they include a red deer antler pick or hoe (SF540) from pit 15591 and a fallow deer mandible from pit 15427. In additional a fragment of shed antler was recovered from late medieval pit 15550.

#### Killer whale

A single tooth from a killer whale (Orcinus orca) was identified from late medieval pit 15550. The tooth is from near the back of the jaw and the closed pulp cavity indicates that it is from an old individual. Killer whales are the largest member of the dolphin family and can be found in the North Atlantic. The tooth may have come from a stranded animal whose remains were recovered from the Rivers Avon/Severn and utilised. However, commercial whaling in England was well underway by the late 16th century (Gardiner 1997, 188), and although there is little historical information for this activity in Bristol during the late medieval period there are records that 18th century commercial whaling ships landed their cargo at Sea Mills dock (Little 1956; Latimer 1893).

#### Small mammals and amphibians

The sieved assemblage includes a mandible from a pigmy shrew (*Sorex minutus*) from post-medieval pit 15482 and a number of frog and toad bones including several partial skeletons (Archive Table 2). These animals are likely to have fallen into open features; as such they represent part of the general environmental background to the site.

## Human

One fragment of human bone was identified from the sieved assemblage. The specimen is a permanent upper incisor tooth from medieval context 15835.

## Birds

Chicken is by far the most common avian species, it accounts for 68% of the medieval and 83% of the post-medieval bird bone assemblage. Bones from the wing are more abundant than other body parts and the majority of chicken bones are from adult birds that were probably reared for their eggs. Most of the juvenile chicken bones are from post-medieval pit 15881; these birds may represent capons that were fattened for eating.

Less common avian species include duck, goose, crow and jackdaw. The first two are domestic species and the last two are both members of the corvid family, and are common scavengers in urban areas. Two further bird bones were recovered, they could only be identified to genus but include one bone from a passerine (e.g. sparrow) and one from a turdus (e.g. thrush).

#### Discussion

A moderate sized assemblage of animal bone was recovered from the site and the bulk of this material is well preserved and from medieval and post-medieval contexts. Bones from livestock species form the bulk of identified fragments, cattle is the most common species in the medieval assemblage, whilst sheep is the most common species in the post-medieval assemblage. Comparison with other medieval and post-medieval assemblages from the southwest region (see Appendix 3 for list) indicates considerable regional variation in species frequencies. Medieval sites in the region with over 50% cattle and less than 30% sheep include St James's Priory in Bristol (Barber 2007), Cheddar Palace (Higgs et al 1979), North Petherton (Adcock 1977), Benham's Garage in Taunton (Levitan 1984) and Minchcombe in Gloucestershire (Levitan 1985). Post-medieval sites with less than 10% difference in the relative frequency of cattle and sheep include the Beehive Yard in Bath (Higbee forthcoming a), St James's Priory (ibid), Union Street in Bristol (Higbee forthcoming b), and Christchurch in Dorset (Coy 1983).

The mortality pattern for cattle suggests that old dairy cows and plough oxen were supplied to the urban meat market during the medieval period, whilst during the postmedieval period younger cattle, including calves, were made available. Similar changes in the kill-off rate of young cattle have been recorded elsewhere in Bristol, for example St James's Priory (Barber 2007, 186–7) and Union Street (Higbee forthcoming b). This pattern is repeated at other regional sites such as Exeter (Maltby 1979, 32) and Launceston Castle (Albarella and Davis 1996, 12). At both these sites the numbers of calves and young cattle increase from the 16th century onwards, and this the authors suggest is a direct result of increased specialisation to produce meat and milk.

The kill-off pattern for sheep indicates peaks of slaughter at the optimum age for prime mutton (usually not more than 4 years). There is some suggestion that sheep were culled at a slightly younger age during the post-medieval period, however this is based on limited data. National trends indicate that there is a general shift in the British economy from one geared towards meat and wool to one primarily geared towards wool (Albarella and Davis 1994 and 1996; Albarella *et al* 1997; Dobney *et al* 1996; Higbee forthcoming b; Luff 1993). The importance of the wool industry seems to have continued until at least the 16th and 17th centuries and this is reflected in the age at which sheep were culled. The apparent increase in the availability of younger sheep and the gradual improvement in their size (see Albarella and Davis 1994, 47) can be seen as a general indication that meat production became more important during the postmedieval period.

The assemblage includes a number of complete/partial skeletons and fragmented skulls. These deposits represent a range of activities, including the disposal of animals exploited food (i.e. the sheep skeletons from pit 15881), the burial of pets (i.e. the dog from pit 15450) and the disposal of horse carcasses. Pathological changes on the vertebrae of the complete skeleton from pit 15290 indicate that this animal was used for heavy work, probably as part of a team. The cause of death could not be established from the remains however it seems likely that the animal was sold on to a knacker to be dispatched, skinned, and disposed of. The burial of horses within urban areas is not uncommon; at Elverton Street in London (Cowie and Pipe 1999) thirty-one late medieval pits containing the articulated remains of horses were discovered. Most of the animals were male and some appear to have been skinned, but there was no direct evidence for meat removal.

A single tooth from a killer whale was also identified and is the first record of this species from Bristol. Other marine mammals have been identified from the area: these include an ulna from a common seal from Union Street and the mandible from a dolphin/porpoise from St Thomas Street. Whales, dolphins and porpoises were once a high status food item but their consumption went out of fashion in the late 16th century (Albarella and Davis 1996, 24), at about the same time that commercial hunting is thought to have begun in England (Gardiner 1997, 188). The behaviour of some species meant that they were preferentially targeted, either because they are slower or congregated in large schools. Historical evidence suggests that smaller cetaceans, such as killer whale, were generally used for non-commercial purposes (Mulville 2002, 37).

#### Acknowledgements

The author would like to thank Richard Sabin, the curator of marine mammals at the Natural History Museum in London, for identifying the killer whale tooth and providing additional information relating to this species. Thanks are also due to Andy King of Bristol and Regional Archaeological Services for information about the whaling industry in Bristol.

## **Worked Bone**

**By Lorrain Higbee** 

## **Romano-British**

Context 15401 Area MMI 2B Cattle metacarpal – possible skate

Proximal half of cattle metacarpal, thin slivers of bone have been removed from around the proximal articular surface to produce flat facets, these are slightly polished. The proximal surface itself has also been modified, possibly by coarse abrasion, which has removed the outer cortical surface and flattened the proximal profile. A small hole 6.0mm in diameter has been made through the central area of the articular surface. Although the object is incomplete the modifications are similar to those seen of bone skates. MacGregor (1985, 142) indicates that axially aligned strap holes are fairly common on these objects and the flattened profile is probably a result of wear. Roman examples are known from Germany but most of the British examples are from late Saxon and early medieval contexts (*ibid*, 144)

## Medieval

SF540 (15591) Area MMI 2B Red deer (Cervus elaphus) – antler pick or hoe

The object is made from the lower section of the main beam and brow tine. The main beam is truncated approximately 107.5mm from the burr and the edge rounded off. The beam has also been hollowed out presumably so that the antler could be halted with the brow tine acting as the pick or hoe. The very tip of the brow tine in broken but analysis of the wear pattern observed on similar objects suggests that these tools may have been used either as a clod breaker or as a draw hoe to form seed drills. Cut marks are visible on the outer surface of the brow tine, near its junction with the main beam. The presence of the burr indicates that the antler was collected after being shed.

## Late Medieval

## SF630 (16203) Area MMI 2F

The small object is flat on one side with a straight shaft, a bulbous head and a central iron rivet but is of uncertain function.

## **Post-Medieval**

SF522 (15128) Area MMI 2ACattle metatarsal - pinners' bone

The object has been fashioned from the distal half of a cattle metatarsal. The mid-shaft of the bone has been shaped to produce four flat facets approximately 45mm in length, the extreme distal portions of which are scored with numerous parallel grooves transverse to the bones long axis. At the other end of the facets are a series of parallel grooves that run

longitudinal to the long axis of the bone, typically between 3 or 4 per facet. The bone acted as a holder during the process of sharpening brass pins by filing each pin individually. The pins would have been held in the longitudinal grooves while the point was filed resulting in file marks across the facets surface. The process was mechanised in the 18th century and examples have been recovered from London, Chelmsford and Kings Lynn (see MacGregor 1985, 171).

# SF631 (16084) Area MMI 2F Cattle metatarsal – pinners' bone

A more worn version of the above.

## **Fish Bone**

### **By Alison Locker**

NB Selected tables only have been reproduced within the report; the remainder, referred to here as 'Archive Table' may be viewed in the project archive for BHER 22159.

## Introduction

A small assemblage of 130 fish bones was recovered from 32 samples from five areas dating from the Iron Age to the 18th century.

The following species/families were identified; Elasmobranchs (sharks and rays), roker (*Raja clavata*), herring (*Clupea harengus*), shad (*Alosa sp.*), cod (*Gadus morhua*), haddock (*Melanogrammus aeglefinus*), whiting (*Merlangius merlangus*), pollack (*Pollachius pollachius*), Gadidae, Triglidae (gurnards) and plaice/flounder (*Pleuronectes platessa*/*Platichthys flesus*). The total lengths of fish were estimated from comparison with modern reference material.

#### The Iron Age (Archive Table 1)

Only one sample was dated to the Iron Age. Two herring vertebrae were recovered from the fill of a pit, one of which was burnt grey.

## The Romano-British Period (Archive Table 2)

Only six fish bones were found in four contexts, these were herring or Clupeid (herring family) and two burnt fragments that are not fish.

#### Medieval 12th to 14th century (Table 11)

A wider range of species was identified in these deposits, particularly from context 15356, a pit fill, which included gurnard vertebrae and the distinctive fin rays. Cod was

Context	sample/area	Roker	Clupeid	Cod	Haddock	Whiting	Pollack	L Gadid	Gurnard	Indet	Total
15356	140 2B	0	1	4	2	0	0	21	5	44	77
15478	147 2B	0	0	0	0	0	1	1	0	0	2
15511	152 2B	0	0	0	0	1	0	2	0	0	3
15527	121 2B	0	0	0	0	0	0	0	0	2	2
15445	128 2B	1	0	0	0	0	0	0	0	0	1
	TOTAL	1	1	4	2	1	1	24	5	46	85

Table 11 Fish bone from medieval contexts (12th to 14th centuries).

identified from four skull fragments from fish of 1000mm and 800mm total length. These are likely to be from whole, fresh fish as the head is removed during the preparation of salted and dried cod. No cod vertebrae were present but there were a number of ribs, branchiostegals and other bone fragments classified as large gadid and other more fragmentary material listed as indeterminate that were of cod size. None of these bones showed any cut marks. A haddock vertebra and quadrate from this context were from a fish of at least 60cms total length

The Gadids, or cod family, featured strongly in this date range, cod, whiting, haddock and pollack being present. A roker (thornback ray) denticle was also identified.

#### Medieval 13th to 15th century (Table 12)

From 12 samples only 18 fish bones were recovered. These included an elasmobranch vertebra from 15154, two herring vertebrae and a shad vertebra from 1148. The latter, a herring relative, may be the only representative of fish caught in the Avon as shad enter freshwater seasonally to spawn. Single bones of cod (a burnt vertebra fragment) and a plaice or flounder vertebra were also identified.

# Late medieval/Post-medieval Transition 15th to 17th century (Archive Table 5)

Single vertebrae of whiting, pollack and plaice or flounder were identified.

*Post-medieval 16th to 18th century* (Archive Table 6) An indeterminate fragment from a single context.

Late post-medieval 17th to 18th century (Archive Table 7) Four bones from three contexts were attributed to herring, whiting and plaice or flounder.

Modern (Archive Table 8) A single bone was identified as shad.

## Undated (Archive Table 9)

Three contexts were undated and were similar to the other medieval deposits with four bones from elasmobranch, haddock and large gadid.

## Discussion

The assemblage is small with all contexts, except 15356, containing very few bones so that any comparison between contexts or date ranges is dubious. The few bones of Iron Age and Roman date were only from herring. The medieval and later samples showed a greater variety of marine fish particularly cod, haddock, pollack and whiting, the major 'whitefish' food fishes. In the latest phases of the 18th century, Bedminster still remained a rural settlement and some of these fish, particularly cod and haddock could have been bought in from the Bristol markets. By the medieval period cod had become the main food fish, surpassing herring.

Despite the proximity of the River Avon, there is no evidence for exclusively freshwater species, or the migratory eel (*Anguilla anguilla*), which matures in fresh water and has been found on other sites in Bristol, for example at Portwall Lane (Locker 2007a) and 55–61 Victoria Street (Locker 2007b). However, eel does not occur in assemblages in the Bristol region in the large numbers found at sites in the south and southeast. The total absence of eel here is evidently not due to the small size of their vertebrae since equally small herring vertebrae were recovered by sieving.

The bones from this assemblage suggest the capture of herring in the Severn estuary during the Iron Age and Roman period, but there is no evidence for other species, marine or freshwater. In medieval times the emphasis is focused on marine fishing; plaice and flounder could have been trapped along the shoreline of the Severn estuary some five miles away, herring and whiting could be netted in local shallow waters where rays and small sharks such as dog fish (Scyliorhinus canicula) could also be caught. Deeper water fisheries using lines were prosecuted for cod, haddock and pollack and were brought to the port of Bristol in great quantities (Carus Wilson 1967). The other signature 'whitefish' for the southwest, hake (Merluccius merluccius) is absent from this assemblage. Hake bones are more fragile than cod and haddock, but vertebrae have been found in other Bristol assemblages including Portwall Lane and Victoria Street cited above and St Thomas Street (Nicholson 2004, 48).

Context	samp	ole/area	Elasmo	Roker	Herring	Shad	Cod	Whiting	Plaice/F	Indet	Total
1148	32	VSH	0	0	0	1	0	0	0	0	1
15154	101	2A	1	0	0	0	0	0	0	1	2
15092	115	2A	0	0	0	0	0	0	1	0	1
15558	156	2B	0	0	1	0	0	0	0	0	1
15562	150	2B	0	0	0	0	0	0	0	1	1
15426	110	2B	0	1	0	0	0	0	0	1	2
15681		2C	0	0	0	0	0	0	0	1	1
16126	140	2F	0	0	1	0	0	0	0	0	1
16130	186	2F	0	0	0	0	0	0	0	2	2
16175	195	2F	0	0	0	0	0	1	0	2	3
16163	194	2F	0	0	0	0	0	0	0	1	1
16073	185	2F	0	0	0	0	1	0	0	1	2
	TOT	AL	1	1	2	1	1	1	1	10	18

Table 12 Fish bone from medieval contexts (13th to 15th centuries).

This small assemblage suggests very restricted fish consumption in the Iron Age and Roman period, limited to herring, while in the Medieval and later period the main 'white fish', i.e. the Gadids, were eaten along with roker, herring and flatfish. Whether this small sample, particularly before the medieval period, is typical of this settlement can only be confirmed by more excavation and sampling in this area.

## **Plant remains**

## By L. Gray

## Introduction and methodology

Sixty samples were selected for assessment. They came from sampling in areas MMI 2A, 2B, 2C, 2F and VSH making up the West Street, Bedminster, Bristol excavations.

Samples dated from Iron Age to post-medieval with most samples being dated as medieval. Bulk sample size ranged from 5 to 95 litres. These were processed by Avon Archaeological Unit Limited by flotation. Flot and residue was collected in a 500 micron mesh sieve, then air dried. Waterlogged samples (116, 118 and 191) were wet-sieved using a 250 micron mesh sieve. Bulk samples were completely processed (unpublished Avon Archaeology Archive Report).Samples were completely scanned for this analysis using a low-powered stereo microscope with magnification ranging from 10 to 40x.

## Recording and Analysis

Charred, silicified and mineralized remains were counted. Where grains and grass seeds were in fragments, embryo ends were counted. Waterlogged remains and fragments of charred wood and grain tissue were given estimated levels of abundance as follows:- + = 1-10, ++ = 11-50, +++ = 51-150, ++++ = 150-250 and +++++ = >250.

Items of charred and mineralized remains per litre of processed soil were calculated excluding charcoal and indeterminate (estimated) amounts of non-wood plant/grain tissue and waterlogged remains. Ratios of grains to chaff and grains to seeds were calculated for all samples where counted remains were present. All calculated figures were rounded up to one decimal place. Wood charcoal was not included in this analysis because it was not recommended for further study. It has been recorded in the author's archive. Most samples contained fragments of microscopic flecks of charcoal. The only exceptions to this were samples 36, 118,150 and 191. Large legumes and estimated quantities of grain/plant tissue fragments were also excluded from the calculation of ratios.

Many uncharred (unmineralised and not waterlogged) remains were observed. The most frequently observed uncharred taxa were silver birch (*Betula pendula* Roth) samaras and bracts, hawthorn (*Cretaegus monogyna* Jacq.) leaves, elderberry (*Sambucus nigra* L.) seeds and indeterminate root/rhizome fragments. These were frequent across all periods, feature types and excavation areas. It is possible that these remains are intrusive and entered the archaeological deposits via stratigraphic mixing due to root and faunal activity. The possible re-deposition of some plant remains due to re-cutting of some features was observed during the assessment of samples from Areas 2A, 2B and 2C. Due to the similarity of the type and distribution of these uncharred remains between the samples the likelihood that they are intrusive means that they have been recorded but will not form part of this analysis.

All details were recorded onto paper record sheets and transferred into an Excel spreadsheet and held in the author's archive. They are available on request.

The term "seed" should be read as replacing the more botanically correct terms achene and nutlet.

## Identification, Method and Criteria

Identifications for plant macro-fossils were made using modern reference material and reference manuals (such as Beijerinck 1947, Cappers et al. 2006, Charles 1984 and Jacomet 2006). Identifications were made to species level where possible and genus and family where diagnostic features were less clear. Nomenclature for taxa has been taken from Stace (Stace 1997), Jacomet (Jacomet 2006) and Zohary and Hopf (Zohary and Hopf 1994).

The quality of preservation varied. The charred and mineralised remains were often too fragmentary and in some cases too distorted to allow for any identification beyond genus or family. This was particularly true in the case of legumes and grass seeds where diagnostic features such as hilums and embryos did not survive. The preservation of the waterlogged remains was very good allowing for many identifications to be made to species.

Wheat (*Triticum* sp.) grains were the most frequent cereal observed across the site and in each period. They resembled free-threshing grains. Those too poorly preserved to be identified beyond genus were identified as wheat grains. No clear free-threshing type chaff was observed so a confident identification of these grains as, say, bread or club wheat (*Triticum aestivum* L.), would be unwise and current practice is to avoid identifying a grain to species unless chaff is present to support this (Hillman *et al* 1995). Better preserved spelt (*Triticum spelta* L.) grains were observed along with spelt chaff. A low number of grains resembling spelt /bread wheat type were observed so it is possible that many of these apparently free-threshing type grains are spelt grains distorted by charring. They have been tabulated as *Triticum aestivum* type.

Seeds were identified as closely as their level of preservation allowed. Many were in fragments or too distorted to make a full identification. If other well-preserved seeds were present then a distorted or fragmentary one was been given a cf. level identification.

#### Results

NB. Archive Tables 1–11 referred to in the following text are available for reference in the project archive, but are not reproduced here.

## Iron Age Pits

Samples from four pits were analysed (Archive Table 1). Pit 15758 had two samples taken from it (samples 160 and 161) but no note was made of whether they were primary or secondary fills.

Preservation was mostly by charring, with the exception of sample 160 which produced mineralised remains in the form of two poorly preserved seeds and a fragment of grass type stem. The density of items per litre of soil ranged from 0.7 to 3.4 with sample 163 (pit 15787) having the highest density.

The charred assemblages consisted of grains, chaff, seeds and a possible nut kernel. Grains dominated each sample. No chaff was observed in sample 161. The ratios of grains to seeds were roughly even with the highest ratio of three grains to one seed in sample 163.

Wheat grains were the most frequent plant remains in these samples. The most frequently occurring grains were those of bread/club wheat type. They were present in sample 161 (pit 15758), sample 162 (pit 15777) and sample 163. Other grains consisted of spelt, oat (Avena sp.), rye (Secale cereale L) and barley (Hordeum sativum L.). A poorly preserved spelt/bread wheat type grain was observed in pit 15787 (sample 163). Rye grains (one clear identification and four poorly preserved possible rye grains) were observed in sample 128 (pit 15446) and pit sample 163. One poorly preserved barley grain was observed in sample 128. Six grains that could only be described as straight barley grains were observed in sample 160 (one grains and 163 (five grains). One hulled and twisted grain was observed in sample 161. One naked straight grain was observed in sample 162 (pit 15777). Two poorly preserved barley/ wheat grains were observed in sample 128. Samples 163 and 163 contained one oat grain each. Sample 163 contained two fragments of oat grain. None of the grains had germinated.

Chaff was rare consisting of a low number of spelt legume bases and spikelet forks, poorly preserved wheat glumes bases and cereal stem fragments

Cultivated legumes were present in n low numbers. These consisted of one Celtic/horse bean (Vicia faba L) sample 160 and one pea (Pisum sativum L.) in sample 163.

Most seeds came from ruderal plants and several were possible weeds of arable fields. The most frequent weed seeds were those of fat hen (*Chenopodium album* L.). Most of these were observed in sample 163.

A fragment of plant tissue resembling a hazelnut kernel (cf. *Corylus avellana* L.) was observed in sample 162.

## Iron Age Ditches and Gully

Samples from six ditch fills were analysed (Archive Table 2). All preservation was by charring. The density of items per litre of soil ranged from 0.7 to 3.6 with sample 37 (taken from small gully/ditch feature 1273) with the highest density.

The charred assemblages consisted of grains, chaff, seeds and nutshell. Grains dominated each sample. No chaff was observed in samples 158 (ditch 15438), 124 (upper fill of ditch 15461) and 176 (ditch 15870). No weed seeds were observed in sample 124 and ratios of grains to weed seeds in the remains in the samples ranged from 1.7 to 14 grains to 1 seed.

Wheat grains were the most frequent plant remains in these samples. The most frequently occurring grains were those of bread/club wheat type. These were present in samples 144 (ditch 15435), 158, sample 141 (ditch 15516) and sample 176 (ditch 15870). Poorly preserved grains resembling spelt/bread wheat type were observed in sample 37. Other grains consisted of spelt and oat. Better preserved spelt grains were observed in samples 141 and 176. One oat grain and an oat grain fragment were observed in sample 37. None of the grains had germinated.

Chaff was rare consisting of low number of oat awn fragments and cereal and grass stem fragments.

Two peas were observed in sample 144. One poorly preserved fragment resembling a Celtic/horse bean or pea fragment was observed in sample 176.

Most seeds came from ruderal plants and several were possible weeds of arable fields. The most frequent seed seeds were those of small legume seeds (*Vicia/Lathyrus/ Pisum* sp.). Next in frequency were seeds of annual mercury (*Mercuralis* cf. *annua*). A fragment of hazelnut shell was observed in samples 141 and 158.

#### Romano-British Pits

Samples from four pits were analysed (Archive Table 3). Most preservation was by charring. One silicified spikerush (*Eleocharis* sp.) seed was observed in sample 138 (secondary pit fill 15403). The density of items per litre of soil ranged from 0.5 to 13.3 with sample 138 having the highest density.

The charred assemblages consisted of grains, chaff and seeds. Grains dominated each sample. No chaff was observed in samples 36 (pit 1166), 138 and 142 (pit 15617). No seeds were observed in sample 142. Rations of grains to chaff ranged from 1.5 to 166 grains to one chaff fragment. Ratios of grains to weed seeds was more balanced and ranged from 0.9 to 2.9 grains to one seed.

Wheat grains were the most frequent plant remains in these samples. The most frequently occurring grains were those of bread/club wheat type. Most of these were observed in sample 36. Spelt grains were observed in low quantities in sample 138. Poorly preserved spelt/bread wheat type grains were observed in sample 36. Low numbers of hulled straight barley grain were observed in samples 36, 138 and 139 (primary pit fill 15403). Ten oat grains were recovered from sample 138. The remaining grains were poorly preserved and fragmentary. None of the grains had germinated.

Chaff was rare consisting of low number of oat awn fragments and cereal and grass stem fragments.

Twenty-three whole peas were observed in samples 22, 36 and 139. Six Celtic/horse bean (*Vicia faba* L.) cotyledons were recovered from sample 138.

Most seeds came from ruderal plants and several were possible weeds of arable fields. Some very well-preserved seeds, fruits and capsule fragments of wild radish/charlock (*Raphanus raphanistrum* L.) were observed in sample 36 and sample 138. The seeds most frequently observed in the samples were those of stinking mayweed (*Anthemis cotula* L.). These were observed in small quantities in all samples but with the exception of sample 142. The most frequent finds of seeds were those of fat hen. These were all seen in both samples from pit 15403. The next most abundant species was corn marigold (*Chrysanthemum segetum* L) with ten seeds of this species in sample 36.

#### Romano-British Ditches

Samples from three ditches were analysed (Archive Table 4). All preservation was by charring. The density of items per litre of soil was low ranging from 1.9 to 2.2.

The charred assemblages consisted of grains, chaff, seeds and nutshell. Grains dominated each sample. No chaff was observed in sample 177 (ditch 15854).

Wheat grains were the most frequent plant remains in these samples. The most frequently occurring grains were those of bread/club wheat type. Most of these were observed in sample 171 (ditch 15820). A spelt grain fragment and a possible emmer (*Triticum* cf. dicoccum) grain were observed in sample 177. Samples 174 (ditch 15851) and 171 both contained a hulled straight barley grain. Oat grains were observed in samples 174 and 171. The remaining grains were poorly preserved and fragmentary. None of the grains had germinated.

Chaff was rare consisting of three spelt glume bases (two in sample 174 and one in sample 171). A poorly preserved wheat glume base was observed in sample 171. A detached wheat embryo was also observed in this sample.

Two peas and one Celtic/horse bean were observed in sample 171. Fragments of peas and Celtic/horse beans were observed in this sample and sample 174.

Most seeds came from ruderal plants and several were possible weeds of arable fields. The most frequent type was seeds of small-seeded legumes.

A fragment of hazelnut shell was observed in sample 177.

## Romano-British Structural Features

Samples from two postholes (sample 167 – posthole 15804 and 165- posthole 15826) and two beamslots (sample 169 – ditch/beamslot 15813 and 166 – beamslot 15834) were analysed (Archive Table 5). All preservation was by charring. The density of items per litre of soil was low ranging from 0.4 to 1.5.

The charred assemblages consisted of grains, chaff, seeds and nutshell. Grains dominated each sample, particularly sample 169 with a ratio of grains to chaff of 42:1 and grains to seeds of 9.2:1. No chaff was observed in samples 167 and 165.

Wheat grains were the most frequent plant remains in these samples. The most frequently occurring grains were those of bread/club wheat type. Most of these were observed in sample 169. Five spelt grains were observed in sample 166. One hulled straight barley grain was also observed in this sample. Low numbers of poorly preserved barley and spelt grains were observed in sample 169. The remaining grains were poorly preserved and fragmentary. None of the grains had germinated. Chaff was rare consisting only of solitary fragments of grass stem in two samples. Most seeds came from ruderal plants and grassland. The most frequently occurring seed as that of curled dock (*Rumex crispus* L.). The grassland species were represented by one seed each of hoary plantain (*Plantago media* L.) and ribwort (*Plantago lanceolata* L.) in sample 167.

A fragment of hazelnut shell was observed in sample 169.

## Medieval Pits

Samples from twenty-one pits were analysed (Archive Table 6). Preservation was by charring and mineralisation. Mineralised remains were observed in sample 140 (lower pit fill 15431) 145 (primary fill of pit 15410), sample 150 (pit fill 15563) and sample 134 (lower pit fill 15594). The density of items per litre of soil was low ranging from 0.1 to 4.4.

The charred assemblages consisted of grains, chaff, seeds, nutshell and fragments of Rosaceae type thorns. Grains dominated each sample. Most grains were observed in sample 156 (pit fill 15559). Chaff was rare and only observed in ten of the twenty-seven samples. The ratio of grains to chaff ranged from 2 to 38 grains to chaff fragments. The lowest ratio of 2:1 came from sample 120 (pit 15427) the highest of 38:1 came from sample 121 (lower pit fill 15557).

Wheat grains dominated the samples. The most frequently occurring wheat grains were those of bread/ club wheat type. Most of these were observed in samples 6 and 8 (both from pit 1112) and sample 121. The next most abundant type of grain was oat. These were observed in sixteen samples with most being in sample 23 (pit fill 1280). Low numbers of rye and barley grains were also observed. One hulled twisted barley grains was seen in sample 147 (upper pit fill 15477) and one naked straight grain was seen in sample 143 (upper fill of pit 15431). The remaining grains were poorly preserved and fragmentary. None of the grains had germinated.

Chaff was observed in twelve of the twenty-seven samples. Most of these were grass type stem fragments. Also observed in low numbers were fragments of oat awn, glume bases, rachises, a whole oat spikelet in sample 121 and a culm node. Most chaff fragments were observed in sample 140. These consisted of four stem fragments and two poorly preserved wheat glume bases. Only three glume bases could be identified to possible species – possible spelt in sample 156 and 143. The rachis fragments were those of barley or barley/rye.

Cultivated legumes were observed in ten samples. These were generally poorly preserved and fragmentary. The best preserved legumes were those of Celtic/Horse bean and present, in low quantities in samples 120, 125 (pit 154270), 140 and 150.

Most seeds came from ruderal plants and several were possible weeds of arable fields. The most frequent type was seeds of curled dock and small-seeded legumes.

Other potential food plants were observed. Fragments of hazelnut shell was observed in samples 39, 102 (pit 15119), 120, 143, 151 (upper fill of pit 15469), 147 (upper fill of pit

15477), 121 and 156. A grape (Vitis vinifera L.) seed was observed in sample 5 from pit 1112.

## Medieval Ditches

Samples from four ditch terminal/ditches were analysed (Archive Table 7). Preservation was by charring. The density of items per litre of soil was low ranging from 0.1 to 15.7. The sample producing most archaeological plant remains was sample 26 (gully fill 1177).

The charred assemblages consisted of grains, chaff, seeds, nutshell and a Rosaceae type thorn. Grains dominated each sample. Most grains were observed in gully fill 1177 (sample 26). Chaff was rare and observed in low quantities in samples 26 and 39 (ditch 1288).

Sample 26 and sample 39 contained most of the grains in these ditch/gully features. Bread/club wheat type grains dominated both samples. Most of these were observed in sample 26. Less well preserved wheat grains and cereal grain fragments were the next most abundant in these samples. Oat grains were next most frequent followed by barley and rye grains. One hulled, twisted barley grain was observed in sample 39. One naked straight barley grain was observed in sample 26. Well preserved spelt grains were also present; two in sample 26 and three in sample 39. The remaining grains were poorly preserved and fragmentary. None of the grains had germinated.

Chaff was scarce and poorly preserved. Three wheat and two awn fragments were observed in sample 26. Sample 39 contained an oat awn fragments and a cereal culm node.

Cultivated legumes were observed in samples 26 and 39. These consisted of eighteen well preserved peas in sample 26 and two Celtic/horse beans and a pea/bean fragments in sample 39

Most seeds were observed in sample 26 and 39. These were dominated by seeds of ruderal plants and several were possible weeds of arable fields. The most frequent seeds in sample 26 were those of small-seeded legumes and corn marigold.). The most frequent seeds in sample 39 were those of stinking mayweed and corn marigold.

A fragment of hazelnut shell was observed in sample 39.

#### Medieval Horse Burial

This sample, sample 117 (fill/cut 15290), produced very little (Archive Table 8). All that was recovered were two bread wheat type grains, two wheat grains, one wheat glume base, one possible oat grain fragments and a seed, which was, like the other charred remains, too poorly preserved to be identifiable.

## Post-Medieval Pits

Three pit features were analysed (Archive Table 9). One, pit 157965, had two samples taken from it (samples 170 and 173) but unfortunately no note was made of where in the feature these were taken from. Preservation was by charring. The density of items per litre of soil was low ranging from 0.3 to 2. The plant remains consisted of grains, chaff, seeds and nutshell. Grains dominated each sample. Chaff was rare

and consisted of one fragment of grass stem in sample 155 (lower pit fill 15606).

Bread wheat type grains were the most frequent plant remains. These were present in each sample. Also present were low quantities of grains of spelt, oat and hulled straight barley. The remaining grains were poorly preserved and in fragments. None were sprouted. Two Celtic/ Broad beans were observed in sample 155.

Seeds were observed in low quantities in samples 133 (pit 15450), 155 and 173. Unfortunately few of these were well-preserved enough to be identified to species but most were ruderals with wild radish/charlock representing possible arable weeds. Small-seeded legumes were the most frequent seed.

A fragment of hazelnut shell was observed in sample 173.

#### Post-Medieval Pond

Two samples were analysed from pond fill 15232 – primary fill sample 116 and fill sample118 (Archive Table 10). Preservation was by waterlogging and consisted of seeds and wood, stem/leaf and vegetative fragments. The fragments of wood had not been recommended for analysis and on scanning were poorly preserved. The seeds were very well preserved and included some quite fragile seeds, such as those of wild parsnip (*Pastanica sativa* L.)

The most frequent plant remains in the primary pond fill were seeds of stinging nettle (Urtica dioica L.). Plants of damp ground were frequent and included seeds of sedge (Carex sp.) water pepper (Polygonum hydropiper L.). Many of the seeds came from ruderal and segetal plants such has corn marigold and milk/sow thistle (Sonchus asper (L.) Hill), knotgrass (Polygonum aviculare L.) and buttercups (Ranunculus acris/repens/bulbosus).

The second sample taken from this feature, sample 118, was also dominated by fragments of wood, stem/leaf and other indeterminate vegetative matter. The most frequent seeds were stinging nettle, knotgrass and buttercup. This sample appeared to contain more seeds of ruderals, segetals and grassland and fewer wetland plant seeds.

#### Post-Medieval Well

One sample, sample 191, was taken from well fill 16051 (Archive Table 11). Plant remains were preserved by charring and waterlogging. The charred remains were scarce and consisted of one hulled, straight barley grain, four oat grains, one wheat and one barley grain fragment and one indeterminate cereal grains fragments. A charred common spikerush seed (Eleocharis palustris (L.)) seed was also present.

The remaining plant remains were preserved by waterlogging and were dominated by fragments of stem/ leaf, wood and indeterminate vegetative material. The most frequent seeds were those of fool's parsley (*Aethusa* cf. cynapium L.). Most of the seeds present came from plants preferring or disturbed or cultivated ground. The only damp ground species were the charred common spikerush seed and low number of waterlogged sedge seeds. Like the pond

fills, preservation of the waterlogged seeds was good and included another find of wild parsnip seed.

## Discussion

# What might have caused the charring and silicification of the plant remains?

Most of the plant remains recovered in these samples was preserved by charring. A silicified seed was observed in a Roman sample (sample 138). Charring occurs when plant remains are burned in reducing conditions where oxygen has been excluded (Jones 2002, 12) but when in oxidizing conditions plant remains can burn to ash leaving silicified material (Robinson and Straker 1990, 4). Charring can take place in many situations. Grains and chaff become charred during drying prior to storage or processing and plant material can enter a fire accidentally or as fuel.

# What might have resulted in mineralisation of plant remains?

Mineralised remains were rarer. Mineralised remains were observed in one Iron Age pit (sample 160, pit 15758) and four Medieval pits (samples 134, 140,145 and 150). Mineralisation occurs when calcium and phosphate from calcium-rich ground water, lime, human faeces or fish bones and scales in a deposit result in the chemical replacement of organics material with calcium phosphate (Green, 1979, 281). The mineralising agent in the Iron Age pit is most likely to be the fish bone also observed in the sample. The same could be the case for samples 140 and 145. None of these samples contained the range of plant remains (fruit seeds and stones) normally associated with cesspits (Grieg 1982, 50).

## What conditions create waterlogged preservation?

Waterlogged remains were observed in three of the postmedieval samples (samples 116, 118 and 191). Plant remains are preserved in this way "...when the water table has remained high enough to inhibit destruction by decaycausing organisms." or "...in certain deposits above the water-table if they are anoxic and highly organic, such as in the fills of pits lined with stone, dug into heavy clay, or sealed by overlying stratigraphy. (Jones ed. 2002, 12–13). This appears to be the case for the post-medieval features where the features had been dug to hold water even if the botanical evidence for standing water was scarce.

# Is there any evidence for changing farming practice from the Roman to the medieval period?

Table 13 displays the frequency with which the different types of cereals and possibly cultivated pulses were found in the samples across periods. The count is of number of samples in which cereal and pulse finds (including chaff) were observed.

It became clear that the types of cereals and pulses in the Iron Age, Romano-British and medieval samples were similar in type and quality of preservation. Wheat dominated the cereals in each period and the dominant wheat type was free-threshing type. The possibility of many of these being distorted spelt grains has already been mentioned here. Bread/club wheat is more likely in the medieval samples where these grains were better preserved. It is possible that there has been a lot of disturbance and backfill between layers and that the charred remains in the samples dated as Iron Age and Romano-British are actually medieval.

It is conventional to examine the seeds within charred cereal assemblages to see if they can be interpreted as seeds of arable weeds and give an indication of the type of soils being exploited to grow crops. Unfortunately none of these samples contained grains of one type so they cannot be assigned to any particular crop. Despite this there do appear to be more of seeds of ruderal and segetal seeds to those of scrub, grassland and damp ground. Seeds of damp ground plants tend to increase in frequency in the Romano-British and medieval samples.

For the Romano-British and medieval samples the most frequent seeds were those of vetch/tare/vetchling/pea. Unfortunately none of these were well-preserved enough to identify to genus or species so the habitat description would have to be broad as the species of these plants would inhabit

SCIENTIFIC NAME	COMMON NAME	IRON AGE	<b>ROMANO-BRITISH</b>	MEDIEVAL
Triticum cf. dicoccum	emmer	0	2	0
Triticum spelta L.	spelt	5	6	13
Triticum dicoccum/spelta	emmer/spelt	0	0	2
Triticum aestivum type	bread wheat type	10	12	30
Triticum spelta/aestivum	spelt/bread wheat type	2	1	0
Triticum sp.	wheat	9	10	22
Secale cereale L.	гуе	2	1	7
Triticum/Secale sp.	wheat/rye	1	0	2
Hordeum/Secale sp.	barley/rye	0	0	1
Hordeum sp.	barley	8	8	19
Hordeum/Secale/Triticum	barley/rye/wheat	0	0	0
Avena sp.	oat	7	8	24
Vicia faba L.	Celtic/horse bean	2	3	8
Pisum sativum L.	pea	3	4	7
Vicia faba/Pisum sativum	Celtic/horse bean/pea	1	1	3

Table 13 Cereal and pulse finds for each period.

waste, disturbed, cultivated ground and grassland. The next most frequent and abundantly occurring seeds for both periods were those of curled dock was the most frequently observed seed in the site as a whole. Curled dock prefers nutrient rich damp loams and heavy soils (Hanf 1983, 545).

The next most abundant Romano-British seeds were grasses and fat hen. The grass seeds were too poorly preserved to identify. Fat hen is often observed as weed of spring cereals and prefers loose, damp, nitrogenous loams and sandy soils (Hanf 1983, 202). For the medieval samples clover and corn marigold were next most frequent. The clover seeds could not be identified beyond genus but many species frequent dry pastures and wasteland (Hanf 1983, 353–56). Corn marigold has been described as a cornfield weed and associated with acidic conditions and sandy, light soils (Salisbury 1961, 37). Stinking mayweed was also frequent in both periods. This plant is an indicator of nutrient rich, waterlogged loams and clay soils (Hanf 1983, 235). Most of these seeds were found in Romano-British and medieval samples.

All of these plants were represented in Romano-British and medieval samples so do not seem to be indicating any change in general environmental conditions. In fact the habitats of many of the seeds seem to reflect the use of a variety of soil types, for example for the Romano-British samples seeds of chalkland plants such as cornflower and ox-tongue are in the same samples as seeds of plants preferring damp loam such as curled dock and fat hen.

The similarity between the assemblages seems to indicate that, as observed for the cereals, the plant remains in the Roman deposits may be intrusive medieval material. It is due to this that it would not be wise to make any conclusions about trends in arable farming based on the plant remains in these samples.

#### Is there any evidence for food plants other than cereals?

Finds of peas and Celtic/horse bean in the Iron Age, Romano-British and medieval samples are common (Green 1981; Jones 1981). Crop rotation took place in the medieval period and these pulses could be evidence of this (de Moulins 2006). The find of a charred grape seed in sample 5 (pit fill 1111) is also common for medieval samples (Greig 1982, 50). The finds of hazelnut shells and a kernel suggest the exploitation of wild or managed resources.

What can these plant remains tell us about feature function? It is more a case of what these samples are showing was not happening rather than what was. There is no evidence for crop storage, cess disposal or crafts in these samples. The assessment reports noted the presence of mammal, bird and fish bone and coal in many samples, so these could be accumulations of general waste entering the pits and ditches as backfill.

The charred assemblages do resemble the type of waste produced during the final, sieving stage of grain processing prior to storage or preparation for food, namely occasional awn fragments, non-basal glume bases, spikelet forks, small weed seeds the same size or smaller than the grain and prime grain. These are reminiscent of the waste observed to be produced at this stage (Hillman 1984, 10). This type of waste has been observed ethnographically to be used as fuel or tinder for peat or wood fires (Hillman 1981, 140) and is a likely cause of charring of the remains in these samples a possible evidence of the disposal of domestic waste. Another possibility is that they are floor sweepings from smoke blackened thatch because the types of seeds, cereals and pulses observed in these samples is similar to those observed in samples from the smoke blackened thatch of a late medieval house in Southern England (de Moulins 2006). However, the remains in these samples are mostly seeds. Grains and small fragments of chaff rather than the whole plants, seeds heads and inflorescences observed in samples from thatch.

# What can the plant remains in the post-medieval pond and well fills tell us about the contemporary environment?

Water flea eggs, ephippia (*Daphnia* sp.), were observed in small quantities in all three samples taken from these features. These are eggs of aquatic insects, which tend to be produced at times of environmental stress (Samaja-Korjonen 2003, 691). They could indicate that the pond and well features were starting to dry up or naturally fill up with sediment. The seeds preserved in both features included many from dry disturbed/cultivated habitats.

The most frequently occurring seeds for both of the pond fills were those of stinging nettle, knotgrass and buttercup type. These plants are common inhabitants of nutrient rich disturbed ground and grassland. Plants of aquatic and damp ground habitats were present, although less abundant. A number of seeds in waterlogged contexts is not always a true indication of the presence of many of one type of plant because one plant can produce thousands of seeds. Water-pepper seeds were more frequent in the primary fill than the later fill. This plant frequents damp places and shallow water (Clapham, Tutin and Warburg 1964, 243). A bulrush (Schoenoplectus sp.) seed in the primary fill also adds to the evidence for standing water being in this feature. Damp ground plants such as sedges and hairy buttercup (Ranunculus cf. sarduus) are also more common in the primary fill. The remaining seeds from both fills come from a range of habitats. Seeds of plants of cultivated, waste ground and grassland were frequent. No clear trend was visible for soil preferences and seeds from plants preferring a range of soils were present.

The well fill contained a lower diversity of plant taxa and many more ruderal and segetal plants. It also contained a small charred assemblage of eight cereal grains suggesting that this deposit was backfill. Seeds of blackberry (*Rubus fruticosus* sens. Lat.) and raspberry (*Rubus idaeus* L.) were observed in both features. These seeds are often difficult to differentiate but in this case there appeared to be a clear enough variation between them to suggest that two different species were present. It would be interesting to know if gardens or herb gardens were on the vicinity. This is because low numbers of seeds of vervain (*Verbena officinalis* L.) were observed in both features. This plant grows wild in rough, well-drained, calcareous soils (Stace 1997, 554) but also has medicinal values as a treatment for many ailments including fever, ulcers, neuralgia and rheumatism (Grieve 1994 edition, 832).

Both features contained evidence of plants of scrub and hedgerow. Sample 116 (primary pond fill 15232) contained a hawthorn leaf identical to those seen as uncharred remains in earlier deposits. This could mean that the uncharred plant remains have found their way into the earlier deposits from the post-medieval ones.

## **Metallurgical Residues**

#### **By Ivan Mack**

## Methodology

Approximately 15kg of material was available for classification based on external morphology, recorded by type and context in unpublished Table 1 available in the archive.

## Description

The majority of the assemblage comprised smelting slag (14681g); lumps of high density iron rich slag ranging in size from 20mm to 300mm, and in weight up to 1200g. This material is typical of slag at bloomery smelting sites ranging in date from the Iron Age up to the later medieval period. Some of these slags showed large charcoal impressions indicating this as the primary fuel used. Other general ironworking slags (1150g) of small size and indeterminate morphology were also identified, as well as a quantity of tap slag (812g); smelting slag with a flowed, ropey upper surface indicating that the slag had frozen during 'tapping' from the furnace. Two small plano-convex slag fragments (210g) were found. These are typically evidence for iron smithing as they form in the hearth from reactions between hammerscales, fuel and hearth lining. One fragment (from context 16108) has evidence of attachment to the hearth wall.

Non-diagnostic materials recorded included fuel ash slag (34g), cinder (3g), coal (186g) and 'Gromp' (172g), small irregular metallic lumps of iron, usually high in carbon, removed from the furnace and discarded with the slags. Two lumps of ore, one of magnetite (364g) and the other galena (316g), were found, neither having been roasted/utilised and two small fragments of an indeterminate black glassy slag (18g) more typical of post-industrial revolution blast furnace slags were also identified.

#### **Discussion and Conclusions**

The overall character of the slag assemblage is indicative of iron smelting activities. Almost 80% of the residues can be confidently associated with iron smelting on the basis of external morphology alone. There is no evidence of any other technology in this assemblage except the small planoconvex fragments from pit 15427 and layer 16108, which are more typical of iron smithing. It is more likely though that these are deceptive fragments of smelting slag, which have formed while attached to a hearth wall. The small quantities of unidentified general iron-working slag are probably smelting derived. The presence of large charcoal impressions in the smelting slag indicates that the primary fuel for smelting was charcoal.

This is a small assemblage, which in an urban or archaeologically dense setting should be regarded as background scatter from adjacent areas. In this case, if it derives from an earlier period it may well be associated with the evidence for the nearby enclosed rural farmstead of the late Iron Age/Roman period. It is unlikely that the slags examined derive from any smelting activities later than the 16th century, which would tend to produce predominantly glassy residues. Iron smelting could have occurred in the vicinity, but not the immediate area, of the site during any period from the Iron Age onwards, but the presence of slag in some of the earliest features may indicate an early date.

The assemblage has not been directly associated with ironworking features, structures, or artefacts and is probably present in secondary or tertiary deposits (slag is often re-used, as metalling for example, or post-packing).

By J.M. Bircher

## Metalwork

## Summary

Of the 21 copper alloy objects and 16 iron objects or groups of objects retrieved, nine copper alloy and four iron objects have been selected for publication based on their diagnostic and intrinsic interest. Most of the material was redeposited and domestic in nature. However, the following comments can be made. No late Roman material has been identified. The Roman brooch and hairpin, together with the melon bead suggest activity up to the 2nd century AD. The medieval and later material displays a reasonable standard of living. In particular, locked doors (no. 13) indicate valuables within.

## **Objects of Copper Alloy**

#### Roman

1 Incomplete hairpin of Cool's Group 5, Sub-group B (Cool 1990, 157, fig 4.11), dating from throughout the Roman period with a concentration in the 2nd century AD. The shaft is cast with clearly visible file marks. The terminal is topped by an ovoid knob and decorated with a band of incised pattern comprising three grooves above a zone of diagonal striations with spiral grooving below. Length 46 mm Area 2C 15751 SF565. Post-medieval context.

2 Nail with globular head and round-sectioned shaft. Roman (for type see Crummy 1983, 115) Length 43mm, diameter of head 10 mm Area 2A 15175 SF504. Post-medieval context.

### Medieval and later

**3** Mount. Rectangular plate of shallow D-shaped section, pierced twice for attachment to a leather strap or similar. Medieval 10 x 7 mm. Area 2C 15762 SF558 18th century context.

4 Spherical-headed pin. Incomplete and heavily encrusted with iron corrosion products. Medieval Length 23 mm,

diameter of head 6 mm. Area 2B 15374 SF529 Medieval context.

**5** Lace tag of Strong's type 2 (2004, 400) with the edges rolled in and no rivet hole. This example is sharply pointed, undecorated and with the black patina that Strong identifies as a common feature of this type. Now slightly bent. Late 16th century or later Length 25 mm Area 2B 15395 SF153 Post-medieval context.

**6** Book clasp. The narrow end has a rolled over hook forming part of the hinge and is decorated by two chevrons formed of three engraved parallel lines. The wider end has three decorative notches and two holes for attachment with iron rivets still *in situ*. The splayed sides have a bevelled edge and are decorated by three marginal grooves – the inner of which is a series of dashes rather than a solid line. The back plate is missing. 15th–16th century AD Length 43mm, maximum width 22mm Area 2C 15650 SF572. Unstratified.

7 Spatulate terminal of an incomplete sheet metal object, possibly part of a medieval book clasp or belt-fitting. 23 x 19 mm Area 2A 15145 SF516 Post-Medieval context.

8 Several fragments of a sheet metal vessel with a sheet metal handle or other component attached by three rivets (one now missing). Medieval. Largest fragment 50 x 45 mm. Area 2B 15492 SF541 Post-medieval context.

**9** Parts of a large vessel of thin sheet metal with a plain rim. One fragment includes a repair made from a folded rivet (Egan 1998, 176). Medieval. Largest piece 100 x 52 mm. Area 2C 15751 SF 596 Post-medieval context.

## **Objects of Iron**

## Roman

10 Head of an iron brooch, comprising at least two coils of the spring. Early Roman – no later than c70-80 AD. Overall maximum dimensions 26 x 20 x 10 mm. Area 2A 15222 Sample 116 Post-medieval context.

11 Shoe cleat with a flat oval plate and clenched arms. It is noteworthy that 8 hobnails were also recovered from this context (of a total of 16 across the site), possibly indicating part of a shoe sole rather than casual losses. A useful discussion of cleats excavated at Marshfield can be found in Blockley 1985, 186. Roman. Plate 20 x 13mm. Area 2B 15352 SF583 Roman context.

## Medieval

12 Arrowhead with triangular-shaped blade, no barbs and a relatively flat profile. The socket contains a single nail *in situ* for attachment to the arrow shaft. This is the most common form of arrowhead on urban and military sites from the 11th to 14th centuries and was probably shot from a long bow (Jessop 1997). Length 90 mm, maximum width 28mm medieval context

13 Looped and stapled hasp, with the hinge element missing. For use in conjunction with a mounted lock to

secure a box or door. For a similar and complete example from Winchester dated to the late 13th century, see Goodall 1990, 977, no 3499. Extant length 115mm Area 2F 16093 SF610. Medieval context.

# Glass

# By Dr Harriet Foster

## Introduction

The assessment report for this assemblage indicated that it comprises 114 fragments from a minimum of 47 vessels or windows of mainly early modern glass, although there are examples of Roman, medieval and post-medieval glasses (Wilmott 2003). This short discussion covers seven items from the assemblage deemed to be of interest to warrant a more detailed report.

## The Objects

Roman material

1 Looped (dolphin) handle, Context 15381; SF525.

Fragment forming the handle attached to the remains of a cylindrical neck and shoulder of bottle. Greenish colourless glass. 4th century AD.

## Medieval material

2 Window glass, Context 15763.

Five fragments. Medieval. Potash glass, devitrification to external surfaces.

## Post-medieval material

3 Pedestal beaker, Context 15716; SF574.

Three joining base pieces and two further body fragments. Green-tinted glass with some milky weathering deposits. Plain body.

Base diam. approx. 80 mm. Th. 1.5-3 mm

## 4 Square case bottle, Context 15418

Fragments forming the shoulder, neck and rim of bottle. Green-tinted glass, iridescent weathering. Late 16th–17th century

Th. 0.1-0.5mm

## 5 Cordial/Wine glass, Context 15601; SF571.

5 fragments, all joining from rim and body of drinking vessel. ?Lead glass. Late 17th-mid 18th century

## 6 Phial, Context 15291; SF509

1 fragment from the base of a cylindrical phial. Colourless glass with milky weathering. Remains of pontil scar on base. 18th century.

Diam. of base approx. 45mm

#### 7 Phial, Context 15118; SF508

Fragment from the base of a cylindrical phial. Greenish glass with milky weathering. Remains of pontil scar on base. Early 18th century.

## Discussion

The earliest vessel represented is of a cylindrical bottle with looped (or 'dolphin') handles. One looped or 'dolphin' handle is represented and these handles are characteristic of certain Roman glass vessels of the 1st to 4th centuries. This example comes from a late Roman cylindrical bottle (Isings 1957, form 100), a fairly common form between AD 275 and 375. The handles can differ slightly in form and this type was produced by applying the handle to the juncture of the lower neck and shoulder and bending it upwards and inwards to close the 'ring' of the handle and form the fold of the dolphin shaped beak at the top of the handle. Another example found nearby is from Frocester Court Roman villa (Price 1979, 44 no. 42).

Little can be said about the edge of a very small piece of fragmentary medieval window glass in fairly poor condition.

A Roman glass paste melon bead was recovered during the trial excavation project (Bircher in Young 2003, trench 9, context 912 SF8). The pale turquoise glossy surface is heavily abraded, almost entirely exposing the glass paste core. Beads of this type occur mainly in contexts dated 70–140 AD. Maximum diameter 19mm, height 14mm, weight 4g.

The remainder of the glass reported here is of postmedieval date. The pedestal beaker and square case bottle are both either late 16th or early 17th century in date and from forms common in this period. The pedestal beaker is a convex bodied beaker with an enclosed, tubular base ring and most likely an in-turned rim, although no fragments from the upper part of the vessel remain. It is from a pedestal beaker type that was often decorated with opticblown designs (e.g. ribs and bosses) or trails of glass, but what remains of this example suggests that it was plain. Pedestal beakers are the most common finds of drinking vessels on early post-medieval English sites and it has been suggested that they were used to contain beer (Willmott 2002: 46). This type is made of potash glass in the form with a less constricted pedestal foot (e.g. see Wilmott 2002: 46, Fig. 28b). The square case bottle is a common form in the late 16th and 17th centuries, the example represented here is towards the smaller end of the known range of sizes for this vessel type (its base measures approx. 60 x 60mm). The body form is square in cross-section, produced via mould blowing, and the extant neck and everted rim demonstrate the practice of finishing off this part of the vessel by hand. Case bottles were manufactured mainly in England, as well

as Germany and the Low Countries. This example is likely to be English as the neck indicates the bottle was probably sealed with a wooden bung. For a comparative, see Willmott (2002: 87–88, Fig. 112b).

The rim fragments are from a late 17th or early 18th century cordial or wine glass. Cordial glasses had similar bowl shapes to wine glasses, but tended to have a much smaller capacity. The small and very fragmentary nature of the rim means it is difficult to determine the bowl size of this vessel and is also hindering a more secure identification of its material being lead glass. For a discussion of the economic and social context of 18th century drinking vessels see Berg (2005: 117ff.).

The two examples of 18th century phials represented in the assemblage are likely to have come from the cylindrical type first produced in the latter part of the 17th century, which featured a pushed-in base and high kick, as seen on both examples here. Phials were quite common in England and were most probably used to contain perfumes, unguents or other medicinal liquids.

## Coins

### **By Mark Corney**

**By Peter Makey** 

A small collection of coins and tokens were retrieved during the excavations carried out over the Mail Marketing International site. These were assessed but not further reported.

## Summary

The coins span a lengthy period from Roman to Victorian (Table 13). Seven of the nine coins are of post-medieval date and include three 16th/17th century tokens (SF502, SF523 and SF563). One quartered medieval silver penny (SF552) was retrieved from a small medieval gully (15717). A coin of Constans (SF587, 4th century A.D.) was recovered from layer 15218 and a further possible Romano-British example from a post medieval buttress (15414).

# Flint

#### Introduction

A total of 67 struck pieces (weighing 425g) of prehistoric worked flint were recovered during the excavation. The

CONTEXT	SMALL FIND NUMBER	IDENTIFICATION	PERIOD
15000	SF523	ÆToken	?17th century
15172	SF502	Æ ?Token	?16th-17th century
15218	SF587	Æ4 Constans	4th century AD c. AD 346-348
15414	SF542	Æ3 ?Roman	?Roman
15513	SF527	Uncertain ? Token	Undated
15650	SF563	Æ ?Token	?16th –17th century
15681	SF552	Silver Penny (quartered)	11th–13th century
15752	SF594	Æ halfpenny	?George I or II
15752	SF595	Silver unit, possibly Victorian threepence	?18th – 19th century

Table 14 Preliminary identification of the coins/tokens.

assemblage, which included 19 intentionally retouched pieces, six utilised pieces and 42 fragments of debitage, appeared to come from two distinct phases, the majority belonging to the middle to later Neolithic period, c3500-2400 BC, the remainder are of early Bronze Age date. The retouched material comprised eight scrapers, one fabricator, two piercers and one leaf/oblique arrowhead. The scraper assemblage consisted of three unclassifiable (one fragmentary) types, two extended end forms and one end and side form. Although consisting of a variety of forms, all had been manufactured on relatively chunky supports. The fabricator, a relatively rare flint implement, was most likely used as a knapping tool. Together, implements such as fabricators, spurs and piercers are most abundant in areas of prehistoric, settlement and are often found on occupation sites.

Of the five cores retrieved, three from contexts 15056, 15145 and 15464 were unclassifiable, irregular multiplatformed flake cores. All of the flint appeared to be of local manufacture and the degree of consistency in the material suggested the local presence of a domestic prehistoric site.

The raw material appeared to be from a local till or gravel deposit, possibly from around the shores of the Bristol Channel. The reuse of cores, worked to exhaustion suggests raw material was at a premium. Despite the assemblage coming from a disparate collection of contexts, the residual material may all have been derived from the same source/ parent assemblage, as there is a degree of homogeneity in the material.

#### Micro-Wear

Four of the pieces show potential traces of micro-wear. A chunky flake from the primary fill of pit 15159 may have been used to work bone and a trimming flake from ditch 15437 for the cutting of meat, while a broken flake (SF643) from layer 16108 appeared to have been used in a cutting motion like a knife. A small micro-bladelet from layer 1207 showed slight traces of indeterminate micro-wear on its ventral surface

#### Discussion

The assemblage included two piercers (contexts 1114 & 1184), a possible spurred chunk (context 1114), a fabricator (layer 1219) and an arrowhead (SF562). Spurs, piercers and fabricators tend to be directly indicative of settlement.

The arrowhead (SF562) from posthole 15811 was unusual, being either a round-based leaf- shaped arrowhead or a slightly atypical oblique form. These two forms are found in distinctly different lithic industries. The leaf shaped arrowhead typically found in secondary Neolithic, Peterborough Ware associated assemblages, whereas the oblique form would be in association with Durrington Walls and Clacton sub-styles of Grooved Ware pottery. The arrowhead displays slight marginal abrasion and tip damage that does not appear to be use related. The piece has been burnt subsequent to manufacture. Overall traces of a remnant bulb and an un-retouched right hand side would tend to favour an oblique form.

#### Chronology

Chronologically the assemblage appears to be predominately of mid to later Neolithic date, with a smaller element of early Bronze Age/Beaker material. With the possible exceptions of a small micro- bladelet from layer 1207, a single crested bladelet (SF3) from layer 1122, a fine multi-crested blade (SF506) and a fragmented edge utilised bladelet, there appears to be no diagnostic Mesolithic or earlier pieces. It may be of note that both these pieces are of yellowish orange coloured flint. The pieces displaying a more distinct Neolithic character tend to be manufactured on flint with a yellowish, orange or brown hue.

The flakes were not particularly period diagnostic, although the core rejuvenation flake (SF517) was of a form more consistent with middle to later Neolithic date. Some small/micro blade scars present on a plunging core rejuvenation flake recovered from layer 1135 are characteristic of later Neolithic to early Bronze Age material. Some of the flakes such as the edge utilised flake fragment from layer 1122 would have been suited to the manufacture of later Neolithic chisel shaped arrowheads.

The fabricator (SF5) is of a form that has very few known firm associations, though similar, unstratified examples tend to occur in the vicinity of features that have produced Neolithic pottery of Peterborough Ware type.

The scrapers (context 1100 and SF4) are not easily datable, although they are of middle Neolithic to early Bronze Age character. The double-side and double-end scraper (SF4) from pit fill 1157 has parallels with an undated example from the Chew Valley Lake excavations (Simon in Rahtz, 1977).

The arrowhead was probably a Later Neolithic form and has many similarities to a fragmentary kite-shaped arrowhead from a medieval site of Moreton (Simon in Rahtz, 1977).

## Significance

Reworking of scrapers is unusual and may prove to be specific to assemblages from the Bristol area. The cutting down of scrapers may represent Beaker reworking of remnant lithics such as scraper SF559, which is of Beaker form. Platform preparation is not unusual, but different forms of preparation can be present in different flint assemblages. Elaborate platform preparation appears to be a feature of the Mail Marketing International group. The unusual arrowhead (SF562) may be a chance occurrence, but at present little is known of the flint assemblages from this region. The presence of a hammerstone and core from the fill of ditch 15466 (fill 15464), demonstrates that flint knapping was probably being conducted on site. The occurrence of a large number of piercers in the assemblage is usually indicative of a settlement in the immediate vicinity. Domestic occupation might also be indicated by the high incidence of use wear. It is possible that some of the undated features on the site may be of Neolithic or Bronze Age date.

# DISCUSSION AND OVERVIEW OF THE PROJECT

#### The Prehistoric Evidence

The earliest occupation at West Street dated to the mid to late Neolithic period, represented by flint objects recovered from later contexts in all areas, including a large number of piercers, indicative of a nearby settlement. A smaller collection of residual early Bronze Age/Beaker flints was also identified. The presence of a single sherd of coarse grog-tempered pottery in a small gully in area MMI 2B suggests there may have been a nearby Bronze Age enclosed settlement rather than a cemetery of funerary urns. The gully subsequently was truncated by a pair of opposing Iron Age ditches, part of a series of substantial enclosure/boundary ditches reflecting a wider pattern of small agricultural fields or enclosures. Analysis of the associated pottery dated this activity to the late Iron Age, whilst the domestic forms and evidence of usage demonstrated the assemblage was typical of a long-lived small rural agricultural settlement, the focus of which lay elsewhere. Associated ecofacts indicated a mixed arable and pastoral economy and the rare discovery south of the River Avon of a fragment of Droitwich saltware briquetage indicated this late Iron Age community participated in a wider trading network.

#### The Romano-British Evidence

There is no direct evidence for continuity of settlement at West Street into the Romano-British period, as the pottery assemblage and other finds recovered largely span the 2nd to 4th centuries. A few objects of 1st century date were retrieved from later contexts - a few sherds of late 1st century imports such as Gaulish Samian ware, a fragment of iron brooch dated no later than c70-80 AD and a Roman glass paste melon bead dated 70-140 AD, all of which could well represent curated items. The lack of a significant quantity of artefacts dating to the later 1st and early 2nd centuries suggests the area was possibly abandoned for a time, but this is contradicted by the spatial organisation of the Romano-British landscape as the complex of ditches opened appears to respect the Iron Age field system and in area MMI 2C redefines an earlier ditch. This points to some continuity of an established and stable pattern of local land division. The lack of earlier Romano-British artefacts may be an accident of survival; the fields may be on the periphery of the settlement, or perhaps reflects that initially the settlement was not conspicuously 'Romanized' after the Conquest and continued using native methods and traditions.

Several earthcut features were located within the Romano-British fields, including pits, postholes and beamslots, such as those in area MMI 2C, where part of a fenceline and small rectangular structure were erected in the later 3rd century. Elsewhere over the site, associated postholes and timber slots indicated other earthfast structures, although no coherent patterns were identified.

The majority of the Romano-British pottery dated to the 2nd century with a smaller proportion continuing into the 3rd and 4th centuries. The type and quality of the pottery and other artefacts, including a few high status and personal items, such as an intaglio finger ring (SF583) and 4th century glass bottle with dolphin handles (SF525), indicates a modest cosmopolitan community exploiting a mixed agricultural economy utilising the full range of domesticates, but more particularly cattle, an increasingly common trend through time in Roman Somerset (Leach 2001), as well as cereals, particularly bread wheat types and barley, and pulses.

The overall picture is of a rural agricultural settlement encompassing the wider West Street area, with a series of large fields and enclosures extending alongside the reputed minor Roman road atop the ridge. The as yet ill-defined road, believed to extend from Chew Valley to Almondsbury, linked the settlement at Bedminster to a well-established network of Roman roads servicing North Somerset, including Roman road 546 (Margary 1973) connecting the villa at Bedminster Down to Farrington Gurney and the Fosse Way beyond. Indeed, given its proximity, in its later years the settlement at West Street may have numbered amongst the smaller agricultural units that contributed to the Bedminster Down villa estate. Prior to this, the resourcerich Bristol/North Somerset area is believed to have been under Imperial administration well into the 3rd century (Higgins 2005). Roman road 546 intersected the main road leading north-eastwards from the Mendip lead and silver mines and over the Avon (ibid, route 540), where it joined the significant regional highway (ibid, route 54) between Roman Bath and the military and subsequent civilian port established at Sea Mills.

The focus of the Roman settlement at Bedminster is yet to be identified. Subsequent archaeological investigations in the decade since the Mail Marketing International project was undertaken have added little to the corpus of evidence for West Street. Excavations on the adjacent site, Nos. 45-53 (Young and Young this volume) revealed the field system probably extended north-eastwards, but again no associated structures were identified, whilst in neighbouring Cromwell Street Romano-British finds were entirely residual in later contexts (BHER 22258). Similarly, sites investigated to the north of the former Mail Marketing International premises, such as those at Nos 26-32 and 36-56 West Street, and on British Road and Westbourne Grove yielded no evidence for occupation predating the post-medieval and modern development of Bedminster. Likewise, several sites investigated to the southwest on or near West Street have failed to define any focus of the Romano-British settlement, suggested from placename evidence at least to have been located around Chessel Street. A deed of AD 1350 refers to a field named as Le Chastele, one of a number of variants of a common historic fieldname denoting stony ground where the remains of Romano-British buildings have been identified. It has been suggested that a point about halfway along modern Chessel Street would lie on a direct line between Bedminster Down Roman villa and the Roman river crossing near the Floating Harbour in central Bristol, continuing the line of the postulated Roman road crossing the Down (BHER 10903). Thus far, archaeological investigations in the near vicinity of the junction with Chessel Street, at Nos 140-146

and at No 166 West Street (BHERs 24878 and 25202), have again found no evidence of Romano-British activity.

## The Medieval Evidence

It is not certain whether West Street was continuously occupied into the post-Roman period. Certainly, an isolated relict soil at Airpoint Block C pointed to a period of diminished activity towards the end of the Romano-British period and a similar hiatus was suggested by a thick buried soil horizon recorded during trial excavations to the northeast (Yorkston 1998) that yielded pottery dating to the 11th century. Further sherds of Saxo-Norman pottery were retrieved during trial excavations on nearby Cromwell Street in 2005 (BHER 22258), whilst in 1988 earthcut features dated to the late 11th/early 12th centuries were located close to the junction of Sheene Road and West Street (BHER 9637). The apparent lengthy gap between the artefact dates may be the result of the abandonment of West Street for a time, or may simply reflect the tradition in Somerset and in the wider South West region of an aceramic culture in the early medieval period, particularly before the 10th century when local (e.g. Ilchester Type A and Taunton Type 41) and regional (Cheddar E) pottery types reappear in the archaeological record. As such, it is possible that some undated features recorded over the Mail Marketing International premises may represent activity during this period. At best, it would appear that West Street was on the periphery of early medieval settlement. Domesday references reveal that Bedminster was an important secular and monastic settlement prior to the Norman Conquest in AD 1066 (Moore 1982), while the placename itself is clearly Saxon in origin, referring to the existence of a pre-Conquest minster within the parish, possibly on the site of the former St. John the Baptist Church (Burchill 2003; Corcos 2010).

It is probable that the street names; 'West', 'East' and 'North' derived from three open fields arranged around a green or marketplace that formed the heart of the medieval settlement. Indeed, throughout the 12th century, West Street represented the main thoroughfare from Bedminster to Bishopsworth and thereafter to Bridgewater and Taunton (La Trobe-Bateman 1999). Despite this, evidence for medieval settlement on West Street from the 12th century is somewhat scant. The excavations on the Mail Marketing International premises recorded activity spanning the 12th to 15th centuries overall, but this was largely confined to extensive pit-cutting activity within successive fields or enclosures established over the period. Possible tenement boundaries were identified at VSH and Airpoint Block C and earthfast structures were variously indicated by beamslots and postholes, however no medieval buildings were identified. The dispersal of the pits over the excavation areas and through time suggests the Mail Marketing International premises largely remained open ground for much of the medieval period. It would appear that West Street remained on the periphery of the medieval village/ town and that development along its length was piecemeal in character. This is supported by subsequent archaeological investigations elsewhere on West Street, the results of

which suggest some plots were developed, whilst others were left open. Excavations in 2011 at Nos 202-206 West Street uncovered the remains of a substantial masonry and timber structure dating to the 14th century (BHER 25015), whereas investigations at Nos 140-146 and 166 (BHERs 24878 and 25202) revealed only residual medieval finds. Trial excavations at Nos 126-132 (BHER 21971) located possible tenement boundaries, but no associated structures or deposits, whilst works at No 113 and Nos 115-119 (BHERs 24792 and 24580) identified only post-medieval remains. Overall, the picture is one of discontinuous medieval occupation along West Street, ably illustrated by a late 18th century plan of Bedminster (Etheridge 2003), on which the layout of the medieval settlement is preserved in the post-medieval streetplan as a series of narrow tenements arranged along North and East Streets, as well as some to the southwest, further along West Street. Furthermore, the modern British Road, formerly known as Back Lane, may have defined the rear boundary of a group of medieval burgage plots on the northern frontage of West Street (BHER 21779). Unfortunately, investigations at this location during the redevelopment of the British School (BHERs 20324 and 21837) revealed potential earlier archaeological deposits had been truncated during modern development, a situation repeated at other locations along West Street.

The economy of the medieval settlement was elucidated from the contents of several pits opened on the Mail Marketing International premises, particularly those in area MMI 2B, where many were used for rubbish disposal. Alongside the expected quantities of utilitarian pottery and animal bone from the larger domesticates (cow, pig and to a lesser extent sheep), the food waste illustrated that chicken and fish, including marine species such as cod, haddock and sea urchin most likely procured from the Severn Estuary, were exploited. The articulated remains of an adult draught horse, probably part of a team, were discovered in a pit in area MMI 2A. The carcass had been skinned, but not otherwise utilised, whilst a second articulated skeleton and several loose bone and tooth finds from contemporary deposits indicated that the processing of carcasses was a common activity. Other pits yielded a complete mandible from an immature fallow deer and a worked red deer antler tine (SF540) suggesting deer were culled during the period. The remains of the draught horse and the worked antler tine fashioned into a clod breaker or draw hoe for seed drills attested to the mixed agricultural base of the medieval economy. The main crops cultivated were bread and/or club wheats and oats, and to a lesser extent barley and Celtic beans. In combination, the evidence at West Street indicates marginal settlement related activity located close to areas of arable cultivation and outside the focal area of a rural settlement that enjoyed a mixed economy utilising a wide range of locally and regionally available resources.

## The Post-medieval Evidence

West Street appears to have remained largely undeveloped on the periphery of post-medieval settlement in Bedminster during the 16th and 17th centuries. The agricultural usage continued on the Mail Marketing International premises; in area MMI 2A, a deep pond with paved access for livestock on one side had been established and a stone-lined well or cistern sunk in area MMI 2F. Elsewhere, miscellaneous pits, including a complex of intercutting features in area MMI 2C, were utilised and a thick cultivation soil accumulated at Airpoint Block C. This sparse settlement evidence is concordant with two historic documents of the time that mention West Street; the first dated 1589 records at least one house and garden on West Street, close to the Mail Marketing International premises, and the second refers to *all that messuage* in West Street, with adjoining garden and fields west of *the brook*, known as either the Malago or Bedminster Brook (Etheridge 2003).

The 18th century saw the first buildings erected on the Mail Marketing International premises. In area MMI 2A, two adjacent masonry structures probably agricultural buildings were constructed, one founded in the top of the now-infilled pond, whilst an animal house with rammed floor and integral brick-lined drainage channel was situated in area MMI 2C. The remnant of a probable domestic building set back from the frontage was sited between these, in area MMI 2B. This last structure was modified in the late 18th century and a second building erected alongside. Further development was recorded at Airpoint Block C, where remnants of another 18th century masonry building floored with sandstone setts and compacted mortar had been erected on the West Street frontage.

The pit-cutting activity that defined much of the medieval and earlier post-medieval periods had ceased by this time, save for the construction of two clay-lined limeslaking pits on the frontage in area MMI 2B that most likely provided the lime for the mortar used in the construction of the various masonry buildings. The erection of these structures and concomitant cessation of extensive pit-cutting over the areas pointed to a distinct move from marginal activity on West Street towards more formalised occupation, involving the establishment of a new farmstead containing both domestic and agricultural buildings and once again based upon a mixed arable and livestock economy.

#### The Modern Evidence

The changing character of Bedminster from rural to urban became increasingly evident in the early modern period. On the Mail Marketing International premises, the postmedieval farmstead appears to have been abandoned some time during the early decades of the 19th century, after which much of the site was occupied by a series of buildings and tenements set out along the West Street frontage and detailed in historic documentary sources. This essentially urban development is likely to have coincided with the expansion of industry and the railway into the area and the subsuming of Bedminster as a suburb of the city of Bristol. In area MMI 2A, three buildings were constructed, one on the frontage, and a second was extended up to the frontage later in the century. The Lamb Inn Public House and ancillary buildings established on the adjacent area (MMI 2B) were demolished in the 1960s and replaced with temporary structures during

the redevelopment for Mail Marketing International. A terraced rank of tenement buildings was laid out in area MMI 2C, each the mirror of its neighbour. Again, these remained in use, some with significant modification, until the 1960s redevelopment. Similar tenements on VSH and area MMI 2F were also demolished. Only Airpoint Block C appears undeveloped in the 19th century; the post-medieval building having been destroyed by structures associated with the 20th century garage premises until recently operating at this location.

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# Shirehampton Remount Depot By Pete Insole and Nick Nourse

# INTRODUCTION

In 2012, research at Bristol Record Office (BRO) revealed an unexpected find within one of the Building Plan folios. Instead of the usual architects' drawings, a large plan was seen to contain groups of uniformly spaced, oblong-shaped buildings interspersed with roads and trackways. By chance a previously unrecorded plan of the Shirehampton Remount Depot, and the best evidence for this nationally important World War 1 facility since its dismantling in 1919, had been discovered ( BRO BP Vol64a f56).

The military depot had occupied an area of some 46.2 hectares (114 acres) extending from Station Road, near The Lamplighters in the east of Shirehampton to beyond West Town Lane near the western edge of the parish, but remarkably little was known of the depot. Except for anecdotal accounts of gardeners having found dozens of horseshoes, no remains of the stables, shoeing sheds or huts for personnel, totalling over 100 buildings, have survived. Official records were of little help in elucidating the history of the site. Furthermore, a surviving war diary for the depot held by the National Archives comprising of a single sheet of paper contained little of interest (WO 95/5466), in contrast to reams of material from the equally important Romsey Remount Depot war diary (*Romsey Remount Depot* [War Diary]; and *War Department: Drawings and Photographs*).

The discovery of the plan in Bristol Record Office (BRO), reproduced in Figure 2, led to Myers-Insole Local

Learning CIC (MILL) securing an 'All Our Stories Heritage Lottery Fund (HLF)' grant to deliver a community learning project to research the Remount Depot to develop a shared understanding with local residents of the importance played by Avonmouth and Shirehampton during the war effort of the First World War. In addition to further documentary research supported by the University of Bristol, with funding from the Arts and Humanities Research Council's (AHRC) Connected Communities programme, Community Events, to collect local memories of the remount depot, geophysical survey was also undertaken to test the potential for archaeological survival, since traditional archaeological methods were impractical given the built up nature of the area. Another of the project's aims was to enhance the information on the Bristol Historic Environment Record, the City Council's database of all archaeological and historic sites, ahead of the WWI centenary beginning in 2014.

## HISTORIC BACKGROUND

Shirehampton is a residential area on the western outskirts of Bristol. It originated as a village in the medieval period and was its own small parish surrounded by the larger Henbury and Westbury-on-Trym parishes. The village has a close connection to the nearby Kingsweston Estate and investment by the owners of Kings Weston, the Napier Miles family, in the late 19th and early 20th century has shaped the suburb we see today. Phillip Napier Miles paid for the public hall



Fig. 1 Location plan. Shirehampton Remount Depot indicated in red over modern Ordnance Survey plan of Shirehampton and Avonmouth. © Crown Copyright and database rights 2016. Ordnance Survey 100023406.



Fig. 2 Engineer's Plan of Remount Depot, September 1914 with amendments dated 1915, BRO BP Vol 64a, f56 (courtesy of BRO).

on Station Road, Shirehampton and other investments led to the development of shops and houses in the area, most notably Bristol's first Garden Suburb at Passage Leaze built before World War I.

Shirehampton also has a very strong connection to its neighbour at Avonmouth, a centre that also benefitted from Napier Miles' influence. Avonmouth is the younger settlement, recently celebrating its 150<sup>th</sup> anniversary. Its origins lie in the creation of new dock facilities in the 1860s that sought to maintain the importance of Bristol's shipping trade and to counter the tidal problems faced by the city docks as the size of ships increased.

It was the second phase of docks expansion at Avonmouth immediately prior to 1914 that highlighted the importance of the area for the military effort during the War. The King Edward Dock, opened by the King on his Royal Yacht (Victoria and Albert) in July 1908, provided Avonmouth with a large, modern deep water dock. At the same time, Napier Miles investment had enabled the construction of new shops, housing and hotels in the 'village'.

Shortly after the outbreak of war in August 1914, Lord Kitchener, Minister for Munitions and principal leader of

the war effort, visited Avonmouth, recognised its strategic importance and immediately declared it a military district with new, state-of-the-art dock facilities that included one of the country's biggest dockside cranes, good rail links to the industries in Bristol and the south coast ports and many acres of surrounding farmland.

During the First World War maintaining a good supply of horses and mules for military use was essential. In addition to the horses used for cavalry regiments, hundreds of thousands of animals were required to help with moving men and equipment. Learning from the poor experience of an inadequate supply of horses during the 1881 Natal war and the later Boer Wars, within the first SSmonths of the outbreak of war several remount depots were established across the country—one each at Shirehampton, Romsey and Lathom Park, Ormskirk—as part of the Army Service Corp to ensure the steady supply of good quality horses and mules. All horses acquired for military service had to spend two weeks at a remount depot to make sure they were fit, healthy and had undergone basic training for duties at the front. In August 1914 the British Army held 25,000 horses trained and in service. But the first fighting force sent to France in 1914, the British Expeditionary Force, needed 165,000 horses for just the first three months of the War. The task of acquiring the extra numbers was achieved in just twelve days: 25,000 horses were called from the Army's reserve, and a further 115,000 were 'impressed'—paid for but taken by the Army—from farms and businesses across the country.

But even this was not enough: to continue the fight in France and Belgium, Kitchener's New Armies needed another 245,000 horses. Having taken so many animals from British farms, the only solution was to buy horses from abroad. By the end of the War in 1918, the War Office had bought over half a million horses and mules from Canada, the United States, Spain and South America, and had spent £67.5 million (over £2.5 billion today) on buying, transporting and feeding the army's animals (HMSO, 1922, .396, 861).

The first new four-legged recruits were purchased in Canada in October 1914, placed on ships and brought to Britain. The Shirehampton Remount Depot was built especially for these new horses and mules.

Many of the new arrivals at the Shirehampton Remount Depot also needed new horse shoes, and the broncos wild horses unused to saddles and harnesses—had to be 'broken' and trained. The Depot was set out so that 100 horses made a Troop, and five Troops made a Squadron. Each Squadron had a blacksmith's forge and a shoeing shed, and the animals were fed from forage (feed) barns. Once Shirehampton's horses had been declared fit by the Army Veterinary surgeons, they were sent to 'conditioning units' where they were further trained to join the Army as military horses.

When the Shirehampton Remount Depot opened in October 1914 it was staffed by officers from the Army Remount Service, but the men under their command were civilians. The non-military manpower was provided by the Legion of Frontiersmen, a volunteer paramilitary unit that specialised in recruiting men who could ride horses and shoot straight. The Legion wore their own uniform of polished leather riding boots, breeches, blue tunics and brown Stetson hats like today's Canadian Mounties, and they were the main workforce for the first six months of the War (WO 95/5466; and Pocock, 2004, 41). In February 1915 the Depot was made into a regular military camp and the civilian Legion men were replaced by regulars from the Army Remount Service. The depot was also staffed by men and women from the Forage Corps who managed the animal's feed, and WAACS—Women's Auxiliary Army Corps—who worked as cooks, housekeepers, and office clerks at the camp (*Evening Post*, 1976). Blacksmiths were also often local people, as indicated by a marriage certificate shared with the project in 2013.

## THE EVIDENCE

One of the biggest problems with research into the Shirehampton Remount Depot was that few official records about the site were kept. However, a supplementary source was found, a 1919 newspaper article written by the Shirehampton commandant, Colonel Carter, which reads as the second half of the official War Diary (see *Western Daily Press*, 1919).

The plan discovered at the record office was the first good primary source of the scale of the operation at Shirehampton in 1914. It is an engineer's drawing of the Remount Depot drawn up in September of that year with amendments dated 1915, for submission to the Bristol Corporation's Sanitary Department for approval of the proposed site drainage. It is possible to match the 1914 plan with the modern Ordnance Survey and for the first time begin to define the extent of the depot and its features.

The plan shows the site divided into 35 paddocks stretched across 46.2 hectares (114 acres) to the south of Shirehampton from Station Road in the east to the area of West Town Lane on the outskirts of Avonmouth. Each paddock was intended to accommodate 100 horses or mules, a total of 3,500 animals. However, by the end of the war it is believed that the camp had almost doubled in size, a newspaper report from 1919 stating that at one time there were 7,244 animals being held at Shirehampton (*Western Daily Press*, 1919). There were two long stable blocks for each paddock and the camp also had a paddock and separate veterinary stables to accommodate up to 200 sick horses.

The first significant new piece of first-hand, personal evidence presented to the project was a collection of letters written by a private stationed at Shirehampton between September and November 1916. The collection of 10 letters had been written by Charlie Day and addressed to his home farm in Wiltshire. They had been kept by the family along with other letters sent from the Front and were shared by Charlie's great nephew, Roger.

The letters provide an insight into camp life that we did not have before. For instance, we know that Charlie was in C Squadron (interestingly he refers to it as "C Company") and that they were responsible for mules rather than horses.



Fig. 3 Extract from a marriage certificate dated 5th August 1916 recording the marriage of a 'Shoeing Smith' with the '15th Hussars' (cavalry regiment) living at 12 Napier Square, Avonmouth.



Fig. 4 Photograph of 'G' Squadron at the Remount Depot, June 1915 (photo courtesy David Martyn).

One letter in particular that Charlie sent to his 12-year-old brother describes some of his general duties and helps us to understand how Avonmouth and Shirehampton operated in 1916. In the letter Charlie describes going down to the docks in Avonmouth to help with the unloading of animals from the ships. He describes that there could be as many as 1000 horses divided over three decks on a single ship. It is clear from the letter that not all these animals were coming to Shirehampton, many of them were loaded straight on to trains to be transported to other depots.

## **COMMUNITY EVIDENCE**

Some of this evidence was presented at two community events, one in Shirehampton the other in Avonmouth, where members of the community were invited to examine the existing evidence for the remount depot and to share with us any information they might have. At the Shirehampton event in particular more images of the depot were collected then had previously been available, as well as horse and mule shoes that people had found in their gardens.

The fate of the remount depot after 1918 also began to become clear through an interview with a 98-year-old resident whose earliest memories were of living in an old remount hut that was used for temporary housing from 1918 until 1926. In support of this testimony there are three drawings of the remount depot by Samuel Loxton from 1919 and 1920 (Loxton 1919/20). Two of these depict parts of the Veterinary Hospital the third depicts a series of huts and is titled "Temporary houses, Barrow Hill" ( Cover illustration this volume). On the reverse is written in pencil "70 huts to 140 houses". We now know that as part of the Bristol Corporation's response to the 1919 Housing Act and Lloyd George's appeal for "Homes fit for heroes", 70 of the huts at the remount depot were repurposed for "temporary accommodation" as a means of helping to address the housing crisis and slum clearances taking place at the time. By the end of the 1920s all the temporary houses had been replaced by the inter-war brick built semi-detached properties that can be seen today lining the Portway and roads like Grove Leaze, or the distinctive terrace at Barrow Hill Crescent.



Fig .5 One of the horse shoes found in Shirehampton and brought to the community event at the Shirehampton Public Hall in 2013.



Fig. 6 This Army Remount Service embroidery was brought along to the community event at Shirehampton Public Hall in 1913 by Beverley Duggan. It was made during the First World War by her father, Sgt Duggan, while he was staying at the Kings Weston House Auxillary Hospital.

The temporary house/army hut was described in an interview as always cold in winter despite their electric heater. These huts were being used for housing at the same time as the estates of Hillfieds, Sea Mills and Knowle Park were being built, but whereas all the permanent houses on these estates had gas lighting, the temporary huts at Shirehampton had electric lights.

## THE GEOPHYSICAL EVIDENCE

The final aspect of the project was investigating how much archaeological evidence beyond finds of horse shoes might survive beneath the ground. Often the remains of hastily constructed army camps from the First World War can be ephemeral, although one report from a resident at the Shirehampton event about discovering a concrete base beneath his garden, that coincides with the location of one of the huts marked on the 1914 plan, suggested that there was a potential for buried physical remains to survive.

As part of the Historic England 'Heritage Schools' initiative that encourages schools to explore local heritage, an opportunity to investigate this archaeological potential became available. Avonmouth Primary School is located at the far western end of the site of the remount depot and an open area within the school grounds was the site of some of the structures associated with the Veterinary Hospital. In the summer of 2013 school children undertook a resistance survey of the area with Archeoscan. The survey of a small area identified some high resistance anomalies that are consistent with the buried remains of structural foundations.



Fig. 7 1920s aerial view showing the Shirehampton council estate under construction amongst the last of the huts of the remount depot. A former stable block is visible near the bottom of the image and a scatter of former army huts towards the top right. The view is looking from the north west along the line of Shirehampton High Street, Albert Clarke Collection courtesy of Bristol Record Office, BRO 44819/3/190.



Fig. 8 Children from Avonmouth Primary School undertaking a geophysical survey with Tony Roberts of Archeoscan on the site of the Remount Depot Veterinary Hospital.



Fig. 9 Results of the Geophysical survey showing areas of high resistance in white that correspond with the location of remount depot structures.

When comparing these results to the 1914 plan of the remount depot it is likely that the geophysical anomaly corresponds to the location of the 'Dispensary' building within the hospital.

## CONCLUSION

Since the discovery of the plan of the remount depot in 2012, through working with the community it has been possible to develop a better understanding of the history of Shirehampton during the First World War. The project was able to map the extent of the remount depot in 1914 and establish that where there has not been later building archaeological evidence of the camp structures are likely to survive.

Through the letters presented to the 'All Our Stories' project, some of the day-to-day experiences at the depot have been revealed. It has also been possible to record the fate of the structures at the camp and what it was like to live in these 'temporary' houses in the early 1920s.

Despite the huge amounts written about the 1914– 1918 war, because of the general chaos of life at the time and the extremes of the period that people wanted to forget, some aspects of the conflict and its aftermath have been lost, particularly as this event is no longer in living memory. Hopefully the 'All Our Stories Avonmouth and Shirehampton World War I' project has developed a wider appreciation of the importance of this corner of Bristol.

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# ARCHAEOLOGICAL EXCAVATIONS AT 45–53 WEST STREET, BEDMINSTER, BRISTOL, 2005 By DONNA YOUNG & ANDREW YOUNG

With contributions by Elaine Morris, Jane Timby, Alejandra Gutiérrez, Lorrain Higbee, Malin Holst, Sarah Newns and Kate Griffiths

# SUMMARY

A staged programme of archaeological investigations culminating in area excavation was undertaken during 2005 prior to residential development at 45-53 West Street, Bedminster in Bristol. Four periods of structural activity ranging in date from the prehistoric period through to the 21st century provided significant new information on the origins and development of settlement in this part of Bedminster. The 2nd-4th centuries AD date for the Romano-British agricultural settlement demonstrated there was no direct continuity between this and the preceding phase of late Iron Age occupation. Thereafter, activity again diminished until the medieval period, when an extensive soil accumulated during the 12th and 13th centuries indicating the area was once more being used for agriculture. Postmedieval development commenced during the 18th century when much of the site was occupied by the former Bedminster Poorhouse (Etheridge 2005). Successive modern residential and industrial developments followed during the 19th and 20th centuries. These included the construction and operation of a limekiln in the 19th century and subsequent erection of a brewery and associated chemical works later that same century. The chemical works operated until the 1960s when some buildings were demolished and the remainder converted for use initially as warehousing and finally as garages and workshops.

## **BACKGROUND TO THE EXCAVATION**

A brief summary of the historical background for West Street and the wider Bedminster area is included in the report on the excavations at the neighbouring Mail Marketing International premises (Young and Young this volume) and is not repeated here. For further detail, please see also Burchill 2003, Etheridge 2005 and Corcos 2010.

This report concerns the results of a staged programme of archaeological investigations in 2005 on a small plot of land lying at c 23.0m above ordnance datum (aOD) on the southern side of West Street, at nos. 45–53, and centred on O.S. Nat. Grid ST 5823 7125 (*Fig. 1*). The site-specific geology comprises Mercia Mudstones with weathered surface exposures of red-brown and grey-green clays (Mojabi 2002).

The 2005 works encompassed standing building recording, trial excavation and area excavation with

subsequent watching brief carried out immediately in advance of residential development on the site by Linden Homes Western Limited. A desk-based assessment (Burchill 2003) and trial excavation restricted to the former garage forecourt on the West Street frontage (BaRAS 2004) had been undertaken prior to the 2005 project. The 2004 trial excavation revealed the ground level on the frontage had been reduced to the underlying geology effectively destroying any potentially significant archaeological deposits. The 2005 trial excavation was specifically designed to target those areas not previously evaluated, particularly given the discovery of extensive and significant evidence of multiperiod archaeological activity during recent excavations on the adjacent former Mail Marketing International site (Young 2003 and Young and Young this volume).

The 2005 trial excavation confirmed the standing buildings originally were erected as part of the Albert Chemical Works established in 1878 (Etheridge 2005) and had undergone two main phases of repair and remodelling, firstly as warehousing during the period 1950–1966 and latterly as garages and workshops post-1970. The buildings in the northeast of the site had been erected over a 19th century limekiln first mapped by Ashmead in 1855 (Etheridge *ibid*). Elsewhere within the development footprint, a series of Romano-British ditches and gullies pointed to agricultural settlement during the 3rd and 4th centuries AD, whilst a small collection of residual pottery sherds indicated unspecified medieval activity in the vicinity.

In view of the importance of these features and their probable association with the multi-period archaeological activity recorded on the adjacent Mail Marketing International site, an area excavation encompassing some 800 square metres was undertaken over the rear of the development footprint during November and December 2005 (*Figs. 1 and 2*).

# THE EXCAVATION

## Period I: Prehistoric (Late Iron Age)

Prehistoric activity was limited to a pair of intercutting gullies (F703 and F705, Fig. 2) that cut isolated remnant soil 711 in the east of the area. Gully F703 yielded several conjoining sherds from a late Iron Age jar (SF12, Fig 4.1) whilst further residual sherds of similar date (Fig. 4.2) and a few flints were scattered over the area.


Fig.1 Location of the current site (in black) and neighbouring Mail Marketing International excavation areas (in grey).

### Period II: Romano-British (later 2nd-early 4th centuries)

There was no direct evidence of continuous occupation from the late Iron Age, but the perpendicular alignment of the Romano-British ditches, apparently respecting the earlier gullies, suggested some continuity in the organisation of the landscape from the prehistoric period.

Four phases of Romano-British activity were evident; the accumulation of an extensive soil layer (579) sealing the prehistoric features represented an initial phase of low intensity activity. The soil subsequently was truncated by two parallel enclosure or boundary ditches (F800 and F801, Figs. 2, 3.2, 3.7, 3.8 and Plate 1) opened in the centre and west of the site during the late 2nd or early 3rd centuries. Some spatial reorganisation of the landscape was evident later in the 3rd century, by which time ditches F800 and F801 had silted up. The central boundary line was redefined with the cutting of ditch F802, partly truncating the original ditch (F800, Figs. 2, 3.7, 3.8 and Plate 1), whereas the western boundary was abandoned and ditch F801 left to become entirely infilled. A possible earthfast timber structure partly defined by two intercutting slots or gullies (F554, and F803, Fig. 3.5) was sited close to the position of the former boundary ditch. Both ditch and structure had fallen out of use by the early 4th century, when an accumulation of soil over much of the site (529) suggested it had reverted to agricultural use, probably as part of a large field. A cluster of four pits (F556, F607, F671 and F676, Figs. 3.3, 3.6 and 3.7) located in the east of the site was possibly used for rubbish disposal away from the focus of settlement. Mineralised plant and insect remains indicated the presence of human faecal material in pit F556 suggesting it had been used as a latrine.



Plate 1 Intercutting Romano-British ditches F800 and F802 viewed from the north, scales  $2m \times 1m \times 1m$ .

### Period III: Medieval (12th-16th centuries)

Evidence for medieval activity was restricted to the accumulation of an extensive soil (559) over the southern two-thirds of the site and to the truncated remnants of two





Fig. 2 The site as excavated.

71

10m

5



Plate 2 Mid-19th century limekiln F807 with compacted work surface F721 to the front sealed with lime residue, viewed from the west.

possible pits (F694 and F528, Fig. 2) dating to the 12th/13th centuries in the extreme west.

### Period IV: Post-medieval (18th century)

A small collection of 18th century artefacts was recovered from made ground (581) sealing the medieval soil, whilst a stone-lined cesspit (F575) yielded a significant pottery assemblage dating to the mid-18th century (Figs. 6–8). Further similar sherds were also retrieved from the waterlogged clay fills of a perpendicular rectilinear trench of indeterminate function (F574) sited nearby (Fig. 2).

### Period V: Modern (19th – 21st centuries)

Extensive modern activity comprising four phases spanning the late 18th/early 19th to 21st centuries was recorded over the site.

The site was more intensively occupied during the late post-medieval/early modern transition (late 18th and early 19th centuries) when a mortared sandstone building with cellar (F806, Figs. 2, and 3.1) was erected in the extreme south. Very little of the building superstructure survived save for an isolated masonry remnant (F706) incorporated in a later wall that had been founded within the infilled cellar. Parish plans of Bedminster dated to c1786 and to 1827 and 1831 (Etheridge 2005, figs. 4-6) suggested the cellar and associated building adjoined the rear of the 18th century Bedminster Poorhouse formerly situated on the West Street frontage. Neither the parish plans, nor the later (1841) tithe plan (ibid, fig.7), however, revealed evidence of a contemporary structure represented by the disturbed remnants of a second sandstone masonry wall (F586) constructed to the northeast. The wall lay on the same orientation as the cellar and was sealed with waste quicklime from a limekiln established during the subsequent phase of activity. Several cut features also dating to the late 18th and early 19th centuries were scattered over the site. These included two parallel trenches (F570 and F566) and a series of pits of indeterminate function, some



Plate 3 Overview of the excavation area showing the extant modern masonry structures viewed from the northwest, scales 2m x 1m.

intercutting (F535 and F536), and others filled with soil and rubble (F569; F691 and F715).

The mid-19th century saw the construction and use of a limekiln (F807, Fig. 2 and Plate 2) depicted on Ashmead's 1855 and 1874 plans of the city (Etheridge 2005, figs.8 and 9) and the resulting deposition of extensive areas of waste quicklime (808) over the north and east of the site. Parts of an associated raised walkway (F809) were preserved alongside the kiln and a compacted working surface (F721) sealed with residue (620) remained to the front where the fuel would have been loaded and the ash raked out. Post settings (F621 and F717) at either edge indicated that the working surface and possibly also the kiln were covered. Remnants of retaining walls (F617 and F631) for the limekiln were incorporated in later masonry on the eastern site boundary. Elsewhere over the site, little evidence of contemporary activity was recorded. The earlier 19th century building erected to the south may still have been in use, as it is unclear whether the building was demolished and the cellar infilled before the middle years of the century (Fig. 2 and Plate 3). Likewise, it is uncertain whether two substantial rectilinear pits (F562 and F810, Fig. 2 and. 3.4) were opened during this or the preceding phase, although a thick lime deposit lined one side of pit F562 suggesting it had been filled while the limekiln was in use. Both pits yielded significant quantities of mixed 18th and 19th century pottery types, the latest of which were first produced during the 1840s. The lack of characteristic late Victorian products in the assemblages suggests the pits were opened and filled before the limekiln fell out of use.

The form of pit F810 was somewhat curious, as it appeared to incorporate a series of possible postholes at the sides of the cut, suggesting it may have accommodated a subsurface structure, or was covered when open. The stratigraphic relationships of an aceramic slot (F546) located immediately adjacent and to the south, truncating earlier trench F570 and partly destroyed by later building F804, suggested it to be a contemporary feature of indeterminate

















Fig. 3 Selected section drawings.

function. A second undated slot (F540) opened nearby, and neighbouring larger trench or pit (F541) probably were also contemporary cuttings destroyed by subsequent activity on the site. Limekiln F807 must have been abandoned soon after Ashmead's second survey was published (1874), as, by 1878, the Albert Chemical Works and associated brewery and ancillary structures were opened on the site (Etheridge 2005). The chemical works building (F811, Fig. 2) was founded over the limekiln, the remains of which were sealed below made ground (601), surfaced with surviving remnants of the internal flagged floor (599) of the works. No other internal features survived, but all four external walls of the rectangular building were recorded, the foundations of the south-western and north western walls exposed within the excavation area and the south eastern and northeaster walls as extant structures defining the site boundary and recorded during the preceding standing building survey (walls F403 and F404, Young 2005).

Their location and slightly skewed alignment to that of the chemical works (F811) suggested that the foundations of buildings F804 and F805 (Fig. 2 and Plate 3) preserved in the west of the site were parts of the brewery and complex of ancillary structures erected in the area between the two. Early editions of the Ordnance Survey coverage for the area (1890-1950, Etheridge 2005, figs. 10-14) clearly depict the evolving pattern of buildings erected on the site. That some of these structures were modified or abandoned over the history of the site is evident from buildings F804 and F805, as both subsequently were razed to the ground. Building F804 was abandoned, the foundations of its north western wall destroyed during the sinking of a well partly lined with modern machine-cut brick (F538), a second well lined with mortared sandstone (F908) was recorded to the southwest during the subsequent watching brief. In contrast, building F805 continued in use in a modified form, at least partly rebuilt in brick (F505) and possibly incorporating the bricklined manhole (F521) that butted the south-western face of the earlier foundation masonry and was sealed by the newly-laid internal flagged floor (507). The chemical works building (F811) appeared unchanged externally throughout this period, but was modified internally with the addition of a brick fascia (F722) to the southwest wall and concrete floor (600) sealing the earlier flags (599).

Several modern service trenches (F503; F509; F530; F553; F558; F628; F654; F664), some associated with the founding of the chemical works and brewery and others with its subsequent usage, were recorded at locations over the site alongside a number of modern cuttings of indeterminate function (F561; F578; F630; F656) and one (F573) identified as an automobile inspection pit with concrete floor, the sinking of which partly destroyed the northeast foundation wall of building F804. By 1966 (Etheridge 2005, fig. 15), the chemical works and brewery had closed and the site had undergone major changes. This involved the demolition of some buildings, particularly in the west, and conversion of others, initially for warehousing and latterly as garages and workshops, some still in use in 2005.

# THE SPECIALIST ANALYSES

# **Iron Age Pottery**

**By Elaine L Morris** 

# Introduction

A total of 23 sherds (253 grammes) of handmade Iron Age pottery was recovered (*Table 1*). The sherds are in good condition with a mean sherd weight of 11 grammes and no examples of split sherd flakes; however two of the smallest sherds had been affected by acidic conditions at some time in their histories and are now vesicular in texture due to the loss of calcareous inclusions in their fabrics, probably due to leaching. None of the sherds displays decoration. The pottery was analysed and recorded following the current guidelines containing visual charts for standardisation and definitions of attributes recommended for the analysis and reporting of later prehistoric pottery in Britain (PCRG 1995; 1997), and improved where necessary. An Excel spreadsheet database of the detailed pottery attributes is available in the archive.

### **Fabrics**

Nine fabrics were identified; four contain calcite temper, two are vesicular, one is a calcite-tempered fabric with a sandy clay matrix, one was grog-tempered into a quartz sand matrix, and one is a sandy fabric with a sparse amount of calcite inclusions. Five of the fabrics have also been identified in other later Iron Age pottery assemblages from previous excavations at West St (C1, C2, CQ1, GQ2, Vesic. 2). All of the fabrics could have been made from locally available resources (Kellaway and Welch 1948).

# Calcite-tempered Fabric Group

C1: common to very common (20–30%), well-sorted, angular fragments of calcite, clearly displaying cleavage structure, measuring  $\leq 2$ mm with rare, sub rounded, recrystallised fragments of calcite up to 3mm.

**C2**: common to very common (25–30%), moderately-sorted, angular calcite,  $\leq 4$ mm with the majority  $\leq 3$ mm, in a clay matrix containing rare (1–2%), rounded to sub rounded quartz,  $\leq 0.8$ mm; coarser fabric than C1.

C4: moderate (10–15%), angular, calcite temper,  $\leq 2mm$ , with sparse (3–5%), rounded, naturally occurring clay pellets,  $\leq 3mm$  and rare (1–2%), sub rounded quartz,  $\leq 0.5mm$ .

C5: common (20%), well-sorted mixture of predominantly sub angular to sub rounded calcite with rounded iron oxides, micaceous siltstone and quartz,  $\leq 2mm$ ; appears to have been derived from a type of gravel or sedimentary deposit.

### Calcareous and Quartz Fabric Group

**CQ1:** moderate (10–15%), well-sorted, angular to sub angular calcite,  $\leq 1$  mm, in a clay matrix containing moderate (10–15%), moderately-sorted, sub rounded to rounded, coarse to medium quartz,  $\leq 0.8$  mm.

E	T				-	-	_	-		FAB	RICS	5							-	F	ORM	AS	GENERAL
ATUR PE	NTE	C	1	(	C2	•	C4	(	C5	C	Q1	G	Q2	Q	C2	VE	SIC 2	2 VE	SIC 4	R2	<b>R</b> 8	<b>B</b> 1	DATE OF FEATURE
FE	CO	СТ	WT	СТ	WT	СТ	WТ	СТ	WT	СТ	WT	СТ	WT	СТ	WT	СТ	WT	СТ	WT				
ditch	511	-	-	1	4	2	38	-	-	-	-	-	-	-	-	1	5	1	1	-	-	1	Roman (1st–3rd)
ditch	589	_	-	1	34	-	-	-	-	_	-		-	-	-	_	-	-	-		1	_	Roman
pit	577	_	_	-	-	-	-	-	-	-	-	-	-	1	4	-	-	-	-	-	-	-	Roman
soil layer	579	2	45	-	-	-	-	-	-	1	5	-	-	-	-	-	-	-	-	-	-	1	1 st century AD
ditch	596	1	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Roman (3rd–4th)
ditch	598	1	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	Roman (3rd-4th)
ditch	666	1	14	1	6	-	-	1	1	_	-	1	20	-	-	-	-	-	-	-	-	-	Roman (3rd)
pit	672	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-		_	-	-	-	-	Roman (3rd)
gully	704	-	-	6	47	-	-	_	-	-	-	-	-	-	-	-	-	-	-	1	-	-	Late Iron Age
	TOTAL	5	75	9	91	2	38	1	1	1	5	1	20	2	6	1	5	1	1	1	1	2	

Table 1 Distribution of Iron Age pottery types by sherd count.

# Grog-tempered and Quartz Fabric Group

**GQ2:** moderate (10%), poorly-sorted, angular grog temper,  $\leq 4$ mm, in a clay matrix containing sparse (7%), sub rounded to rounded, coarse to medium quartz,  $\leq 0.8$ mm and sparse (3%) angular to sub angular calcite,  $\leq 2$ mmm.Quartz and Calcite Fabric Group.

**QC2**: common (20–25%), sub rounded quartz,  $\leq 0.8$ mm with the majority  $\leq 0.4$ mm, and sparse (5%), angular calcite inclusions,  $\leq 1.2$ mm; the infrequency of calcite suggests that it is not actually temper but the angularity suggests that it is deliberately added temper in contrast to the sub rounded shape of the quartz.

## Vesicular-texture Fabric Group

**Vesic 2**: very common (30%), angular vesicles,  $\leq$  3mm; extremely similar to calcite-tempered fabric C2.

**Vesic 4**: abundant (50%), rounded vesicles,  $\leq 1$ mm; most likely to have once been ooliths represented by these vesicles based on the uniformly rounded shape of the holes.

### Vessel Forms

Two rim or vessel forms (R2 & R8, Fig.7.1–2) and one type of simple flat base (B1; not drawn) were identified in this modest assemblage. The R2 vessel is a type of Late

Iron Age jar with a beaded rim and a high, softly rounded shoulder profile. This same vessel type was also recovered on the west side of the Bristol-Severn Estuary region at Sudbrook, Llanmelin and Whitton (Spencer 1983, class A), Hills Flats, Magor Pill and Oldbury Flats (Allen 1998, fig. 4, 11, 15–16, 18), and at Lydney Park where it is referred to as the bead-rimmed flowerpot and comfortably assigned to the first century BC to mid-first century AD based on the presence of a late La Tène II brooch (Wheeler and Wheeler 1932, 93-4, fig. 24, 1-4, 11). This jar type, found in sandy fabrics, belongs to the Cadbury Castle Ceramic Assemblage 9 dated to c100BC-AD100 (Barrett, et al. 2000, 23, figs. 20, 10 & 15; 21, 1-2, 4, 6, 7, 9; 30, 2-4). The R8 vessel is a Middle-Late Iron Age form with a short upright rim similar to types from Middle-Late Iron Age activity at Blaise Castle (Rahtz and Brown 1958-9, fig. 37, 32) and Cadbury Castle ceramic assemblages 6-7 (Woodward 2000, types JB2, fig. 149, 3-5 & JB4.2, fig. 149, 3).

### Surface treatment and evidence of use

A total of 17 sherds displayed evidence of burnishing, predominantly on the exterior surface with three of the sherds also having burnished interior surfaces. The latter are examples from bowls probably used to serve liquid contents while the former are more likely to have derived



Fig. 4 The prehistoric pottery. 1 Rim type R2; fabric type C2; burnished on exterior; unoxidised firing to exterior and core, oxidised on interior; 21% of 12 cm diameter rim present; SF12, context 704, gully 703. 2 Rim type R8; fabric type C2; burnished on exterior; unoxidised firing to exterior and core, oxidised on interior; 10% of 12 cm diameter rim present; context 589, ditch 588.

from closed form containers such as jars used to keep the moisture away from dry foods, to retain the moisture within pots, or as cookpots. One of the illustrated vessels (Fig. 4.2) is an example of a small diameter jar used as a cookpot. Evidence of use to support these interpretations comes from the correlated presence of burnishing on sherds with limescale or burnt milk, pitting out of calcareous inclusions from the fabrics and carbonised residues or soot. Eight different vessels, based on variations in fabric type and location of recovery displayed evidence of use; all but one had also been burnished. The very high frequency of burnished surfaces is a cultural trait typical of the later Iron Age in this area.

# Conclusions

The fabric types, shape of the identifiable jars, frequency of surface treatment and correlated evidence of use are all consistent with this small assemblage having been part of the larger assemblage of middle-late Iron Age domestic pottery from a settlement site identified at the neighbouring Mail Marketing International site on West St, Bedminster (Young and Young this volume).

# **ROMAN POTTERY**

# **By Jane Timby**

# Introduction and methodology

The archaeological work resulted in the recovery of 375 sherds of Roman pottery weighing 6.8 kg, of which 90 sherds came from the evaluation, the rest from the subsequent excavation. The sherds were of variable condition with some well-preserved pieces with joining sherds and some more abraded sherds. The overall average sherd weight for this material was 18g. The Roman pottery was sorted macroscopically into fabrics based on firing colour and the main visible inclusions in the fabrics. Known or named regional or traded wares were coded using the National Fabric Reference Collection codes (Tomber and Dore 1998). More local or unsourced wares are coded specific to this assemblage. The assemblage was quantified by sherd count, weight and estimated (rim) vessel equivalence and the data entered onto an MS Excel spreadsheet, a copy of which is deposited with the site archive. *Table 2* provides a quantified summary of the main wares identified.

# Description of fabrics and forms

Imports

**Central Gaulish Samian**: four sherds were recovered. Forms include cups of Dragendorff (Drag.) forms 33 and 80 and a large sherd of decorated bowl of Drag 37. All the sherds appear to be Antonine or later.

# Regional

**Dorset Black Burnished Ware** (Tomber and Dore 1998, 127, DOR BB1): some 66 sherds of DOR BB1 were present, 3.7% by count of the assemblage. Vessels include jars with acute and oblique burnished lattice (Fig. 8.3), flat rim bowls, plain-rimmed dishes and flanged conical bowls. A very small dish from ditch 665 has a sooted interior suggesting it may have been used as a lamp (Figure 5.7). Typologically these forms span the 2nd through to the later 3rd-4th centuries.

**Southwest Black Burnished Ware** (*ibid*, 129, SOW BB1): a single bodysherd from a jar.

**Oxfordshire Colour-Coated Ware** (*ibid*, 176 OXF RS): fourteen sherds were recorded including a beaker decorated with barbotine scroll and a bowl of Young (1977) form C45.

**Savernake Ware** (ibid, 191, SAV GT): two sherds only, both from large jars.

	FABRIC	DESCRIPTION	No	% No	Wt	% Wt	EVE	% EVE
1	CODE							
IMPORTS	CGSAM	Central Gaulish Samian	4	1.1	132	1.9	22	3.9
REGIONAL	DOR BB1	Dorset black burnished ware	66	17.6	1150	16.9	153	27.1
	SOW BB1	South west black burnished ware	. 1	0.3	12	0.2	0	0.0
	OXF RS	Oxfordshire colour-coated ware	14	3.7	134	2.0	0	0.0
	SAV GT	Savernake ware	5	1.3	138	2.0	0	0.0
	SVW OX	Severn Valley ware	3	0.8	23	0.3	11	1.9
LOCAL/	BW1	black sandy ware	68	18.1	957	14.0	69	12.2
UNKNOWN	BWF	fine black sandy ware	17	4.5	56	0.8	10	1.8
	BWFMIC	fine black micaceous ware	6	1.6	50	0.7	0	0.0
	CC1	colour-coated ware	1	0.3	25	0.4	0	0.0
	GW1	hard grey ware	80	21.3	1386	20.3	83	14.7
	GW2	grey sandy ware	84	22.4	1647	24.1	145	25.7
	GW3	Hard blue-grey sandy ware	18	4.8	860	12.6	65	11.5
	GW4	Black sandy ware with grog	1	0.3	17	0.2	0	0.0
	GWG1	Grey ware with grog	3	0.8	199	2.9	7	1.2
1	OXGR	Oxidised ware with grog	1	0.3	13	0.2	0	0.0
	OXID1	Oxidised hard sandy ware	2	0.5	16	0.2	0	0.0
	OXID2	Coarse-tempered oxidised ware	1	0.3	7	0.1	0	0.0
TOTAL		course temperou on alona in alo	375	100.0	6822	100.0	565	100.0

Table 2 Quantification of the Romano-British pottery fabrics.

Severn Valley Ware (*ibid* 1998, 148, SVW OX): limited to just three sherds, two from tankards and one from an everted rim jar.

# Local/source unknown

**BW1**: a hard black sandy ware with a red or grey core with red margins. At x20 magnification, the paste contains well-sorted sub-angular quartz < 0.5 mm and rare red iron. Vessels include jars, a lid (Fig. 5.5), plain rim dishes, flat (Fig. 5.6) and grooved rim bowls (Fig. 5.11) imitating DOR BB1 forms.

**BWF**: a fine black ware with a smooth silky exterior. Very fine textured, very slightly micaceous paste with no visible inclusions. The only featured sherds are from a necked jar.

BWFMIC: a very fine sandy, highly micaceous black ware. No featured sherds.

**CC1**: a very fine, pale orange-buff fabric with an orangebrown colour-coat. Very fine, slightly micaceous paste with no other visible inclusions. A single bodysherd.

**GW1**: a wheel made, hard, mid to dark grey well-fired greyware. The fabric has a slightly granular texture with no surface finish. At x20 magnification, the paste contains an ill-sorted, sparse to common frequency of quartz grains,

some up to 1 mm in size, but mainly finer. The matrix has a crystalline appearance. Vessels include necked jars (Fig.5.10), large bowls (Fig.5.9) and flat rim bowls (*Fig. 5.2*). A single handle, probably from a jug was also recovered.

**GW2**: a pale to mid grey, smooth fine greyware with a silky texture and slightly micaceous fabric. The core is often a lighter grey with darker margins. At x20 magnification, the paste contains a well-sorted scatter of very fine black grains (?iron), flecks of muscovite mica and rare grains of visible quartz. Vessels include necked jars, some decorated with a burnished lattice or chevron decoration (Figs. 5.4 and 5.8), flat rim bowls (Fig. 5.1) and a lid.

**GW3**: a hard blue-greyware with a burnished exterior. A very hard, well fired, slightly micaceous fabric. At x20 magnification, the paste contains a common frequency of ill-sorted rounded quartz, both clear and opaque white grains, some up to 1mm in size but mainly finer, and some very fine calcareous inclusions, occasionally as voids. Vessels include jars with everted expanded rims, and flat rim bowls. One base is decorated with burnished line decoration.

**GW4**: a black surface ware with sparse inclusions of grog. Probably a Savernake/ Wiltshire fabric. Represented by a single bodysherd.



Fig. 5 Romano-British pottery.

**GWG1**: a moderately fine greyware with a sparse temper of sub-angular grog. Possibly a Savernake variant. The only featured form is a wheel made hooked rim jar.

**OXGR**: orange-brown surfaces with a dark grey core. The fabric is hard and well fired with a slightly soapy feel. The paste contains a sparse frequency of sub-angular grog, occasional limestone and quartz sand. A single bodysherd.

**OXID1**: a very hard mid orange fabric with a grey inner core. The paste has a slightly granular texture with a smooth burnished exterior. At x20 magnification, the paste contains a sparse scatter of well-sorted clear quartz grains in a clean matrix. Two bodysherds only.

**OXID2:** a brick red fabric with matt surfaces. At x20 magnification, the paste contains a sparse temper of mixed and ill-sorted sub-angular grains, including quartz, flint, quartzite and a fine-grained grey rock (?siltstone). The larger grains are up to 1.5-2 mm in size. A single bodysherd.

## Discussion

The Roman assemblage is extremely conservative with a modest range of fabrics largely dominated by local greywares. Continental traded wares are limited to four sherds of Samian, all from Central Gaul and representing 1% of the assemblage by count. Regional wares account for 23.7% of the total assemblage with Dorset black burnished ware taking the larger share at 17.6 % by count. Other regional wares include Southwest Elack. Burnished ware, Oxfordshire colour-coated ware, Savernake ware and Severn Valley ware. Three fabrics dominate the local wares, fabrics BW1, GW1 and GW2 at 18%, 21% and 22% by sherd count respectively. Although not sourced, the fabrics probably come from the poorly documented North Somerset industries exemplified by the kilns at Congresbury.

In terms of the vessel repertoire, the assemblage is dominated by jars, which account for 66.6% by EVE, followed by bowls/dishes at 27.8% and drinking vessels (cups, tankards) at 5.6%. This combined with the low proportions of imported ware shows a fairly typical profile for a 'rural' assemblage.

In terms of date, the Roman assemblage appears to largely date from the mid-later 2nd through to the early 4th century. There does not appear to be any continuity through from the later Iron Age component, nor are there many wares which need continue into the later 4th century although the assemblage represents quite a small sample.

Most of the Roman pottery was recovered from ditches with one of the larger assemblages, 58 sherds, coming from context 588, a possible recut ditch. The pottery (*Figs.* 5.9-11) suggests a 3rd century date for the fill, although material from the primary fill (682) may be 2nd century. Ditch 665 may be later 2nd century in date but ditches 550, 554, 592, 597 and possibly pit 671 appear to be 3rd century. The latest features on the site, on the basis of the Roman pottery present, appear to be probable ditch 542 (543), evaluation context (E131) and gully 679 (680). There is limited knowledge about Roman activity in this area, although a range of Roman pottery of similar date was recovered from the nearby Mail Marketing International site (Young and Young this volume). Small scale Roman activity has been documented south of the River Avon, including rural settlement, stray finds and two villas (Boore 1999, fig 2). Roman occupation has been documented from at least two other suburbs of Bristol, Lawrence Weston (*ibid*) and Filwood Park (Cox 1997), which is also south of the Avon. The settlement at Filwood Park appears to be a 2nd-4th century farmstead and may be of a similar nature to the settlement producing the pottery from Bedminster.

# Catalogue of illustrated sherds (Fig. 5)

- 1 Deep dish burnished internally and externally Fabric GW2. Ditch 512 (511).
- 2 Flat thickened rim bowl. Fabric GW1. Ditch 512 (511).
- 3 Everted rim jar. Fabric DOR BB1. Ditch 512 (511).
- 4 Sharply everted rim jar. Fabric GW2. Ditch 665 (666).
- 5 Lid. Fabric BW1. Ditch 512 (511).
- 6 Dropped flat rim bowl. Fabric BW1. Ditch 512 (511).
- 7 Small dish with a sooted interior. Fabric DOR BB1. Burnished line decoration. Ditch 665 (666).
- 8 Narrow necked jar with slipped exterior and burnished line decoration. Fabric GW2. Ditch 665 (666), SF 14.
- **9** Bowl with a rounded body and burnished interior. Fabric GW1. Ditch 588 (589).
- 10 Wide mouthed jar with burnished lattice decoration. Burnished exterior. Fabric GW1. Ditch 588 (589).
- 11 Grooved rim bowl. Fabric BW1. Ditch 588 (589).

# **Post-Roman Pottery**

# By Alejandra Gutiérrez

# Introduction and methodology

Some 638 sherds of pottery weighing around 11.6kg were recovered during the excavation. The assemblage includes a small group of 42 sherds (1.1kg) trom the evaluation of the same site.

The pottery was sorted into fabrics with the aid of a microscope (x20 magnification), counted and weighed. The fill of features produced good-sized sherds (average 18g) and complete profiles. Most of the assemblage consists of modern wares of the 18th century and later, whereas medieval wares are poorly represented and account for just 3% of the total number of sherds (1% by weight).

### Medieval wares

Just 18 small sherds of medieval pottery were recovered (*Table 3*). The main fabrics are:

HAM GREEN JUGS (Fabric SS). Bristol. 12th to 13th centuries (Barton 1963; Ponsford 1991). Grey core; buff or white margins; pink, orange or buff interior surface. Inclusions of well-sorted quartz, limestone and clay pellets. Handmade and rim finished on low wheel. Green glaze on exterior surface and ove the interior of the rim only.

**BRISTOL** (/**REDCLIFFE**) **WARE** (Fabric AAA). Bristol. Mid-13th to 15th centuries (Vince 1988, 260; Ponsford 1998). Usually pale yellow throughout, sometimes with a light grey core. Inclusions of quartz and quartzite up to 1.2 mm, clay pellets <1 mm, occasional sandstone up to 7 mm, iron ore 0.2 mm across, rounded limestone up to c0.3 mm. Wheel thrown. Green glaze on exterior, sometimes with applied clay strips.

**'BATH A'** (Fabric U4). Avon Valley-West Wiltshire? Late 11th to 13th centuries (Vince 1979). Usually grey core, buff margins and grey surfaces. Abundant mica, rare calcareous inclusions, sparse flint/chert <3 mm, moderate glassy quartz <2 mm. Smoothed-over surfaces. Handmade.

MINETY-TYPE WARE. Northwest Wiltshire. 12th to 13th centuries (Vince 1988, 262). Grey core, white or pink interior margin, buff or orange interior surface. The main inclusion is abundant Oolitic limestone which leaves a characteristic round void when burnt out during firing; occasional chert/ flint. All inclusions are ill-sorted and mainly <1 mm, but also up to 2 mm.

**FABRIC 1**. Medieval coarseware. Grey fabric with dark brown interior surface. Micaceous fabric with moderate, poorly sorted limestone <1.5mm; rounded, well-sorted quartz <0.5mm; sparse calcite <0.5mm. Handmade.

**CISTERCIAN-TYPE WARE**. South Gloucestershire. 16th century (Good and Russett 1987, 38).Dark red or brown throughout. Sparse inclusions of quartz and quartzite up to 1 mm and rounded iron ore up to 0.4 mm. Very thick dark brown/black glaze all over.

The quantities recovered were very small and represent medieval fabrics, which are local and typical of excavations in Bristol. Quantification is shown in Table 3. A few sherds were clearly residual and appear mixed with later material (contexts 500, 562, 567, 572); single sherds appear dispersed across the stratigraphy (contexts 528, 564, 640, 695) and only a small concentration in context 559 might represent an undisturbed medieval layer, on the basis of the six sherds recovered there. Modern wares (18th century onwards)

The rest of the assemblage is dominated by modern wares. The main types identified are:

**BRISTOL/STAFFORDSHIRE SLIPWARES** (Fabric KK for hollow wares; Fabric M for flatwares). Late 17th –18th century. Buff throughout, with moderate iron oxide <0.25 mm. Trailed and feathered dark brown slip over white slip under amber glaze.

**MOTTLED WARE**. 18th century. Same fabric as slipware above, but with a dark, mottled glaze all-over.

**ENGLISH DELFTWARE** (Fabric A1). 18th century. No inclusions visible. All-over tin glazed with painted decoration.

**MODERN REDWARES** (Fabric C20). 18th–19th centuries. Hard, red or brown fabric. Occasional quartz and limestone inclusions. Honey or brown lead glazed, sometimes mottled.

**NORTH DEVON GRAVEL-TEMPERED WARES** (Fabric E). Late 17th – 18th century. Grey or orange core, grey interior margin and surface, orange exterior margin and surface. Super abundant quartz up to 6 mm; abundant milky quartz up to 3 mm; sparse limestone up to 2 mm; moderate slate <5 mm; moderate chert <6 mm. Green glaze on interior surface.

**REFINED WARES**. Creamware, pearlware, bone china, majolica, ironstone, porcelain, white stoneware, yellow ware.

**BROWN STONEWARES.** Included here are lead-glazed wares (Bristol-type) and also brown glazed stonewares of the 19th century.

There is ample documentary and archaeological evidence to attest to the production of feathered slipwares, mottled ware and delftware in Bristol, one of the key assemblages being that excavated at the Temple Back pottery (Price 2006) where wasters of all these types plus brown-glazed stonewares were found together in a mid-18th century pit. Although these types of pottery were also made elsewhere in England, for example in Staffordshire and London and produced vessels

CONTEXT	FABRIC	FABRIC DATE	FORM	SHERDS	WEIGHT (g)
100 eval	Bristol ware	13th-15thC	jug	1	4
100 eval	Minety-type	12th-13thC	jug	1	6
118 eval	Fabric 1	12th-13thC?	cw	1	6
500	Fabric 1	12th-13thC?	cw	2	13
528	Bath A?	12th-13thC	cw	1	12
559	Fabric 1	12th-13thC?	cw	1	6
559	Bath A	12th-13thC	cw	5	17
562	S Glos Cistercian ware	16thC	cup?	2	13
564	Bath A	12th-13thC	cw	1	15
567	Bristol ware	13th-15thC	jug	1	8
572	Ham Green jug	12th-13thC	jug	3	14
640	Ham Green jug?	12th-13thC	jug	1	2
695	Bath A	12th-13thC	CW	1	5

Table 3 Quantification of medieval pottery.

that are visually identical, it is very likely that those found in Bristol were made locally. The quantification of modern types present is summarised in Table 4.

	SHERDS	%	WEIGHT (g)	%	
<b>Glazed</b> wares					
North Devon	9	1.8	107	1.2	
Modern redwares	92	18.1	4001	44.8	
Delftware	52	10.2	651	7.3	
Mottled ware	1	0.2	8	0.1	
Slipwares	53	10.4	1265	14.2	
<b>Refined</b> wares					
Bone china	10	2.0	40	0.4	
Creamware	3	0.6	25	0.3	
Pearlware	243	47.8	1626	18.2	
Stonewares	27	5.3	792	8.9	
White stoneware	10	2.0	243	2.7	
Yellow ware	5	1.0	132	1.5	
Unid	3	0.6	33	0.4	
TOTAL	491		8342		

Table 4 Summary of modern wares (18th century onwards)

About half of all the modern wares appear in the fill (576) of a small rectangular cesspit (575) and a large rectangular pit (562).

The fill of cesspit 575 produced an interesting group of pottery of the 18th century (Figs. 6 and 7). The contents represent a minimum of 33 vessels, which seem to comprise domestic refuse deposited probably in a single episode (*Table 5*). The contents include tablewares and utilitarian wares in the following numbers:

- -14 delftware dishes (Nos. 1-7, 10, 11)
- -1 plain delftware ointment jar (No. 9)
- -2 delftware jugs/jars (No. 8)
- -1 porcelain teacup
- -1 North Devon glazed pancheon/crock
- -1 glazed redware jar
- -3 feathered slipware dishes (Nos. 12-13)
- -4 feathered slipware cup/porringers (Nos. 14-15)
- -1 mottled ware jug
- -2 white stoneware plates (Nos. 17-18)
- -1 scratch blue bowl (No. 16)
- -2 white stoneware cups (No. 19).



Fig. 6 Modern pottery. From cesspit F575 (576): 1. Delftware plate. All-over white bluish tin glaze with painted blue decoration. 2. Delftware plate. All-over white tin glaze with linear red decoration.3. Delftware plate. All-over white tin glaze with painted decoration in faint green and red lines. 4. Delftware plate. All-over white tin glaze with painted decoration in brown, yellow and blue. 5. Delftware /plate. White tin glaze with blue painted decoration.6. White bluish tin glaze with blue decoration.

ТҮРЕ	FABRIC	FABRIC DATE	SHERDS	WEIGHT (g)
Delftware	A1	18thC	45	573
N Devon	E	17th-18thC	4	57
Porcelain	A12	1770s+	8	23
Modern redwares	C20	18thC	18	566
Mottled ware	MW	18thC	1	8
Slipwares	KK, M	late 17th-18thC	40	1142
White stoneware	white dipped stw	18thC	1	5
White stoneware	scratch blue	1740s-1770s	1	12
White stoneware	white stw	18thC	7	204
	biscuit slipware?		5	47
Total			130	2637

Table 5 Quantification of pottery from cess pit 575.



Fig. 7 From cesspit F575 (576): 7. Delftware plate. All-over white tin glaze with painted blue decoration. 8. Plain delftware base. All-over white tin glaze (except for the underside of the base) with a blue tinge. 9. Plain delftware ointment jar. All-over white tin glaze. 10. Plain delftware plate. All-over white tin glaze. 11. Plain delftware plate. All-over white tin glaze. 12. Bristol/Staffordshire slipware plate. Heavily sooted on part of the underside. 13. Bristol/Staffordshire slipware plate, with shoulder and flange. 14. Bristol/Staffordshire slipware cup/porringer. Sooted on underside of base. 15. Bristol/Staffordshire slipware cup/porringer. 16. Scratch-blue stoneware bowl. White salt-glazed with blue scratched decoration.

Some of the utilitarian wares in this group are heavily sooted, especially the North Devon pancheon but also one of the feathered slipware dishes and one of the cup/porringers. This indicates their use near fire, probably during the heating or cooking of foodstuffs. Since the slipware dish is clearly sooted on one half of the underside only (No. 12), this could indicate that it was only partially in contact with heat or, more likely, that it was used as a lid which had slid off to one side leaving part of the underside unprotected by the pot beneath. The emphasis in the forms recovered from cesspit 575 is clearly on dishes, of which there are 19 examples in a variety of textures and decorations, delftwares being predominant. These would have also been the most fragile, especially in comparison with the robustness of the white stonewares. The two white stonewares have a polygonal rim



Fig. 8 From cesspit F575 (576): 17. Press-moulded white stoneware dish with polygonal rim. Flange decorated with the 'dot, diaper and basket'. 18. Press-moulded white stoneware dish with polygonal rim. Beaded edge to rim. 19. White stoneware teacup. From linear trench F570: 20. Plain delftware ointment jar. All-over white tin glaze. From deposit 581: 21. Delftware plate. All-over white bluish tin glaze and blue decoration. From linear trench 574 (687): 22. Delftware plate. All-over white tin glaze and blue decoration. 23. Bristol/Staffordshire slipware cup/ porringer. Heavily sooted on exterior surface, up to the start of the handle. 24. Modern redware jar. Red fabric with dark brown glazed interior surface. From rectilinear pit F810 (565): 25. Refined earthenware jug with moulded exterior decoration. All-over clear (yellowish) glaze on bottom part, dark brown glaze on upper part. Two sherds from (565) and one from (500). 26. Brown stoneware inkbottle. Dark grey fabric; exterior brown glaze 27. Modern redware bowl. Red fabric with brown glazed interior surface.

and press-moulded decorated flanges, one of them with just a beaded edge, the other with only part of the 'dot, diaper and basket' remaining (Nöel Hume 1991, 116).

Among the decorated delftwares from the pit, most of the decorative motifs are flowers, although a plate with a Chinese landscape (Fig. 6.1) was also found; trees are represented in the style of other Bristol plates of the middle of the 18th century (Archer 1997, B213) whereas parts of the landscape are also identical to examples from Bristol of the same date (such as Price 2006, nos. 92 and 101). Of the same period is a plate (Fig.6.2) with red decoration with a linear painting style (in the style of Archer 1997, B209).



Fig. 9 From rectilinear pit F810 (708): 28. Lead-glazed stoneware jar, Bristol-type. Light buff fabric; all-over clear glaze and honey-colour glaze on upper part of exterior surface. 29. Lead-glazed stoneware inkbottle, Bristol-type. Light buff fabric; clear glaze on interior surface and honey-colour glaze on exterior surface. 30. Factory-made slipware (pearlware) mug. Two sherds from [708] and one from [709]. 31. Stoneware hunting jug. Light grey fabric. Moulded exterior decoration ('the kill'). Dark brown glazed on upper half. 32. Modern redware bowl/pancheon. Red fabric with brown glazed interior surface.

Stylised flowers drawn with blue strokes (Fig.6.5–6) and blue landscapes (Fig.7.7) are also of similar date (similar to Archer 1997, B25 and B257).

Although all the types present belong to the 18th century, the delftwares, porcelain cup (hand-painted in pink and gold) and the white stonewares would place the group towards the middle or second half of that century.

The second group was found in pit 562. This assemblage is slightly later than that from the filling of the cesspit (576), with later refined earthenwares, such as pearlwares, being predominant. These break more easily into small sherds so that minimum number of vessels is more difficult to ascertain. The number of sherds from the pit is shown in *Table 6*. The latest wares present are the mauve-printed and green-printed pearlwares, which only appear around the 1820s; the sponged-decorated pearlwares, popular with modest households from the 1830s onwards; and the factory-made slipware which was current until the middle of the 19th century.

Utilitarian wares include modern redwares, here present in the form of unglazed, plain flowerpots and brownglazed bowls. The rest of the assemblage is, however, tablewares mainly in the shape of cups, saucers and plates. Although there are a few sherds of decorated bone china, the assemblage is dominated by blue-printed pearlwares with oriental and floral themes. Typical of the 19th century are also brown-glazed stonewares, of which there are some lead-glazed (Bristol-type) bottles and an almost complete brown-glazed inkbottle. Four sherds from 19th century roof pantiles (389g) were also found in pit 562.

Similar types of pottery were also recorded from the rest of the stratigraphy (unpublished Table 7), including further sherds of blue-decorated delftware (*Fig. 8.21–22*; contexts 687, 581). Among the stonewares, a lead-glazed (Bristol-type) bottle recovered from context 709 (F810) was impressed with the writing: H Taylor / 23 REDCLIFF STREE[T] / Bristol. A Hugh Taylor, 'gallypotmaker', was active in Redcliffe in the second half of the 18th century (Jackson *et al.*, 1982, 182). A stoneware hunting jug was also found in context 708 (*Fig.9.31*). Interestingly, a further example (from 565 and 500) looks very similar, but this is made of earthenware rather than stoneware (Fig. 8.25).

Both have moulded decoration and are glazed dark brown on the upper half of the vessel. Modern redwares in the form of bowls, lids with knobs, jars and flowerpots are similar to 18th and 19th century examples found elsewhere in Bristol (Jackson 2002).

Four sherds of what appears to be unfinished vessels were also found, three from context 576 and one from 565. These are biscuit fired, i.e. unglazed. Those from 576 are in a buff fabric similar to the feathered slipwares and belong to a base. The sherd from pit fill 565 is a foot ring in white fabric, in the style of pearlwares. There were some potteries nearby in Bedminster, but their documented production seems to have been only 'brown ware' (Jackson *et al* 1982, 44), so these wasters are not without interest.

### Conclusions

An assemblage mainly of 18th and 19th century pottery vessels was recovered during the excavation. The range of vessels identified includes utilitarian wares used in the transport and storage of goods, domestic vessels and tablewares. The range of forms and types of pottery present are typical of assemblages of this date, reflecting the range of wares used in a modest domestic context. The interest in this material is that the contexts are well dated and their contents might fruitfully be linked to the development of the plot and the biography of its owners and occupants during the period 1750–1850 through cartographic evidence and census returns.

A small number of wasters were also recovered and, though this might not necessarily indicate a kiln in the immediate vicinity, the finds are worthy of note.

Post-medieval pottery was totally absent and only a handful of medieval pottery was recovered. This was found

ТҮРЕ	FABRIC	FABRIC DATE	SHERDS	WEIGHT (g)
Modern redwares	C20	18th-19thC	33	1163
Bone china	bone china	19thC	8	22
Pearlware	shell-edge	1780-1810	1	4
Pearlware	black/grey printed	1790s+	6	37
Pearlware	blue-printed flowers	1780s-today	11	37
Pearlware	flue blue	1780s-today	2	20
Pearlware	blue-printed oriental	c1775-1810	62	338
Pearlware	factory-made slipware	1790s-1840s	7	14
Pearlware	green-printed	1820+	4	20
Pearlware	mauve-printed	1820s+	2	44
Pearlware	plain	19thC	25	102
Pearlware	sponged-blue	from 1830s	5	56
Stoneware	Bristol-type stw	19thC	12	237
Stoneware	brown-glazed	19thC	4	37
Yellow ware	yellow ware	19thC	4	17
(residual)	North Devon gravel-tempered	17th-18thC	1	28
Unid	burnt pearlware?		2	11
Unid	burnt redware?		1	22

Table 6 Quantification of pottery from pit 562.

mainly mixed with later material and serves only to point to the existence of medieval stratigraphy that has been disturbed at a later date.

# **Animal bone**

### **By Lorrain Higbee**

### Introduction

A total of 299 bone fragments (or c6.5kg) was recovered by hand from the site. Bone was recovered from all phases of activity/occupation and an initial assessment recommended further more detailed work on the moderately sized Romano-British assemblage. Bone from later periods was quantified in the assessment and will not be further discussed.

### Methods

Analysis was carried out following Davis (1992), in summary a selective range of skeletal elements (termed POSAC) were recorded in full. These are generally bones that show a good survival and recovery rate in most bone assemblages and also provide useful age and biometric data. Bones were only recorded if at least 50% of a given part was present and Dobney and Reilly's (1988) zonal recording method was incorporated for this purpose. Given the small size of the assemblage, other identifiable bones were also recorded but in much less detail. Bones that could not be assigned to species have been quantified into general size categories (mostly vertebrae and rib fragments) and small splinters into an unidentifiable category. This information is presented in order to provide an overall fragment count.

Caprine species (i.e. sheep and goat) were distinguished using the criteria of Boessneck (1969) and Payne (1985). Both sheep and goat were positively identified but sheep bones are more abundant than goat bones and it is therefore assumed that most undifferentiated caprine bones belong to sheep. The shape of enamel folds was used to distinguish between equid species following Davis (1987); only horses were positively identified. All post-cranial bones were simply recorded as equid. Equid remains will be referred to throughout this report as horse although it cannot be discounted that other equid species may be included in this category. The Gallus/Numida/Phasianus group of closely related galliformes are also difficult to distinguish (see MacDonald, 1992) however, no guinea fowl or pheasant bones were positively identified, and it is therefore assumed that fowl-like bones belong to chicken.

The ageing data of Silver (1969) was used to assess epiphyseal fusion of the post-cranial skeleton and fusion categories follow O'Connor (1989). Bird bones with 'spongy' ends were recorded as 'juvenile'. Grant's (1982) tooth eruption/wear stages were used for cattle and pigs and mandibles were assigned to the age categories of Halstead (1985) for cattle and Hambleton (1999) for pig. Tooth eruption/wear and mandible wear stages for sheep/goat were recorded following Payne (1973 and 1987).

Sexing using morphological characteristics was undertaken for pig canines and their alveoli, and cattle pelvises. Boar canines can be differentiated from sow canines on the basis of their size, shape and root morphology (Schmid 1972: 80–81). Likewise the illio-pubic ridge and medial border of the acetabulum (after Grigson 1982: 8) can be used to distinguish between cow and bull pelvises.

In general measurements follow Von den Driesch (1976) with the following exceptions: measurements taken on the humerus follow Davis (1992); measurements on pig teeth follow Payne and Bull (1988) with the addition of the width of the central (or second) cusp of the third molar (or m3); width measurements of cattle and caprine teeth were taken across both cusps and measurement of equid cheek teeth follow Davis (1987). Individual measurements are given in the appendix (archive only).

Preservation was recorded using a modified version of Behrensmeyer's (1978) weathering stages that is each POSAC was graded on a scale of 1 to 5 with 1 representing excellent and 5 very poor preservation.

Information on gnawing, butchery, pathology and non-metric traits was recorded where present. Butchery was recorded by type (i.e. chop, knife cut, sawn), position and orientation (using standard anatomical terms and orientation). This information is detailed in the archive.

# Results

All of the animal bone was recovered by hand during the normal course of excavation, hand-recovery relies on the observation skills of the excavator and assemblages recovered by this method are typically biased in favour of large fragments (Payne 1992). The West Street assemblage, with its high frequency of bones from large domestic mammals, few birds and amphibians, and a complete absence of fish and small mammals, clearly illustrates the effect of recovery bias.

The Romano-British assemblage is well preserved, although gnaw marks were recorded on a relatively large number (18%) of post-cranial bones. A small range of species has been identified (Table 7) and sheep bones are relatively common, accounting for c.32% of all identified bones (or NISP). Cattle and horse bones are also fairly common, accounting for c.24% and 22% NISP respectively. Less common species include dog, chicken, pig, goat and common toad.

The assemblage is too small to assess the relative importance of livestock species to the pastoral economy of the site. In general, sites with a relatively high frequency of sheep are thought to be native civilian settlements, whilst sites with high frequencies of cattle are more Romanised (Grant 1989; King 1978, 1984 and 1999).

### Sheep

A minimum of three individuals is represented in the assemblage and despite the relatively high frequency of sheep bones, only a small range of body parts is present. These include meat bearing bones such as humeri, pelvises and tibiae, and butchery waste such as metatarsals, mandibles and loose teeth. This last group of elements are significantly more common than the former, which would seem to suggest that most of the waste results from primary carcass dismemberment. However, high ratios of teeth to post-cranial bones are common on many rural sites, and lower rates of deposition and higher rates of gnawing are thought to be the principle factors affecting skeletal element distribution (Davis 2003: 127).

Tooth eruption and wear stage information indicates that sheep aged 1–6 years are represented. The ratio between deciduous fourth premolars (or dp4) and permanent fourth premolars (or p4) suggests that 57% of sheep are less than 21–24 months of age. In other words, most sheep were slaughtered at the optimum age for prime meat, whilst some were maintained for secondary products (e.g. wool or milk) and as breeding stock.

### Cattle

Cattle is represented by a wider range of body parts than sheep, most are major meat bearing limb bones and some bear butchery marks, mostly chop marks, indicative of primary carcass dismemberment, reduction and marrowfat extraction. Small bones from the foot (i.e. phalanges) are entirely absent but this is likely to be a product of small sample size and possibly recovery method. At least two individuals are represented, one pelvis is from a cow and all long bone epiphyses are fused indicating that only adult cattle were selected for slaughter.

TAXA	ROMANO-BRITISH	MEDIEVAL	POST-MEDIEVAL	MODERN	TOTAL
cattle	16	1	5	-	22
sheep/goat	16	-	3	-	19
sheep	6	-	-	1	7
goat	1	-	-	-	1
pig	1	-	1	-	2
horse	15	-	1	-	16
dog	6*	-	-	-	6
chicken	6	-	-	-	6
Strigiformes n.f.i.	-	-	1	-	1
common toad	1	-	-	-	1
subtotal 1	68	1	11	1	81
cattle-sized	99	-	7	-	106
sheep-sized	41	-	3	-	44
unidentifiable	68	-	-	-	68
subtotal 2	208	-	10	-	218
Grand total	276	1	21	1	299

Table 7 Number of specimens identified to species (or NISP) by chronological period (n.f.i. indicates that a specimen was not further identified and \* denotes partial skeleton).

### Horse

Horse bone accounts for a little under half of the large vertebrate assemblage (i.e. cattle and horse combined). This figure is particularly high when viewed against the results of a recent survey of 190 Roman assemblages in central England (Johnstone and Albarella 2002: 33). The survey estimated that on average horse bones account for 5% of the large vertebrate assemblage from rural sites. With this in mind it is likely that the archaeological investigation area covered a peripheral part of the site since spatial analysis has shown that the frequency of domestic species is graded from central to peripheral areas of a site in order of increasing fragment size, and therefore the body size of an animal (Wilson 1996: 23). It is also worth emphasising that horses need a certain amount of pasture on which to graze and exercise, for this reason they are usually kept on the outskirts of settlements and their carcasses disposed of locally, usually in ditches, rather than being transferred elsewhere for slaughter. In other words, the high frequency of horse bones in the West Street assemblage is due to waste disposal patterns rather than economic or social factors.

At least two horses are represented; small groups of bones were identified from ditch 550 and inter-cutting ditches 588/597, other bones occur as isolated finds from individual contexts. Mandibles and loose teeth are common, tooth wear suggests that immature and adult individuals are represented, the mandible from ditch 550 has particularly worn teeth, suggesting extreme age, possibly as much as 40 years (see Levine 1982).

### Dog

Dog bones account for c9% NISP and at least two individuals are represented. This includes the partial skeleton of a juvenile aged 6–7 months of age from ditch 550 and isolated bones from a number of other features. All of the dog bones are from small, gracile individuals, and the individual from ditch 550 has noticeably bowed limbs, particularly the tibia. Dogs with this type of limb conformation are thought to have been introduced to Britain by the Romans (see Harcourt 1974; Clark 2000; Cram 2000). Modern breeds with similar characteristics include Corgi, Jack Russell and Basset Hound.

#### Chicken

Wing bones and a single leg bone were recovered from pit 556, (557); the remains are from at least three different birds, two of which are juveniles.

### Pig

A single fragment of posterior mandible was recovered, the teeth are in early wear and the animal is probably a subadult.

### Goat

A near complete goat skull was recovered from the same deposit (557) as the chicken bones described above. The animal is a fairly robust adult individual probably a ram and the horn cores were cleanly removed at the base by

transverse chops. This suggests that the horns were retained for further working.

### Common toad

A single toad tibia-fibula was recovered from ditch 665, (666), the animal is likely to have fallen into the open feature and been unable to get out.

# **Discussion and Conclusions**

A well-preserved but rather modest assemblage of animal bone was recovered from the site, thought to be a small farmstead. A full archive has been compiled and the results of the analysis have provided an interesting glimpse of animal husbandry regimes in the Bristol area during the Romano-British period.

The pattern of relative frequency for livestock species suggests that the site's pastoral economy was little affected by Romanising influences, but continued with what is considered a more native sheep based economy (Grant 1989; Hambleton 1999: 46–7; King 1978, 1984 and 1999). This statement needs to be treated with caution, given the small size of the sample, however, it is worth noting that sheep bones were also relatively common in the small Romano-British assemblage from the adjacent Mail Marketing site (Higbee 2006a), and the nearby site at Highwood House (Higbee 2006b), whilst at Hadrian's Close, Sea Mills deposits associated with military occupation are dominated by cattle bones (Higbee 2006c).

The limited age data available for sheep and cattle suggests that sheep were primarily managed for meat whilst cattle appear to have been maintained for secondary products and traction. This kill-off pattern is typical for the late Roman period and is thought to reflect the need for greater numbers of cattle for traction as arable cultivation intensified (Johnstone and Albarella 2002: 45).

The very high frequency of horse bones is typical of rural sites and also suggests that a peripheral part of the farmstead was located in the investigation area. Maltby (1994) compared the assemblages from Dorchester and Winchester with rural sites in the surrounding areas; he found that horse remains were more common at the edges of built up areas and at rural sites in the hinterland than from central urban areas (*ibid*: 89) and a similar pattern was recorded at Catterick, North Yorkshire (Stallibrass 2002).

The small dog from [550] with its distinct limb conformation probably represents a breed that was introduced to Britain by the Romans, they are not unusual finds from small farmsteads and other rural settlement sites in southern Britain, and were probably used as working dogs.

The bone assemblage from feature [556] stands out from the rest of the assemblage, it includes all of the chicken bones and the only goat specimen from the site. These species are frequently found in association at shrine sites, for example at Uley in Gloucestershire (Levitan 1993), which is connected with the worship of Mercury. Whilst it cannot be ruled out that the West Street deposit is deliberate and has some religious/ritual significance, it is more likely in the context of a small farmstead that these associations have resulted from purely secular activities.

# Human bone

### **By Malin Holst**

### Introduction

A total of twenty-four fragments of human bone, mainly skull, were recovered from the fill of a Romano-British ditch located in the southwest of the site during the area excavation and preceding evaluation stage (contexts 511 and E315 respectively).

### Description

The skull was nearly complete and the bone well preserved, although fragmentary and with slight surface erosion. According to the dental wear it belonged to a young adult, aged between 17 and 25 years, and the cranial sexing characteristics suggested that this individual was male. The ectocranial surface of the skull showed evidence for inflammation in the form of microporosity, possibly due to a mild skull inflammation, possibly caused by iron deficiency anaemia. The five surviving maxillary teeth all showed evidence for slight calculus (dental plaque concretions), which is common in archaeological populations. The other maxillary teeth had been lost post-mortem.

Fragments of a right scapula (shoulder blade) of an adult of indeterminate sex and age were also found.

### Conclusion

Despite being retrieved from a secondary context, no bone elements were duplicated, indicating a 'minimum number of individuals' (MNI) of one skeleton and suggesting the skull and scapula may have belonged to the same person.

### **Clay Tobacco Pipes**

### **By Sarah Newns**

### Introduction

A small assemblage of 61 clay tobacco pipe stem fragments and 18 bowls or bowl fragments, the majority (74) recovered from stratified contexts, were analysed. The stem bore diameters were measured in accordance with the dating systems outlined by Walker (1967) and the bowl fragments compared with typologies established by Oswald (1960), Peacey (undated) and Pearson (undated).

Of the eighteen bowls recovered, three are decorated with striations on the seam, three with a stylised leaf motif on the seam and one is facetted, with textured decoration around the rim. One bowl with leaf decoration and the facetted bowl both bear the initial "R" on one or both sides of the spur. Pipes bearing this initial are likely to have been made by Richard Frank Ring and Company, the largest pipe manufacturers in south Bristol during the nineteenth century. The Ring family company was one of a small number of family firms who dominated the pipe-making industry in Bristol at this time, producing pipes both for the domestic and export markets. The company is known to have produced pipes from as many as two hundred different moulds and to have been in production from the beginning of the nineteenth century until c.1880. R.F. Ring pipes have been recovered from various sites in Bristol including Clement Street (Beckey and Jackson, 1986); Lawrence Hill (Beckey et al. forthcoming); Temple Back (Beckey et al., 2003); Bath Road, Mead Street and Weare Street (Price and Jackson, 1984). The leaf motif and striations on the bowl were popular decorative motifs for mid-nineteenth century pipes and were also used by other manufacturers in Bristol, including the Bye family (Beckey, 1999), Jonathan Moul (Beckey and Jackson, 1986) and James White (Jackson and Price, 1974).

Seven of the remaining nine near-complete bowls are undecorated with spur heels of a type similar to Oswald type 26 or Peacey type 16 and dated to the mid eighteenth to nineteenth centuries. A further near-complete bowl, with milling around the rim had a post-1840 date (Oswald type 33, "Irish type"). The remaining complete bowl, which is small and barrel-shaped with a pedestal heel and traces of milling around the rim, is an early example dated by Peacey to 1670 to 1700 (Peacey type 4) and by Pearson to c.1700 (Pearson type 21). The final two bowl fragments were not identified.

Forty-seven stem fragments have a bore diameter size of 4/64" and may be dated, according to Walker, to the beginning of the eighteenth century or later. Thirteen fragments have a bore sizes of 5/64" or 6/64" and may be dated from the mid/late 17th to the end of the 18th centuries and the remaining stem fragment has a very large bore (7/64") dating from the early 17th to early 18th centuries.

As Walker explains, dating on bore diameter size alone is liable to inaccuracies, especially when, as here, dealing with small sample sizes, and can be taken only as a guide to the approximate date of the pipe stems in question. In particular, stems of 4/64", 5/64" and 6/64" bore size have all been recorded for pipes of nineteenth century date.

# Discussion

The earliest complete bowl, dated stylistically to 1670 to 1700, was recovered from a rectilinear trench (570) alongside the earliest stem fragment (of exceptionally large bore), dating from early 17th to early 18th centuries.

All but one of the mid-18th to 19th century bowls were recovered from deposit 576 sealing the base of a clay- and stone-lined cesspit (571/575). The deposit also yielded a significant collection of 18th century Bristol/Staffordshire ware and Delft ware pottery sherds, as well as several pipe stem fragments of bore sizes 4/64", 5/64" and 6/64". The remaining mid-18th to 19th century bowl was recovered from a deep pit (660) filled with significant quantities of clinker, slag and coal, alongside a small collection of 19th century pottery sherds and a further pipe bowl of post 1840 date (Oswald type 33).

The remaining 19th century bowls were recovered from the latest fills (565 and 708) of a substantial rectilinear pit of indeterminate function and fourteen stem fragments, largely of 4/64" bore size, were retrieved from an adjacent large pit (562). With the exception of five unstratified fragments, the remaining stems, mostly of 4/64" and 5/64" bore size, were residual in late Victorian and modern features.

# **Small Finds**

# **By Sarah Newns**

## Introduction

A small assemblage of thirteen Small Finds was retrieved during the excavation, including coins, metalwork, ceramics, worked stone and one human bone fragment. The ceramics and the bone fragment are discussed in the relevant sections and the remainder below.

### Methodology

The finds were examined by eye, and their details recorded (Table 8). The coins were identified with reference to standard reference works such as Mattingly, 1977 and Sear, 1974. The flint was identified with reference to Butler, 2005.

### Coins

Two small bronze coins, (SF5 and SF11) both of Romano-British date, were recovered, one from a cleaning layer and one from context 579, a deposit sealing the natural substrate.

Both coins are relatively unworn and show legible inscriptions. Both date to the reign of Constantine I (A.D. 307 to 337) and show a laureate head, right, obverse, and two soldiers, reverse ("GLORIA EXERCITUS" type, introduced in AD 330; Sear 1974, 312). One of the coins shows the initials "TRS" in the exergue, suggesting that the coin was minted in Treveri, Gaul, but both are likely to be contemporary copies (Reece and James 1994, 28–9).

### Metalwork

The metalwork assemblage comprises two further items of probable Romano-British date, a large iron nail, with square-sectioned shank and flat, sub-circular head (SF17) and a small triangular fragment of copper alloy sheet (SF15). Both the above items are undiagnostic, but were retrieved from features yielding significant quantities of Romano-British pottery sherds (the nail from pit/gully 671 and the sheet fragment from ditch 597).

A small machine-stamped 19th/20th century copper alloy button (SF10) and a small rod fragment of copper alloy were retrieved from a large rectangular modern cut 565. The two remaining items of metalwork comprise an unstratified iron nail (heavily corroded) and a semi-circular copper alloy fitting (from large modern cut 562).

### **Other Finds**

The earliest datable find from the site is a worked flint sidescraper (SF8), of dark grey flint with light grey flecking, of Neolithic/Early Bronze Age date, showing lateral retouch (Butler 2005, 128–9; 166–7). This tool was probably residual, within a boundary/enclosure ditch which yielded a single sherd of Romano-British pottery.

SF NO	CONTEXT	MATERIAL	WEIGHT (g)	DESCRIPTION
5	579	Bronze	2 (approx.)	Small bronze coin, 16mm diameter, obverse showing laureate head, right, reverse showing 2 soldiers ("GLORIA EXERCITUS" type. Similar to coin of Constantine I (Treveri mint), c.A.D.330 (Mattingly 1977 200 plate LVI po 11)
7	562	Copper alloy/iron	~	Small semicircular fitting, 42mm long, with flattened triangular terminal, probably iron with copper alloy plating. Shaft is square/ rectangular in section. fractured at one end.
8	675	Flint	4	Probable Neolithic/Bronze Age side scraper, 35mm by 25mm, showing retouch along both lateral edges, dorsal face. Distal end shows possible fractured point. Proximal end is blunted. Ventral face slightly concave. Dark grey flint with light grey flecking.
10	565	Copper alloy	2	19th/20th century, machine-pressed, metal button, 12mm diameter, circular, four central holes (Cuddeford 1994, 15).
11	693	Bronze	<2	Small bronze coin, 15mm diameter, obverse showing laureate head, right, reverse showing 2 soldiers ("GLORIA EXERCITUS" type. Similar to coin of Constantine I (Treveri mint – "TRS" in exergue), c.A.D.335 (Mattingly 1977, 300, plate LVI no.12).
13	500	Worked stone	34	Micaceous sandstone whetstone fragment, rod-shaped, fractured at either end. Upper and lower faces are facetted and highly polished, due to use, as are the two sides. Dimensions: 46mm by 25mm by 24mm.
15	598	Copper alloy	2	Small triangular fragment of copper alloy sheet, 12mm by 18mm.
16	565	Copper alloy	8	Curved fragment of copper alloy rod, circular in section, fractured at either end. Dimensions: 70mm long by 4mm diameter.
17	672	Iron	40	Large iron nail with square-sectioned shank and sub-circular flat head. Dimensions: 93mm long, head 23mm diameter.
18	500	Iron	12	Heavily corroded iron nail, original form completely obscured by concretions and corrosion products. Dimensions: 58mm long, head 12mm diameter.

Table 8 Small finds.

The final object is a micaceous sandstone whetstone fragment (SF13), showing signs of wear on both upper and lower faces. The unstratified whetstone is undated.

# Conclusions

Although small, the assemblage contains objects which range widely in date, from the prehistoric period through to the 19th/20th century. Several of the objects are undiagnostic fragments, or items which are difficult to date, as their form changes little over time. A significant proportion of the objects, notably the two coins, are of Romano-British date, suggestive of significant Roman activity in the near vicinity. The residual flint scraper also suggests some localised low level prehistoric activity. It is perhaps also significant that the assemblage is lacking any objects post-dating the Roman period and pre-dating the 19th century.

### **Miscellaneous Finds**

### **By Sarah Newns**

A small assemblage of miscellaneous other finds was also recovered during the excavation, including two residual flints and a broken tessera amongst the small collection of worked stone objects. The majority of the remaining finds were indicative of modern occupation on the site, such as ceramic building materials, plaster and technological residues, or domestic items such as bone and copper alloy buttons. The modest glass assemblage produced the only finds of interest. Of the 35 pieces of vessel and window glass collected, all but two dated to the 19th and 20th centuries (Hedges 1998). The latter two shards comprised a body shard and complete handle from a plain-bellied soda glass tankard of mid to late 17th century date. The handle was c 100 mm in length and would have been attached close to the rim of the vessel and halfway down the belly of the tankard, where it ended in a decorative tail (Wilmott 2002).

# **Plant remains**

# by C.J. Griffiths

### Introduction

An initial assessment of the environmental samples for their potential to offer economic and environmental information about the site was made (Griffiths 2006) and six samples, five from ditch fills and one from a pit fill were chosen for further analysis. All the samples contained charred remains, and the fill from the pit also contained mineralised plant remains.

### Methodology

All the samples were processed by Avon Archaeological Unit using a standard flotation technique and the flots and residues were recovered on 500  $\mu$ m mesh and air dried. These were then sorted at the University of Wales, Lampeter, using a Wild M5 stereomicroscope. The plant remains were identified using modern reference material and standard reference books (Anderberg 1994, Berggren 1969 and 1981, Bertsch 1941, Jacomet 2006). Martin (1946) was used for the identification of the internal contents of the seeds preserved by mineralisation. Nomenclature for non-cereals follows Stace (1991).

### Results

### **Charred remains**

The results from the identification of the charred remains are summarised in *Table 9*. All the samples examined contained charred cereal and weed seeds. The assemblage can be divided into three categories: the cereals and other remains associated with cultivation, weed seeds associated with arable cultivation or grassland and the plant remains brought on to the site either deliberately as a food source or accidentally as a by-product from other activities.

### Cereals and other cultivated plant remains

The deposits from ditches 554, 512, 588 and 597, and the fill of pit 556 all contained charred cereal remains; the most predominant are grains with the characteristics associated with free-threshing bread wheat (*Triticum aestivum* s.l.). The presence of this type of grain is supported by bread wheat type rachis fragments that occur in the fills of ditches 554, 512 and 597. Smaller quantities of the glume wheat Spelt (*Triticum spelta*), are also present in the ditch and pit fills and chaff from the wheat is found in all but one of the samples. Other cereal remains present include barley (*Hordeum* sp. [hulled]), with twisted and straight grains present, rye (*Secale cereale*) and oats (*Avena* sp.). The secondary fill of ditch 588 contained a single oat floret base, from a wild oat (*Avena fatua* L.).

Other remains associated with cultivation include fragments of large legumes, one of which was identified as a broad bean (*Vicia faba* L.), from the secondary fill of ditch 588. Legumes from the other samples were too fragmented to be identified to species, but were large enough to be either broad bean or pea (*Pisum sativum* L.).

# Weed seeds associated with arable and grassland

Weed seeds associated both with arable cultivation and meadows or grassland were recovered. All the samples contained small quantities of weed seeds. The pit (556) contained a limited assemblage, with 14 seeds present. These were species associated with a variety of habitats, including grassland, arable and disturbed ground. Ditch 597 contained the largest variety of weed seeds, of which the majority of species present are mainly associated with grassland habitats, for example, medick/clover (*Medicago/Trifolium*), smooth tare (*Vicia tetrasperma* (L.) Schreber), self-heal (*Prunella vulgaris* L.) and ribwort plantain (*Plantago lanceolata* L.). Slight evidence of wet or damp conditions was indicated from the presence of a sedge nutlet, (*Carex* sp.) and deer grass (*Trichophorum cespitosum* (L.) Hartman).

The weed seeds associated with arable cultivation included two seeds of stinking chamomile (Anthemis cotula L.) from ditches 554 and 512, sheep's sorrel (Rumex

CONTEXT	555	511	682	589	598	557	HABITAT
FEATURE	554	512	588	588	597	556	PREFERENCE
FEATURE TYPE	Ditch,	Ditch,	Ditch, prima	ryDitch,	Ditch,	Pit,	
D. ATTE	only fill	only fill	fill	2ndary fill	only fill	only fill	
DALE VOLUMEA INDE	50	40	40	40	60	A0	
VOLUME/LITRE	50	40	40	40	00	40	۵
Triticum spetta grain (Spett wheat)	2	5	-	-	10		Δ
Triticum cr. speita grain	3	2	Z	1	10	_	A 
Triticum spetta spikelet fork	-	2	-	_	17	1	A
Triticum spetta giume bases	9	ð 20	10	4	17	1	A
T. destivum s.I. grain (Bread wheat)	40	30	19	10	2	41	A
T. destivum s.i. rachis node	2	21	-		1		A
Triticum sp. grain	20	51	2	0	5	2	A
Seconda carrieda carrier (Buo)	1	2	1	_	5	2	A A
Hardown on (Hullod) twisted grain (Parley)	1	2	-	2	3		A
Hordeum sp.(Hulled) twisted grain (Barley)	_	2	-	2	0	3	A
Hordeum sp.(Hulled) indet grain	-	6	4	2	8	1	A A
Hordeum sp. (Hulled) Indet gran	0	0	-	2	0	1	A A
Avera en Croin	11	0	5	12	27	15	A 
Avena sp. Gram	11	0	3	2	1	15	A
Avenularge Foaceae	26	19	20	59		52	A
August fatus floret base (Wild opt)	20	10	39	1	//	32	
Combus quallang L shell from (Hezel)	2			1		2	A,D W
Characteria Characteria Characteria (Marcel)	L	-	-	2	1	2	A D
(Fig-leaved goosefoot)	-	-	-		1	-	A, D
Chenopodium album L (Fat_hen)	_	1			_	_	A D
Atrinlar sp. (Oraches)		-			1	_	A D C
Silana sp. (Campions)		2			,		G D A
Persicaria lanathifolia (L.) Gray (Pale persicaria)		-		1	1		A D
Rumer acetosella L. (Sheen's sorrel)	1	3	1	-	1		A G H
Rumer sp. (Docks)	-	5	1		10	1	G D A M B
Raphanus raphanistrum L. (Wild radish) – capsule	1	1	-	-	-	-	D,A
Raphanus raphanistrum L. seeds	_	3	-	_	_	_	D.A
Rubus fruticosus L. agg (Bramble)	-	1	_		-		G W H
Medicago spp / Trifolium spp / Medick/Clover)	_	2	_	_	14	-	D G
Vicia hirsuta (L.) Grav (Hairy tare)	_	1	_		-	_	D,G
Vicia tetrasperma (L.) Schreber (Smooth tare)	-	1	_	1	9		G.
Vicia faba L. (Broad bean)	-	_	_	1	_	_	Δ
Vicia cf. faba L. fragments	_	1	2	_	3	_	A
Vicia faba I / Pisum sativum I, fragments	-	6	-	14	1	1	A D
Vicia spp /Lathyrus spp (Vetches/Peas)	12	_	9	1	-	_	GWDHAM
Vicia spp./Lathyrus spp. (vectories reas)	7	16	5	4	7	6	G W D H A M
Pisum sativum L. (Garden peas)	_	1	_	_	4	_	4 D
Daucus carota L. (Carrot)	_	_	-	_	1	_	D.G.A
Prunella vulgaris L. (Selfheal)	_	_	_	_	1	_	G D W
Plantago lanceolata L. (Ribwort plantain)	_	_	_		2	_	G, D, W
Anthemis cotula I. (Stinking chamomile)	1	1			-	_	A D
Trichophorum cespitosum (L.) Hartman	_	_	_	_	2	_	M Hw
(Deergrass)					2		
Carex sp trigonous (Sedges)	2		-	1	1	_	B. M. W. Gw
Carex sp biconvex (Sedges)	_	_	-	1	_	_	B. M. W. Gw
Bromus sp. (Brome)	-	1	_	_	6	4	G. R. D. A
Poaceae 3.0 mm + (Grasses)	_	_	-	_	1	~	G. H. M. W. R
Poaceae 2.0 mm+	_	_	-	-	-13		-,,,,,,,
Foaceae $1 - 2.0$ mm	1	14	2	36	15	2	
Culm frags	1	1	-	_	_	-	
Seeds indeterminate	_	2	_	_	26	_	
Organic material indeterminate	33	18	_	48	16	-	

Table 9 Charred plant remains. Habitat preference: A = arable & cultivated; Aq = aquatic, B = bank side, pond margins; D = disturbed ground, wasteland; G = grassland; H = heaths; M = marshes, fens, bogs; N = nitrogen; R = roadsides; W = woods, hedges, scrub; w = wet.

acetosella L.), dock seeds (Rumex sp.) and wild radish (Raphanus raphanistrum L.).

# Plant remains brought to the site either deliberately or accidentally

Ditch 554, the secondary fill of ditch 588 and pit 556 all contained small quantities of hazelnut shell fragments (*Corylus avellana* L.) that may have either been deliberately collected for food, or brought to the site accidentally with wood for fuel.

# The mineralised remains

Mineralised plant and insect remains were found only in the fill of pit 556 (Table 10). Mineralisation occurs in deposits rich in calcium phosphate, whereby the soft plant tissue is replaced by mineral deposits. For more detailed descriptions of the processes associated with mineralisation see Green (1979) and Carruthers (2000).

The most frequent plant remains from the pit were fragments of straw. Cereal grains are represented by a small quantity of oats (*Avena* sp.), which Green (1979) describes as the cereal most commonly found preserved by mineralisation. Other seeds possibly associated with cultivation are represented by pea/bean fragments (*Pisum sativum L./Vicia faba L.*). Stones from the cherry/plum family (*Prunus* spp.) may have entered the deposit as food remains.

The weed seeds from the deposit are dominated by those associated with damp and wet ground, for example, sedges (*Carex* sp.) and creeping buttercup seeds (*Ranunculus repens* L.). Weeds associated with arable cultivation occur in small quantities and include nipplewort (*Lapsana communis* L.), common marigold (*Chrysanthemum segetum* L) and Bromes (*Bromus* sp.). Seeds associated with either arable or disturbed ground were represented by a quantity of Chenopodiaceae seeds. Grassland species include grass seeds (Poaceae), sheep's sorrel (*Rumex acetosella* L.) and docks (*Rumex* sp.). Nettle seeds (*Urtica dioica* L) may represent disturbed ground or ground with a high nitrogen content.

### Discussion

The evidence from the charred and mineralised plant remains seems to indicate that the site was associated with arable and pastoral agricultural activity. Plant remains associated with Roman features from other assessments in the area also produced a similar range of charred cereal grains and weed seeds, as for example, material from the adjacent Mail Marketing International premises, area VSH (Hunter 2005).

The presence of bread wheat in a Roman context is to some extent unusual, although there is evidence for the utilisation of free-threshing wheat in Britain from as early as the Neolithic. A deposit of bread wheat grain was found in a Roman ditch at Roughground Farm, Lechlade, Gloucestershire (Letts and Robinson 1993) and was thought to represent a minor crop being grown in association with Spelt wheat.

The mineralised remains are representative of plant remains placed into the pit as part of either human excrement or domestic rubbish and of plant remains that entered the pit accidentally by growing nearby. The foetid nature of the original deposit is shown by the presence of a large quantity of mineralised anthropoid fragments and several examples of fly pupae. A quantity of fish vertebrae in the deposit is also probable evidence of domestic waste.

Mineralised plant remains from Roman sites are not common, with most mineralised remains being associated with later cess and latrine pits or in the case of Potterne, Wiltshire, a Bronze Age midden site (Carruthers 2000). A similar deposit was found in a Roman latrine pit from the Uley Shrines, Gloucestershire and was interpreted as containing both human excrement and the probable remains of hay used to feed the goats at the temple complex (Girling and Straker 1993). The straw and weed seeds found in the West Street deposit may also indicate that part of the deposit is derived from a fodder crop used to feed animals on site.

In conclusion, the samples from the ditches and pit show that the site probably had a mixed agricultural economy during the Roman period, with the presence of arable and pastoral agriculture. The presence of wheat grains and chaff suggest the crops were grown locally and were probably processed on the site. The legumes also seem to have been part of an arable crop, which could have been either for human consumption or animal fodder. The local environment is indicated by the presence of seeds associated with grassland and damp or wet conditions.

# DISCUSSION AND OVERVIEW OF THE PROJECT

The following discussion relates the results of the current project with those from the excavations on the adjoining Mail Marketing International premises (MMI, Young and Young this volume). For a full discussion of the archaeological evidence in the wider setting of West Street and its environs, please see that article.

### The Prehistoric Evidence

The earliest evidence of human occupation at Nos 45–53 West Street dated to the later Iron Age period when a pair of intercutting gullies was opened, cutting a prehistoric soil layer. A modest assemblage of later Iron Age pottery was recovered, including part of a round shouldered jar with beaded rim from the later gully (Fig. 7.1) and residual sherds from a second jar with short upright rim (Fig. 7.2). The gullies formed part of a complex of ditches that appear to have extended onto the adjacent Mail Marketing International premises (MMI, Young and Young this volume) and defined a series of fields or enclosures. The lack of associated contemporary features, save for a short length of fence and few scattered pits at MMI, suggested the enclosures were utilised for agriculture and that the focus of Iron Age settlement activity lay elsewhere.

These Iron Age fields did not, however, reflect the earliest evidence for human occupation on West Street. At MMI a small, but significant collection of flint artefacts identified two distinct phases of earlier and possibly more transient activity in the vicinity dating to the mid to late Neolithic and early Bronze Age periods, the latter associated with a few sherds of utilitarian domestic Bronze Age pottery retrieved from a severely truncated gully.

### The Romano-British Evidence

There is no direct evidence for continuity of settlement at 45-53 West Street into the Romano-British period, as the pottery assemblage and other finds recovered span the later 2nd to 4th centuries. The lack of artefacts dating to the later 1st and early 2nd centuries suggests the area was abandoned for a time, but this is contradicted by the spatial organisation of the Romano-British landscape. The complex of ditches opened over both Nos 45-53 and MMI appears to respect the Iron Age field system and, in some instances on MMI, redefines an earlier ditch, which points to the continuity of an established and stable pattern of local land division. The lack of earlier Romano-British artefacts may just be an accident of survival, the fields may be on the periphery of the settlement, or perhaps reflects that initially the settlement was not conspicuously 'Romanized' after the Conquest and continued using native methods and traditions. This is supported by the animal bone remains; where the pattern of relative frequency for livestock species suggests that the pastoral economy of the settlement was little affected by Romanising influences, but continued with what is considered a more native sheep-based economy (Grant 1989; Hambleton 1999: 46-7; King 1978, 1984 and 1999). The plant assemblage reflected the species identified at MMI, confirming the mixed arable and pastoral economy enjoyed by the rural settlement, and, unusually for a Roman site, included some mineralised examples in a single pit, probably cess waste. Overall, the Romano-British evidence at 45-53 West Street reinforces the picture established at MMI of a modest rural agricultural settlement, the core of which lay elsewhere.

### The Medieval Evidence

Settlement-related activity at 45–53 West Street appears to have been all but abandoned in the post-Roman period and the limited medieval evidence suggests this situation continued until the 12th and 13th centuries. At this time, an extensive relict soil was brought back into agricultural use, pottery sherds probably incorporated during manuring, and two pits were opened and filled. Residual sherds of later medieval pottery spanning the 13th to 16th centuries indicated activity continued throughout the period, but focused some distance from Nos 45–53.

This medieval activity appeared to be a continuation of that recorded at MMI, where evidence for occupation spanned the 12th to 15th centuries overall, but was largely confined to extensive pit-cutting within successive fields or enclosures established over the period. Whilst a few possible tenement boundaries and earthfast structures were identified, no medieval buildings were recorded. This suggested that West Street was sited on the periphery of the medieval village/town and largely remained open ground for much of the period with only piecemeal development along its length.

### The Post-medieval Evidence

A very few residual finds, including two fragments from a mid-17th century plain-bellied soda glass tankard, suggest that 45-53 West Street remained in agricultural use during the 16th and 17th centuries, as did the adjacent MMI premises where a pond and stone-lined well/cistern were constructed and further pit-cutting activity carried out. The 18th century saw little change at Nos 45-53, save for the opening of a cesspit that yielded a significant pottery assemblage (Figs. 9-11) and other artefacts and a linear trench of indeterminate function. These features probably were associated with the operations of a mixed arable and pastoral farmstead established at MMI, where the erection of domestic buildings and animal and storage structures heralded the first development on this part of West Street. This, and the cessation of the long-lived tradition of pit-cutting at MMI, indicated a distinct change from marginal activity on West Street to more formalised occupation, as an inclusive part of the post-medieval settlement.

### The Modern Evidence

The increasing and rapid urbanisation of Bedminster during the early modern period was evident at 45-53 West Street and probably coincided with the expansion of industry and the railway into the area and its resulting incorporation as a suburb of the City of Bristol. This involved several development phases, during which domestic buildings and industrial structures were constructed, the majority recorded on historic documentary sources. This mirrors the evidence for modern development on the neighbouring MMI premises, where the farmstead was demolished in the early years of the 19th century and a successive series of tenements and other buildings, variously depicted on historic maps, were laid out along the West Street frontage. At Nos 45-53, two buildings, one with a cellar, were erected early in the 19th century, the latter attached to the Bedminster Poorhouse founded in the late 18th century on the West Street frontage. By the mid-19th century, the first building had been razed and replaced with a limekiln and associated structures, whilst the second building appeared to continue in use. Both subsequently were destroyed when the Albert Chemical Works and associated brewery and ancillary structures were established on the site in 1878. Historic maps depict the evolving pattern of the buildings over the next 70 years, recording their various modifications and alterations. until the closure of the brewery and chemical works in the mid-20th century. This led to major changes on the site with some buildings demolished and others converted, initially as warehousing and latterly as garages and workshops, a number still occupied in 2005.

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# REVIEW OF ARCHAEOLOGY 2014

# **Edited by Bruce Williams**

### Abbreviations

AAL	Avon Archaeology Limited
BWA	Bristol & West Archaeology
BaRAS	Bristol & Region Archaeological Services
CA-	Cotswold Archaeology

The review of archaeology is arranged alphabetically by parish and covers the four unitary authorities of Bath and North-East Somerset, Bristol, North Somerset and South Gloucestershire, formerly Avon County.

# **BATH AND NORTH-EAST SOMERSET**

### Bath

Block 4ES, University of Bath Campus, Claverton Down, ST 77342 64423. A watching brief revealed major disturbances from earlier university developments and no archaeological features, deposits or finds.

Bruce Williams, BWA

Former Widcombe Social Club, Widcombe Hill, ST 75550 64231. A watching brief revealed modern made ground and no archaeological features, deposits or stratified finds of any date.

Bruce Williams, BWA

Cheltenham Street, ST 7437 6447. A watching brief revealed no features or deposits of archaeological interest.

Luke Brannlund, CA

Twerton Mill, Lower Bristol Road, ST 7268 6473. An evaluation found walls likely to pre-date 1838. A subsequent watching brief revealed no further remains.

Tim Havard and Christopher Leonard, CA

# Keynsham

Somerdale, ST 6562 6912. A watching brief revealed a limestone wall, possibly a medieval or later revetment.

Alex Thomson, CA

# MidsomerNorton

Land at Midsomer Norton ST 6637 5296. An excavation revealed a parallel ditch and hollow way, corresponding with two slightly curving linear anomalies recorded during a geophysical survey. The hollow-way may have linked the medieval village of Chilcompton to the Fosse Way.

Ray Holt, CA

Land at Silver Street, ST 6638 5299. An evaluation identified possible postholes, a possible pit and a palaeochannel, the

latter corresponding with an anomaly identified during a geophysical survey. Other geophysical anomalies were shown to relate to natural features. Modern artefacts and a worked flint were recovered from the topsoil.

Jay Wood, CA

# Radstock

Land to the rear of 'Lynton' and 'Roman Orchard', Wells Road, ST 67664 54394. Archaeological monitoring of a site whose western boundary lay alongside the Fosse Way. However, nothing of archaeological interest was found.

Nick Corcos, AAL

Land at Saltford Golf Club, Golf Club Lane, Saltford, Wells Road, ST 67951 66534. An archaeological watching brief undertaken during landscaping works revealed a kerbed trackway constructed from slag and cinder rubble, which did not appear to be indicated on any of the historic maps which were consulted for an earlier desk-based assessment. However clear traces of the track are visible on modern satellite imagery. It is likely that this feature represents a relatively late 18th/19th century farm track.

> Rachel Heaton, Sarah Newns, Kevin Potter, Nick Corcos, AAL

### Wellow

Stoney Littleton Long Barrow, ST 7349 5720. A watching brief during remedial works observed structural remains possibly associated with the original Neolithic kerb wall of the barrow.

Rebecca Havard, CA

# BRISTOL

### Bedminster

8–12 Mill Lane, ST 58604 71563. A watching brief revealed a 19th-century vaulted cellar, buried topsoil which contained a single medieval sherd, and 19th-century deposits of made ground.

# Bruce Williams, BWA

64–67 West Street, ST 5816 7124. A watching brief during groundworks revealed the site had undergon extensive reduction in ground levels and significant disturbance from its previous use as a fuel service station. No archaeological deposits or finds were revealed.

David Etheridge, BWA

Nos.6–10, Stillhouse Lane, ST 58882 71798. An archaeological watching brief revealed modern rubble. No features or deposits of archaeological interest were revealed. Susana Dias, AAL

St Catherine's Place, Bedminster, ST 58670 71517. An evaluation revealed substantial, well-preserved, structural remains of a watermill. There has been a mill in Bedminster since at least 1086 and the discovery of residual medieval ceramics at the south-eastern end of Mill Lane provides some evidence for activity in the vicinity of the site from at least the mid-13th century onwards. It was not possible to determine when the earliest parts of the watermill were constructed but some parts of it are likely to date from the late 17th or early 18th century.

### Cai Mason, BaRAS

Wapping Wharf, Wapping Road, ST 5857072170. A watching brief was carried out during the mechanical excavation of 40 of geotechnical trial pits associated with Phases 2 and 3 of a proposed mixed use scheme in central Bristol. These mostly revealed varying depths of construction-related disturbance overlying the sandstone bedrock, and in five pits a former cliff edge marking the southern limit of the river channel (R. Avon). In a further six pits, surviving sections of gaol wall and the foundations of the extant gaol gatehouse were also revealed. Deposits of alluvial/intertidal silts of possible archaeological interest and possible stratified archaeology in the form of structural remains and deposits were also observed in at least five of the pits.

Tim Longman, BaRAS

### Brislington

No. 47 Langton Court Road, St. Anne's, ST 62023 72519. An evaluation confirmed that during the latter half of the 19th century and the early 20th century the farm buildings which were part of the nearby Langton Court estate were demolished and robbed out. The grounds suffered heavy horizontal truncation either during their demolition or prior to the construction of the 1920s Co-operative building. The trench revealed a robbed-out wall trench at the northern end, while a smaller linear feature was uncovered to the southwest. All are thought to have been post-medieval with no earlier finds or features being exposed.

Tracey Smith BaRAS

# Clifton

Former Whiteladies Picture House, Whiteladies Road, Clifton, ST 57747395. A standing building record was made of a former row of mid-19th century terraced houses, heavily converted c. 1921 into a cinema, with the addition of a large auditorium to the rear and the construction of a classical frontage in the former front gardens on Whiteladies Road.

# David Etheridge, BWA

Nos 30-32 Tyndall's Park Road, ST 58046 73684. A watching brief was carried out but failed to find any trace of the 1373 County of Bristol Boundary, believed to have

crossed the site at its southern end. A newly cleared-out air raid shelter was recorded.

# Tracey Smith, BaRAS

151 Hotwell Road, ST 5740672463. A photographic record during demolition was made of this building of two-and-ahalf storeys with basement. Dating from the mid-18th-century and in use as a public house from at least 1868 when it was called 'New Dock Tavern', the building was in a dangerous condition. Following demolition, a follow-up excavation to the rear of the building revealed part of an adjoining tap room and brew house.

### Bruce Williams, BWA

Southern Junction Lock, Cumberland Basin, ST 57105 72254. A watching brief was carried out during the digging of test trenches, geotechnical test pits and boreholes in order to ascertain whether any structures or deposits associated with the original southern lock swingbridge survived. The work was located at the eastern side of the current Merchant Road bridge, with test pits and boreholes being located both north and south of the lock in front of the Old Dock Cottages.

The pre-borehole test pitting exposed brick walls on the northern and southern sides of the lock, of uncertain purpose but likely to have been part of the mechanisms for the early 19th century Southern Junction Lock swing bridge. A test trench on the northern side of the lock against the granite quoins of the lock wall itself, revealed the stone build of the lock walls, a substantial structure whose full depth was not exposed but which extended almost 1.40m northwards from the granite quoins. Work on both sides of the lock revealed made ground below the modern tarmac surfaces and alluvial deposits at 0.70m - 0.80m below current ground surface which was possibly redeposited, before clean alluvium was reached at approximately 2m from the current surface.

Tracey Smith, BaRAS

### **Outparish of SS Philip and Jacob**

Site at the corner of Midland Road and Horton Street, St Philips, ST 59900 73025. A watching brief during ground reduction up to 2m deep revealed the remains of up to five buildings of mid-19th century date which had been demolished by 1963, and which had fronted onto Horton Street and Midland Road. The buildings formed a typical 19th century terrace of uniform size. Four of them comprised small terrace houses of one room width. The corner building, which was larger, was a former public house known as 'Albert Tavern'. No associated contemporary occupation material was retrieved. Significantly, the excavation revealed that the level of both Horton Street and Midland Road now lie some 2m above the level of the floors of the buildings.

Susana Dias and Sarah Newns, AAL

### 47-49 Barton Road, St Philips, ST 59972 72825.

A watching brief recorded two walls dating from the 19th century. No other archaeological features or deposits predating the 19th century were revealed.

Rachel Heaton, AAL

### Redcliffe

General Hospital, Guinea Street, (ST 5885 7216). Following a programme of building recording which investigated the former Bristol and General Hospital, an excavation was undertaken by Cotswold Archaeology. The excavation revealed structural remains of two adjacent 18th-century and later properties fronting the southern side of Guinea Street, correlating with the results of a preceding archaeological evaluation. Elsewhere, evidence for later 17th or 18th-century landscaping in advance of large-scale commercial and industrial development was found. Subsequent structural remains of a building first depicted on the 1828 Ashmead Map of Bristol were partially revealed, although no associated floor levels or deposits survived to clarify its function. Remnant footings of one of a row of four small tenement houses, with attached yards, and a former wash block set against the earlier building were also recorded.

### Alistair Barber, CA

St. Mary Redcliffe Church, Redcliffe Way, ST 5913 7235. An evaluation was commissioned to investigate a number of anomalies detected by a Ground Penertrating Radar survey and to provide data on the date, character, degree of survival, extent, significance, and location of any archaeological features or deposits within the land to the north of the church. A substantial structure located near the church is probably a retaining wall, suggesting a significant difference in height between the churchyard and the buildings which were originally located here in the early 19th century and confirmed by the great depth of dump deposits found in most of the trenches. The other structural remains encountered were close to the surface and probably of 19th century date. No archaeologically significant deposits were excavated.

Simon Roper, BaRAS

### **St Augustine**

*No. 31 College Green*, ST 58402 72814. The property is a Listed Grade II building dating from the early 18th century. Following a building assessment by BaRAS in 2013, further investigation and recording was required, largely of the upper storeys. Planning consent allowed for internal partitions to be removed, floors to be investigated, and the roof structure to be examined in more detail than had previously been possible.

### John Bryant BaRAS

Lord Mayor's Chapel, College Green, ST 58404 72838. Photographic recording was undertaken inside the tower during works to replace the old bell frame with a new structure at lower level. The tower was completed in 1487, although the chapel was founded in the 13th century. The peal of six bells was cast by Evan I Evans of Chepstow in 1722, although the existing bell frame is thought to be of 19th-century origin. Examination of the tower interior revealed three disused sets of substantial sockets to take timbers of about 300mm (1 foot) square, indicating that there were some earlier floors or bell frame positions at different levels to those in use today.

John Bryant BaRAS

No. 10 Anchor Road, ST 58176 72586. The results of geoarchaeological investigations indicated that the majority of the deposits are part of the Wentlooge Formation and were composed of three main stratigraphic units, namely 'Alluvium 1', 'Peat', and 'Alluvium 2'. Two radiocarbon dates obtained from peat samples suggest that these deposits developed during the Early Neolithic (from c.4100 cal. BC to c.3500 cal. BC). Volume magnetic susceptibility readings provided potential evidence of human activity both in the intertidal sediments and the peat strata. Assessment of samples from the peat deposits also showed good preservation of pollen and provided possible evidence of both changing estuarine/freshwater influences on the site and of potential human impact on vegetation during the Neolithic.

A watching brief was undertaken during the construction groundwork phase. A mid-19th century stone-built culvert transected the site from north-west to south-east, while to the north, part a cellar belonging to a demolished 19th century building was recorded. In addition, a small quantity of disarticulated human bone, probably dating from the 19th century, was recovered nearby at a depth of c 2m.

Tim Longman, BaRAS

### St George

22 Jeffries Hill Bottom, ST 6370 7243. A photographic record was made of this derelict cottage before demolition. Probably constructed between 1803 and 1842, the building was occupied into the later 20th century.

David Etheridge, BWA

Nos 254–256 Two Mile Hill Road, ST 64097 73865. A limited building survey was undertaken to record the exterior of the Grade II listed buildings prior to and during their demolition, after 20 years of neglect. A photographic record was made of the external elevations, particularly those safely accessible on Two Mile Hill Road and Kennard Road. The buildings, described as a 'pair of attached houses and shops', listed in 1994, were significant in being 'a rare early example of Georgian artisan housing, with a 19th century shop extension'. They appeared to date from the 18th century but few original features were apparent. At some point in the mid/late-19th century a two-storey Victorian shop-front extension was added, as seen on the 1882 First Edition Ordnance Survey plan. Both the shop premises were originally cellared.

### Tim Longman, BaRAS

Avonvale Primary School, Redfield, ST 61506 73353. A building survey was undertaken prior to the demolition of the former school and in advance of a new school being constructed. The two main school buildings, the caretaker's house and a workshop were recorded in detail, all four buildings having retained a number of original period features. The building known as the annexe had suffered the least alteration to its interior features. A subsequent evaluation and watching brief found no archaeological deposits or features and demonstrated that prior to the end of the 19th century the land had been used for pasture or cultivation.

Tracey Smith, BaRAS

# St John

Guildhall Chambers, Broad Street, ST 58801 73101. An evaluation and historic building recording were undertaken. Medieval dumped layers and a possible pit or wall footing were found. These may identify ground consolidation ahead of construction of a late 12th-century aisled hall which stood on the site of 20 Small Street. A medieval or later stonebuilt culvert had removed associated floor levels. Residual worked stone and plaster fragments recovered from later features included limestone pier and shaft fragments from a late 12th-century arcade (remains of which still survive *in situ* encapsulated within a mid 19th-century wall). Two pieces of painted, finely moulded, plaster may represent ornate ceiling decoration from Smyth's house of c.AD 1540, whilst decorated plaster from 19th-century remodelling of the building were also found.

Alistair Barber and Peter Davenport, CA

### St Michael

Queen's Building, University Walk, University of Bristol, ST 58204 73268. An evaluation to locate, identify and date structures shown on a late 1940s survey drawing was undertaken prior to the building of an extension to the Queen's Building. Structural remains of mid-20th century date were found, but due to the site being constrained by the route of modern services, it was not possible to establish whether these related to the survey or to the construction of the Queen's Building itself in the 1950s.

### Simon Roper, BaRAS

Oldbury House, No. 121 St Michael's Hill, ST 58317 73636. A watching brief was undertaken during groundworks for the construction of a ground-air heat exchange system in the front garden. The foundations of the former bay windows were exposed, overlying a series of inter-cutting, abutting and overlying walls and drains with foundation cuts, a cobbled surface and a ditch through made-up ground.

Alistair Byford-Bates, BaRAS

### St Philip & St Jacob

Land at the Corner of Wade Street and Little Ann Street, St Jude's, ST 59829 73501. Following on from a desk-based assessment in 2000 and evaluation trenching in 2013 (see BAA 25), this site was the subject of an archaeological excavation before redevelopment.

The site was formerly occupied by residential dwellings originally established in the very early 18th century as part of a then newly-planned development of artisans' houses. In combination, the data from these studies indicates that the Wade Street site has a history of continuous occupation from c.1700, until the buildings on it were removed in the years on either side of the Second World War as part of a slum clearance project. A very small assemblage of medieval pottery recovered from the lower contexts of the site during the excavation, may hint at some level of activity in the vicinity during that time. The excavation revealed the presence of a complex series of post-medieval structures, deposits and surfaces, with finds also reinforcing the known history of occupation of the site well into the 20th century. The work identified the initial, early 18th century phase of building, and thereafter, into the later 18th and 19th centuries, the clear archaeological narrative was one of progressive subdivision of both houses and their associated plots, and an increasing density of occupation

A follow-up watching brief revealed a cache of 19th century clay tobacco pipes, perhaps reinforcing the known presence on the site of a pipe maker at that time. The break in the artefact sequence during the second half of the 18th century may relate to the progressive establishment, and then subsequent regular sweeping and cleaning, of hard floor and yard surfaces throughout the dwellings occupying the site. A very large cache of machine-made glass sauce bottles was found within a cellar of a property which fronted Little Ann Street, may possibly be traced to the vinegar making works which was established on the south-east side of the road, probably in the early 20th century as an extension to a malthouse which was already in existence by the latter 19th century.

Nick Corcos, AAL

### St Stephen

Marsh Street Gas Main Replacement ST 5886 7272. A watching brief recorded undated flag and cobble surfaces, walls and dumped deposits.

Luke Brannlund and Tom Weavill, CA

# Temple

*Plot 3, Friary, Temple Quay,* ST 59700 72600. An evaluation uncovered structural remains of Isambard Kingdom Brunel's early 1840s Dock and Goods Shed, and also remains of the late 1870s rebuilding of the Goods Shed. The northeast side of the dock appears to have been at least partially demolished in the 1870s.

Cai Mason, BaRAS

### Westbury-on-Trym

No. 49A Parrys Lane, Stoke Bishop, ST 56631 76103. A two-storey building at the former Dairy Crest milk distribution depôt in Parrys Lane was recorded prior to demolition. The ground floor incorporated the remains of a barn that was certainly in place by 1817 and retained much of its character until 1963, when the old roof was replaced by new first floor offices. Cold stores had been installed, both inside the original structure and in extensions along its southern side, and a roofed loading dock added on its downslope side. The depot was used by Hornby's Dairies, a well-known local concern, later named Bristol Dairies, and was later part of the Unigate business before it became Dairy Crest.

John Bryant, BaRAS

# NORTH SOMERSET

### Clevedon

Clevedon Hall Hotel, Elton Road, ST 4003 7098. A watching brief recorded no remains of archaeological interest.

Jay Wood, CA

# SOUTH GLOUCESTERSHIRE

# Bitton

The Old Mill, Golden Valley Lane, ST 68853 71053. An archaeological watching brief and standing building recording were undertaken to form a garage/store within a derelict building and provide a parking area located about 10.m from the main mill.

The site has a rich industrial heritage which is believed to have begun during the 17th century and possibly earlier. Mill House and associated structures evolved over several phases of development and the mill itself has gone through several changes having been connected with the production and/or processing of paper, flour and ochre. The site has also been used as a scrap yard and a poultry farm. An earlier desk-based assessment had suggested that the standing mill building and stables where built sometime prior to 1816, and that the current structure had re-used part of an older building of 18th century date, but no more precise dating evidence was available. A watching brief revealed a sequence of archaeological deposits clearly highlighting significant events in the history of the site, including deposits of an industrial nature, perhaps reflecting the processing of ochre. Unfortunately little dating evidence was found within the deposits, and what was recorded was mostly of 20th century origin.

Rachel Heaton, AAL

# **Bradley Stoke**

Bradley Stoke Community School, Fiddlers Wood Lane, ST 62475 81750. A watching brief was undertaken during groundworks for the construction of a new car and cycle park. A limited number of truncated archaeological and geological features were identified and recorded, but only residual post-medieval and modern finds were retrieved and their original date and extent is unknown.

Ian Powlesand, BaRAS

### **Chipping Sodbury**

*Baptist Church, High Street.* ST 72806 82107. A watching brief during redevelopment work revealed no human remains or deposits of archaeological interest.

Bruce Williams, BWA

### **Easter Compton**

*land rear of 'Wyngarth*', ST 57103 82507. An excavation revealed several agricultural ditches dating from the late mid-late Iron Age to the mid-late 2nd – 4th century.

Bruce Williams, BWA

Hanham

*Mount Pleasant Farm*, ST 65350 71350 A photographic record was made of twenty-two farm buildings, excluding the farmhouse, before demolition. Most of the buildings formed a compact group of limestone rubble, brick, concrete and steel-framed structures dating from the mid-19th century.

Bruce Williams, BWA

# Mangotsfield

Mangotsfield C of E Primary School, Church Farm Road, South Gloucestershire, ST 66965 76530. A watching brief was carried out during groundworks for an extension of the main school and the removal of a small football pitch for a new play area. The paddock to the east of the school was also watched. No archaeological finds or features pre-dated the post-medieval period. The school site revealed only Victorian activity or later, the area south of the main school having been previously reduced in height when the school was built in the 1990s. The paddock revealed mainly 18th-century field drains and a boundary ditch of the same date in the north, while to the south of the field, an irregular feature was exposed which was thought to be quarrying. This was backfilled in the later 17th to 18th centuries.

Tracey Smith, BaRAS

### **Oldbury-on-Severn**

The Paddock House, Camp Road, ST 6108 9280. Evaluation trenching found no remains associated with Oldbury Camp Iron Age Hillfort aside from small quantities of Iron Age finds. Medieval finds were also present.

### Rebecca Havard, CA

Memorial Hall, ST 6094 9270. A watching brief recorded a large ditch, at least 5m wide and 2.2m deep. Although a small assemblage of 12th to 14th-century pottery was recovered from its uppermost fills, the ditch is interpreted as the outer ditch of Oldbury Camp hillfort and was cut by medieval pits or ditches. Two nearby ditches relate to later boundaries.

### Daniel Sausins, CA

Oldbury on Severn to Berkeley Overhead Electricity Interconnector (Z-Route). ST 6140 9405 to ST 6620 9901. An archaeological watching brief was conducted during the construction of 26 new electricity towers, replacing pylons disused since the 1960s. For the majority of the pylons the construction method entailed no intrusive groundworks; however, two of them, Tower 1 at the south-western end of the corridor, and Tower 26 at the north-eastern end, required substantial foundations. A third area, set slightly off the route of the pylon corridor, was the location of the site compound and pylon assembly, and was subject only to topsoil stripping. Here was recorded ridge and furrow, assumed to be of medieval date.

The route of the electricity interconnector crossed the Severn Levels, an area of high archaeological potential which are known to have a complex sequence of deeply stratified alluvial deposits, known as the Wentlooge Sequence, which can both seal and contain archaeological layers. Groundworks at Tower 1 exposed a shallow pit filled with ash-rich deposits just over 1m below alluvial clay, within the Wentlooge Sequence. Samples of the ash-rich deposits couldn't be dated, but their location within the Wentlooge Sequence indicate a possible prehistoric date.

Groundworks at Tower 26 also exposed a buried sequence of deposits within the Wentlooge alluvial sequence that are of significant geoarchaeological interest, with possible evidence of anthropogenic activity, reflecting a buried wetland environment of late Bronze Age to Iron Age date, with some evidence for burning episodes which *may* be anthropogenic in character

Kevin Potter, AAL

### Siston

Siston Hill Farm, Siston Common, ST 66295 75084. An excavation and watching brief was undertaken prior to and during the construction of a new housing development. The work uncovered structural remains of a post-medieval farm and coal mine, which included fragmentary remains of a horse gin and two mine shafts. Siston Hill Farm existed by the end of the 18th century; the coal mine was probably established c 1799 and closed between 1810 and 1839 and the farm subsequently reverted to purely agricultural use. The horse gin and farm buildings were demolished without record between 2004 and 2009.

Cai Mason, BaRAS

38 Siston Common, ST 366438 174305. A watching brief behind the rear garden of Rock House revealed topsoil, subsoil and weathered limestone bedrock. No features, deposits or finds of any date were observed.

Bruce Williams, BWA

# **Stoke Gifford**

Land at Coldharbour Lane, ST 6255 7775. An evaluation recorded a post-medieval ditch, perhaps a former field boundary pre-dating those depicted on Naston's 1725 map of Stoke Gifford.

Alistair Barber, CA

*Wallscourt Park, UWE Frenchay Campus,* ST 58412 75925. A watching brief undertaken during groundworks for the construction of new student accommodation uncovered a stone wall associated with a pre-1853 farm, and a system of stone-lined land drains, a quarry and a trackway associated with agricultural improvements undertaken in the early 1850s.

Cai Mason, BaRAS

# Thornbury

*Rear of 23 St John Street*, ST63838 90132. A drawn and photographic record was made of this derelict, two-storey cottage before demolition. A follow-up watching brief during demolition revealed two principal rooms on the ground floor, together with a small rear extension. The building could not be dated archaeologically but appears to have been in existence from at least the 1840s. During the late 19th century it was occupied by workers from the nearby saw mill.

## Bruce Williams, BWA

Land at Pound House Farm, Rockhampton, ST 6645 9271. Excavation of nine trenches in advance of the construction of a single wind turbine in a field to the north-east of the main farm complex revealed unstratified sherds of probable Roman roof tile in one trench and numerous V shaped and bowl shaped cut features containing RB pottery in another trench.

Rachel Heaton, AAL

### Tytherington

Baden Hill Road, ST 67028 88335. An evaluation of the site revealed a partially intact late 19th/early 20th century brick drain or soakaway but no archaeological deposits or features were present. In particular, there was no evidence of any activity associated with a medieval grange thought to lie close to the site, which belonged to Llantony Priory. *Tim Longman, BaRAS* 

# REVIEW OF ARCHAEOLOGY 2015 Edited by Bruce Williams

Abbreviations

BWA	Bristol & West Archaeology
CA	Cotswold Archaeology

The review of archaeology is arranged alphabetically by parish and covers the four unitary authorities of Bath and North-East Somerset, Bristol, North Somerset and South Gloucestershire, formerly Avon County.

# **BATH AND NORTH-EAST SOMERSET**

### Bath

Land at Odd Down, ST 7418 6152. An evaluation by Cotswold Archaeology revealed field boundary ditches, one of which was cut by a rectangular prehistoric pit. Part of a possible Roman ditched enclosure was also revealed, as were remains that potentially formed part of the Wansdyke. *Tom Weavill, CA* 

Pultney Road Gas Main Replacement. ST 7553 6426. A watching brief by Cotswold Archaeology exposed a limestone wall, abutted by post-medieval made ground deposits. It seems likely that the wall represents the remains of a structure that stood prior to the construction of the Kennet and Avon Canal in the late 18th century.

Greg Crees. CA

Temple Precinct, ST 7505 6468. A watching brief by Cotswold Archaeology revealed parts of the extant building, which dates to the 1790s. Roman masonry blocks were identified built into the building and some questions on the dating of aspects of the basement structures were addressed. *Peter Davenport, CA* 

Thomas Street Gas Main Replacement. ST 7534 6580. A watching brief by Cotswold Archaeology revealed no archaeological remains.

Greg Crees. CA

Seven Dials, ST 7486 6476. A watching brief by Cotswold Archaeology revealed no features or deposits of archaeological interest.

### Luke Brannlund, CA

Land at Silver Street, ST 6638 5299. An evaluation by Cotswold Archaeology revealed possible postholes, a possible pit and a palaeochannel. A prehistoric worked flint was recovered from the topsoil.

Jay Wood, CA

15 Somerset Place, ST 7442 6610. A watching brief by Cotswold Archaeology revealed no deposits older than the construction of the crescent in 1790–1821.

Simon Cox. CA

### Keynsham

Keynsham, New Fry Club and F1 Pitch. ST 9247 8849. An excavation and watching brief were undertaken by Cotswold Archaeology at the former Cadbury Factory and surrounding land. The work revealed part of an enclosure, holding area, and droveway more than likely for the management of livestock. The evidence suggests that these features were in use until the mid 2nd century AD and that they were located on the western edge of an extensive Roman small town, possibly that of *Traiectus*, previously identified through excavation and geophysical survey.

Tim Havard, CA

Keynsham, Somerdale. ST 6562 6912. A watching brief by Cotswold Archaeology revealed a prehistoric enclosure and prehistoric pits, along with the remains of extensive Roman or later quarrying. Post-medieval to modern boundaries were also identified.

Tim Havard, CA

# BRISTOL

# Bedminster

Filwood Park. ST 5952 6937. An evaluation by Cotswold Archaeology revealed shallow ditches, a pit and a boundary ditch, all of which were undated by finds but which might be post-medieval or later. The site lies within the former Whitchurch Airport and a suspected backfilled bomb crater was also found and several shrapnel fragments were recovered from the topsoil.

Matt Nichol, CA

Knowle, Torpoint Road. ST 5873 7045. A watching brief by Cotswold Archaeology identified no remains of archaeological interest.

Jay Wood, Jonathan Orellana, Tom Weavill, CA

# **Brislington**

623–625 Bath Road, ST 61579 70983. An excavation and watching brief in close proximity to the site of Brislington Roman Villa revealed several tree throws and buried soil horizon which contained sherds of Romano-British Pottery. No significant archaeological remains were found.

Bruce Williams, BWA

# **Castle Precinct**

Former Central Ambulance Station, Marybush Lane, ST 59389 73108. Seven trenches were excavated within the eastern limit of the castle precinct. Six of these were located north of the castle moat which now lies within an east west culvert. Indications are that ground levels north of the culvert have been considerably lowered since the site was cleared in the 1960's following an air raid in 1940, with the natural geology now lying remarkably close to present-day ground levels. One of the trenches (3) contained a substantial linear, rock-cut, ditch, probably defensive, which appeared to be aligned NE/SW. In width it measured some 2.5 m and it was not bottomed at 1.7m. Upper fills were largely clean, re-deposited natural sand, interbedded with deposits containing plant remains and animal bones, probably discarded kitchen and domestic waste. Three sherds of pottery from the ditch appear to date its backfilling to between the mid. 11th and the mid. 12th century, which would place its construction during the late Saxon period.

Bruce Williams, BWA

### Horfield

1A, 3-5 Ashley Down Road, ST 59399 76181. A watching brief revealed late post-medieval/modern walls and a buried topsoil. No significant archaeological remains were found. Raymond K Ducker, BWA

**Outparish of St Paul** 

Land rear of 25A Bath Buildings, ST 5911 7437. A watching brief revealed Cutler's Mill Brook within a stone culvert, and 19th-century walls of industrial buildings.

Raymond K Ducker, BWA

### Redcliffe

25 Redcliff and 14-14a St Thomas Street, Sampson Court, ST 3590 1727. A watching brief by Cotswold Archaeology revealed a silt deposit dating to the 13th to 15th-centuries, possibly a fill of the 'Law Ditch', a medieval boundary ditch between the parishes of Redcliffe and Temple. A 19th-century brick-built culvert that later replaced the open ditch was also found along with walls and deposits likely to date to the 18th to 20th centuries.

Luke Brannlund, CA

### St George

Kingsmarsh House Gas Mains Replacement, ST 6047 7336. A watching brief by Cotswold Archaeology revealed postmedieval demolition deposits and garden remains associated with the back plots of later post-medieval or modern houses. *Greg Crees, CA* 

### St Paul

Bishop Street/Dean Street, ST 59447 73815. Walls and structures connected with three adjoining properties bombed during the last war were recorded during a watching brief. Raymond K Ducker, BWA Junction of Wilder Street/Brunswick Street, ST 59301 73841. A watching brief recorded the walls of 19th/20thcentury commercial properties.

Raymond K Ducker, BWA

### St Philip

51A and 57 Braggs Lane, ST 59926 73318. A watching brief revealed the foundation walls of 19th-century properties together with a simple stratigraphic sequence.

Raymond K Ducker, BWA

### Temple

Temple Quay, Plot ND7. ST 5977 7277. An evaluation by Cotswold Archaeology revealed up to three metres of made ground and garden soils, along with post-medieval to modern features including a ditch, a pit and a possible culvert or well.

# Oliver Good, CA

Temple Back, Avon Fire Station. ST 5929 7283. An evaluation by Cotswold Archaeology reached the undisturbed riverine alluvium. This was overlain by a trampled or re-deposited layer containing 12th to 13th-century AD pottery. Soil horizons overlying this deposit contained 12th to 15th-century AD pottery, suggesting an initially undeveloped area, perhaps utilised as gardens within tenement plots to the rear of medieval properties fronting Water Lane. A stone wall footing broadly correlated with the rear wall of properties fronting onto Water Lane depicted on Millerd's 1673 plan of Bristol, and also with a former tenement plot division and the exterior wall of a building shown on Ashmead's plan of 1828 and on the 1884 OS 1st Edition map, by which time the tenement plots are depicted as fronting Temple Street and Temple Back, rather than Water Lane. The evaluation also identified the construction and periodic adaptation of residential and/or commercial buildings during the post-medieval and modern periods, represented by brick foundations and flagstone flooring of late 18th or 19th-century or later date. A subsequent watching brief revealed no further remains

Alistair Barber and Luke Brannlund, CA

# NORTH SOMERSET

Congresbury Yeo Tidal Banks. ST 3782 6573. A watching brief by Cotswold Archaeology revealed no archaeological remains.

Simon Sworn, CA

### Weston

Weston Airfield, ST 3441 6042. An excavation by Cotswold Archaeology targeted on two palaeochannels identified during previous geophysical and lidar surveys exposed no deposits of archaeological interest.

Luke Brannlund, CA

### Nailsea

Nailsea Glassworks, ST 4768 7085. A watching brief by Cotswold Archaeology at the former Nailsea Glassworks revealed structural remains belonging to the glassworks, some of which had not been recorded previously. A detached grave marker was also found.

Jonathan Orellana, Rebecca Havard, Peter Davenport, Rob Skinner, CA

### Wrington

Site U Bristol Airport, ST 5030 6466. A watching brief by Cotswold Archaeology recorded no deposits of archaeological interest.

Sikko van der Brug, CA

# SOUTH GLOUCESTERSHIRE

# Aust

*Church Lane*, *Pilning*, ST 5377 8490. An evaluation saw the excavation of 22 trenches which revealed a soil spread at depth within the alluvial sequence, containing a single medieval sherd. Nothing of archaeological significance was found.

Raymond K Ducker, BWA

# **Coalpit Heath**

Badminton Arms, ST 6995 8348. A watching brief by Cotswold Archaeology revealed no archaeological remains. *Peter Searle, CA* 

## **Easter Compton**

Bristol Zoo Gardens Wild Place, ST 5745 8161. A watching brief by Cotswold Archaeology identified no archaeological remains.

Christopher Leonard, CA

# Hinton

Hinton, Ring o' Bells, ST 7233 7746. An evaluation by Cotswold Archaeology exposed no features or deposits of archaeological significance.

Matt Nichol, CA

### **Oldbury-on-Severn**

*Matilda House*, ST 60986 92655. A watching brief on the excavation of an electricity cable trench revealed no archaeological deposits.

Raymond K. Ducker, BWA

# **Stoke Gifford**

Stoke Gifford, Land at Coldharbour Lane, ST 6255 7775. An evaluation by Cotswold Archaeology revealed a postmedieval ditch, possibly a former field boundary pre-dating Naston's 1725 map of Stoke Gifford.

Alistair Barber, CA

### Thornbury

Thornbury, Park Mill Farm, ST 6269 9142. A watching brief by Cotswold Archaeology revealed no archaeological remains.

Luke Brannlund, CA

# Wickwar

*Wixoldbury Farm*, ST 70125 87370. Evaluation trenching revealed topsoil overlying natural clay. No archaeology was revealed.

Bruce Williams, BWA

# Yate

Yate, Brinsham Bridge, ST 7260 8490. An excavation undertaken by Cotswold Archaeology followed on from a geophysical survey and trial trench evaluation which had revealed a Roman rectilinear ditched enclosure. The excavation was focused on this enclosure and machine stripping revealed its full extent of 130m by 87m. The excavation showed the enclosure to have originated in the 1st century AD (Period 1) as a rectilinear ditched enclosure with two entrances. Few internal features were present. Recutting of the enclosure ditches was evident and the enclosure was remodelled somewhat during the mid/late 1st to later 2nd or early 3rd centuries (Period 2.1). Ditch fills from this period attest to the likely presence of an internal bank and a wooden gateway seems to have been provided at one of the entrances. Occupation continued into the later 3rd to later 4th centuries (Period 2.2), although the ditch itself may have fallen into disuse by this time. Internally, a dark grey silty clay layer covering an area of c. 5m by 5m and abutting a small fragment of dry-stone wall has been ascribed to this period. This area produced a large assemblage of pottery and metalwork (mainly nails) and may have been the location of a building. The only other internal features were a few pits or postholes, a ditch and a depression containing the extended supine (but poorly preserved) skeleton of a juvenile. The enclosure ditches continued to collect pottery into the 11th to 13th centuries.

There are numerous examples of Roman rectilinear enclosures throughout Britain, including within the Cotswolds and Severn Vale, and in these terms, the Brinsham Bridge enclosure appears unremarkable. However, the small pottery assemblage from the site includes types normally associated with high status 1st-century AD sites such as significant Late Iron Age complexes, Roman forts and urban centres, and suggests that the site was more significant than might be implied from its morphology. No villas have yet been recorded in the vicinity.

Neil Holbrook, Jonathan Orellana and E.R. McSloy, CA