Warwickshire County Council

# 8000 Years at Barford: The Archaeology of the A429 Barford Bypass, Warwickshire, 2005-7

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Warwickshire County Council

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## SUMMARY

**Archaeological fieldwork along the route of the A429 Barford Bypass identified evidence for human activity extending over the preceding 8000 years. Preliminary surface survey conducted in 1994 and 2001 recovered a small assemblage of flint tools and waste flakes representative of nomadic visits during the Late Mesolithic (*c*6000 - 4000 BC) and Neolithic (*c*4000 – 2500 BC) periods. However. a single sherd of Neolithic pottery found residually in the base of a Late Iron Age pit hints at a more persistent presence somewhere in the near vicinity during the Neolithic period. Later flintwork of Bronze Age date (*c*2500 – 800 BC) was also recovered but two trenches designed to locate a possible Bronze Age barrow suggested by place name evidence as lying on the boundary between Barford and Wasperton parishes only revealed an undated buried soil horizon with no evidence for a barrow ditch.**

**Late Bronze Age/Early Iron Age (*c*1200 – 400 BC) activity was represented by some large decorated pottery sherds buried with a rubbing stone in a small pit in Area B. This cache appears to have been covered by a deposit of charcoal and charred barley seeds which has yielded a radiocarbon date of 210-20 Cal BC (SUERC-24744).**

**Intensive agricultural settlement was not evident until the Middle to Late Iron Age date (*c*400 BC – AD 43), evinced at two sites referred to as Areas A and B. In Area A, an alignment defined by a linear pit group was redefined by the north arm of a large V-shaped ditch in an L-shape which was attached antenna-like to a large double ditched rectangular settlement enclosure located outside the road corridor. Few finds were recovered from the ditch although an upper jaw bone, probably from a young woman, was recovered from near the base at the end of the eastern arm: a radiocarbon date taken from the bone indicates she died between 390 and 200 Cal BC (SUERC-24967). Romano-British and Anglo-Saxon pottery recovered from the upper ditch fills show that the feature remained a prominent earthwork until at least the middle of the 1st millennium AD.**

**An arrangement of five pits was aligned along the western side of the north arm and one pit contained a dump of burnt spelt wheat radiocarbon dated 390-200 Cal BC (SUERC-24745). A further group of seven disparate pits lay in the area between the L-shaped ditch arms and one pit contained a burnt barley crop which was radiocarbon dated to 360-50 Cal BC (SUERC-24746).**

**In Area B a group of Iron Age storage pits yielded a small assemblage of pottery and a small group of postholes may have represented a nearby structure of uncertain form. A sequence of field boundary gullies on a north-west to south-east axis are thought likely to be Late Iron Age or Romano-British in date, although they were heavily truncated and no finds were recovered. Similarly undated boundary gullies, albeit on a north to south axis, were identified in Areas E and G whilst in Area H an entrance gap was examined, the terminals of which yielded a significant assemblage of Romano-British pottery.**

**A single sunken-featured building examined in Area D yielded a small assemblage of 5th/6th century pottery. These finds add to a growing corpus of Anglo-Saxon period evidence in the region and also provide a tangible link between the Roman and medieval settlement at Barford.**

**A section through the causeway leading to Barford bridge (Area J) revealed the foundation stonework of an 18th century winged flood culvert and part of the facing arch. A group of five wooden piles recovered from the adjacent floodplain may have been associated with a fish weir or bank revetment but neither of the two piles tested yielded a dendrochronology date (Area I).**

**The report contains details the preliminary surveys and describes the excavation and recording of each of the sites identified. There then follow details of the radiocarbon dates obtained and analyses of the flint, pottery and quern stones recovered. Following a description of the environmental evidence, a final section discusses the combined evidence with reference to other sites in the region and attempts to develop a model for the evolution of the Holocene landscape of this part of the Avon Valley.**

## 1. INTRODUCTION

In 2003 Warwickshire County Council obtained planning permission (Ref R1494/02CC111) for the construction of the A429 Barford Bypass, a single carriageway road 2.1km long, skirting the west side of Barford village, between Wasperton Hill and Sherbourne Park.

A preliminary Stage 1 archaeological survey, carried out in 1994, identified a small number of sites which might be affected by the construction of the bypass. This background archaeological signature prompted a limited programme of fieldwalking that was only carried out in those fields that were in a suitable condition at that time. A small assemblage of flintwork was recovered from an area immediately west of Barford (Warwickshire Museum 1994).

Stage 2 survey was completed in 1995 and included a detailed desk-based assessment and walk-over field survey of two of the proposed routes, the subsequent report making recommendations that two sites would require further fieldwork before the construction began (Warwickshire Museum 1995).

In the same year a Stage 3 survey was incorporated into an Environmental Statement (Warwickshire County Council 1995) but was confined to checking and updating of the Stage 2 survey. Further updating and a repeated walk-over survey was carried out for the revised Environmental Statement of 2002. The survey detailed eight archaeological sites recorded on the Warwickshire Historic Environment Record (HER) that would be affected by the scheme. It also flagged up the possibility that previously unknown sites might be revealed during the construction work (Warwickshire County Council 2002). The consequent archaeological mitigation strategy for the road construction required a programme of works to be carried out before and during the construction process.

A limited programme of trial trenching was initiated in August 2005. The results of this work prompted the selection of two areas for detailed excavation which began later that same month. A watching brief was undertaken during road construction in February and March 2006 and in March 2007.

## 2. LOCATION AND TOPOGRAPHY

The parish of Barford lies immediately south of Warwick, the modern village (centred on National Grid Reference SP 2690 6075) lying within a broad meander 'loop' of the River Avon which also forms the westernmost parish boundary (Fig 1). The present village lies mainly on the 1st and 2nd terrace river gravels between the 45m and 50m contours, but extends eastward and upslope onto an outcrop of Mercia Mudstone (BGS 1984). It is overlooked by Watchbury Hill (85m aod) some 1km to the east. The former A429 skirts the foot of the slope across the meander to align with a medieval bridge which, as the appellative suggests, replaced a ford which historically gave access to Warwick and thence to Coventry.

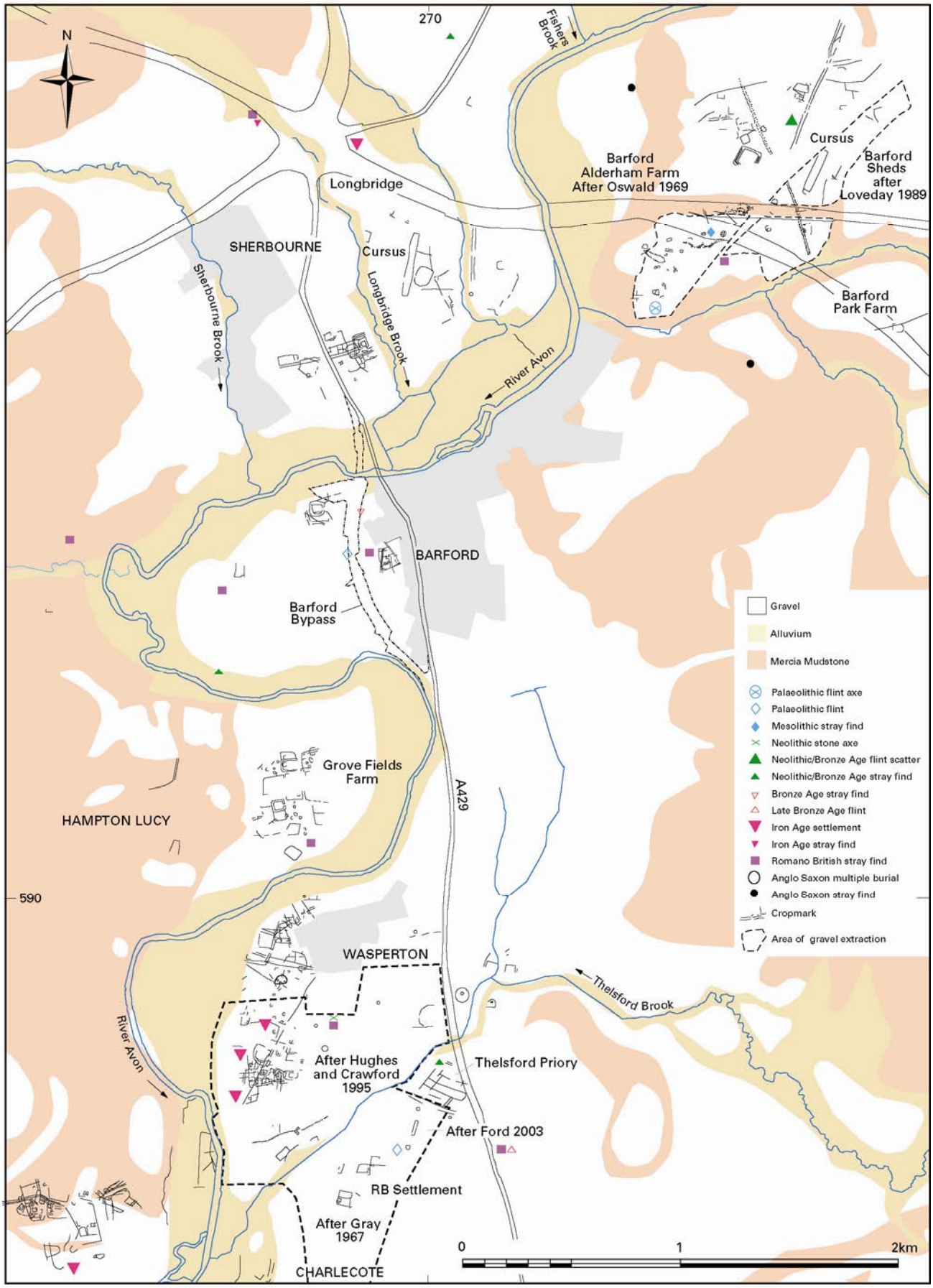


Fig 1: The Avon Valley: geology, drainage, cropmarks and other archaeological sites

The River Avon rises near Naseby in Northamptonshire and flows broadly south-west through Warwickshire to Tewkesbury in Gloucestershire where it joins the River Severn. The Avon Valley in Warwickshire is a narrow, shallow, ravine incised mostly through low lying Mercia Mudstone hills. It emerges some 3.7km to the NNE of Barford around a protrusion of Triassic sandstone at Warwick which delineates the southern extent of the Permian and Carboniferous rocks that outcrop to the north. South of Warwick the middle Avon Valley is at it widest, almost 2km at Barford, providing well-drained but slightly acidic farmland.

The new bypass diverts around the village leaving the former A429 at SP 2700 6000 in a broad curve across the meander to rejoin the old road after crossing the river at SP 2670 6120.

# 3. ARCHAEOLOGICAL BACKGROUND

## Palaeolithic and Mesolithic

The Avon gravels contain occasional evidence of human tool making in the Palaeolithic period (*c*700,000–8000 BC), although the majority of these finds would have been transported within the gravel from other areas as sediment. Two such worked flints have been found in Barford parish, although these particular examples can tell us little about the early hominins that made them (Fig 1). The post-glacial (Holocene) history of the Avon Valley begins during the Mesolithic period (*c*8000–4000 BC). The small scatter of flint tools of this date found in the area indicates the presence of mobile hunter-gatherers. No camp sites have been identified, although survey work capable of distinguishing such sites has been very limited.

## Neolithic

The Avon Valley was a major route-way and line of communication during the Neolithic (*c*4000–2500 BC), the period in which the first monuments were built and farming first developed. A great ceremonial monument complex was constructed along the river banks between Warwick and Charlecote, perhaps forming a centre for a cult (Loveday 2007). At Barford (Barford Sheds and Alderham Farm complex), Longbridge and Charlecote the earliest elements in the complex appear to have been long, processional cursus monuments dating from the Middle Neolithic (*c*3400-2900 BC) (Palmer 2007a). At Wasperton the earliest contemporary element may have been a large segmented circular enclosure next to the Thelsford Brook (Hughes & Crawford 1995). A shorter oblong enclosure excavated at Charlecote may have been a derivative of the early Neolithic long barrow tradition although these features remain little understood (Loveday 2003). It was flanked by two equidistant ring ditches, one containing an inhumation burial (Ford 2003). A long mortuary enclosure was excavated at Barford Sheds (Loveday 1989, 70) and a penannular ring ditch was excavated at Barford, Alderham Farm (Site D) (Oswald 1969).

Within this landscape there is little evidence for contemporary settlement apart from a few concentrations of worked flint. Similar flint scatters are found widely across the county so their presence here lends little credence to much previous hyperbole that the terraces were favoured by early farmers. In fact, the evidence to date suggests that people at this time were largely mobile, ranging with their domesticated livestock over a wide area, only visiting these sites periodically. In some locations flints were deliberately deposited in shallow pits along with broken pottery vessels and the remains from episodes of feasting. Nearby examples were

excavated at Wasperton (Hughes & Crawford 1995), Barford, Alderham Farm (Site B) (Oswald 1969, 17) and Barford Sheds (Site IV) (Loveday 1989, 63).

## Bronze Age

The great monument complex attracted additional activity in the early Bronze Age (*c*2500–1500 BC) when large burial mounds were constructed at Wasperton (Hughes & Crawford 1995), and Barford Sheds (Loveday 1989), whilst a complex hengiform feature was excavated at Barford, Alderham Farm (Oswald 1969).

The presence of a possible mound or barrow of early Bronze Age date is suggested by place name evidence on the southern side of the Avon meander at the boundary between Barford and Wasperton. The name *Inggeslowe* is recorded in 1400 as the point where fishery rights on the river ended (WRO CR 1886/483); and another reference (WRO CR 1886/481), for 1398/9 identifies this point as being on the parish boundary between Barford and Wasperton.

Plate 1: Evaluation Trench 2, positioned on the Wasperton/Barford parish boundary to investigate a possible burial mound indicated by documentary references

Contemporary evidence for settlement is still unknown, although three post-built roundhouses excavated at Barford Sheds have been suggested as Bronze Age (Hingley 1996, 18).

The middle Bronze Age (*c*1500–1200 BC) remains something of an enigma in this region as very little evidence for activity of this period has been recorded. Occasional bronzes are found, particularly by metal detectorists, but these are without context and therefore little understood. This shortfall in evidence may in part be related to our inability to distinguish a flint technology datable to this period, and it is also possible that pottery, *de facto* the most resonant indicator of prehistoric settlement, was not commonly used in this area during this period. In other regions it is in this period that the first evidence for permanent settlement and field systems are found.

During the late Bronze Age (*c*1200–800 BC) the local valley landscape was increasingly divided by linear boundary features, although, the settlements of this date appear fairly ephemeral. The earliest evidence for land division in the county comes from the nearby Wasperton complex where extensive excavations to the south of the village in the 1980s revealed a large territorial boundary ditch that cut off a meander of the river sometime around 1300-800 BC. The earliest physical remains of settlement, in the form of house-sized, ditched enclosures are, however, dated later (*c* 850-650 BC), the same period in which a pit alignment boundary re-inforced the territorial boundary. Similar enclosures excavated in the 1960s at Barford, Alderham Farm were found to be Iron Age (Oswald 1969). A pit group excavated at Hampton Lucy, probably represents a thriving settlement on the opposite bank of the Avon (Palmer 2008). Fieldwalking on the route of the bypass in 1994 located a small scatter of probable later prehistoric flint on the west side of Barford (Warwickshire Museum 1994).

## Iron Age

Many of the Avon Valley cropmarks appear on morphological grounds to date from the Iron Age (800 BC–AD 43), implying that farming settlements were widespread along the valley. The earliest settlement enclosures at Wasperton were constructed around 650-550 BC and replaced before 250 BC only to be abandoned at the end of the millennium (Ann Woodward pers comm). Further settlements have been excavated at Barford, Alderham Farm (Oswald 1969) and Barford, Park Farm (Cracknell & Hingley 1994). At Wasperton and other local sites disused storage pits were used as graves and backfilled with domestic refuse (Palmer in press). The Hampton Lucy settlement complex developed throughout this period (Palmer in prep).

Within the Barford loop, the westernmost cropmark complex (Fig 1) is formed from three linear ditches in a U-shape and therefore perhaps represents three sides of a rectangular enclosure. The northern cropmark complex (Fig 2; MWA 4621) to which this present work directly relates consists of a large double rectangular ditched enclosure with an eastern entrance from which antenna ditches extend to the east. The southern antenna turns south and then west to form a parallel side of a trackway or drove road that then turns north-west at the rear of the enclosure. An L-shaped cropmark is conjoined to the north-east corner of the enclosure by a spur (Fig 3).

Plate 2: A maxilla (upper jaw bone – probably from a young woman) of Middle Iron Age date being excavated from the bottom of ditch **1** (Area A)

## Romano-British

Many of the Iron Age cropmark complexes in the valley conceivably include Romano-British elements which could suggest that occupation was continuous into this period. At Wasperton a complicated ditched enclosure sequence along with three corndriers and two wells suggest the existence of a substantial farming settlement and it remains possible that contemporary buildings were lost to gravel quarrying. A discrete settlement complex was also excavated near Charlecote (Gray 1967). The cropmark complex immediately south-west of Barford includes a number of linear gullies enclosing an area in which other linear features may indicate rectilinear buildings or other structures. Romano-British pottery sherds have been recovered from the surface of the field over this cropmark and from fields within the river's meander. Such pottery scatters probably reflect dispersion by manuring and implicitly, the former presence of a Roman field system. At Wasperton an extensive Romano-British cemetery was excavated on the east side of the settlement complex (Crawford 1981, 1982, 1983, 1984), whilst only limited finds of this date have been excavated at Hampton Lucy.

## Anglo-Saxon

Very little other than the pagan burial evidence is known about the Anglo-Saxon occupation of the Avon Valley. The Romano-British cemetery at Wasperton continued in use into the early Anglo-Saxon period (Carver *et al* 2009) and at least two quintessentially Anglo-Saxon sunken-feature buildings (SFBs) were found which possibly formed part of a settlement (Crawford 1983). A further cemetery was discovered south of Warwick at Longbridge in 1886. A major Anglo-Saxon palace is implied by cropmarks and limited fieldwork (Hirst & Rahtz 1973) at Hampton Lucy (Hatton Rock) and it is likely that the name Barford was an early Anglo-Saxon place-name given that includes a topographical element (Gelling 1982, 67).

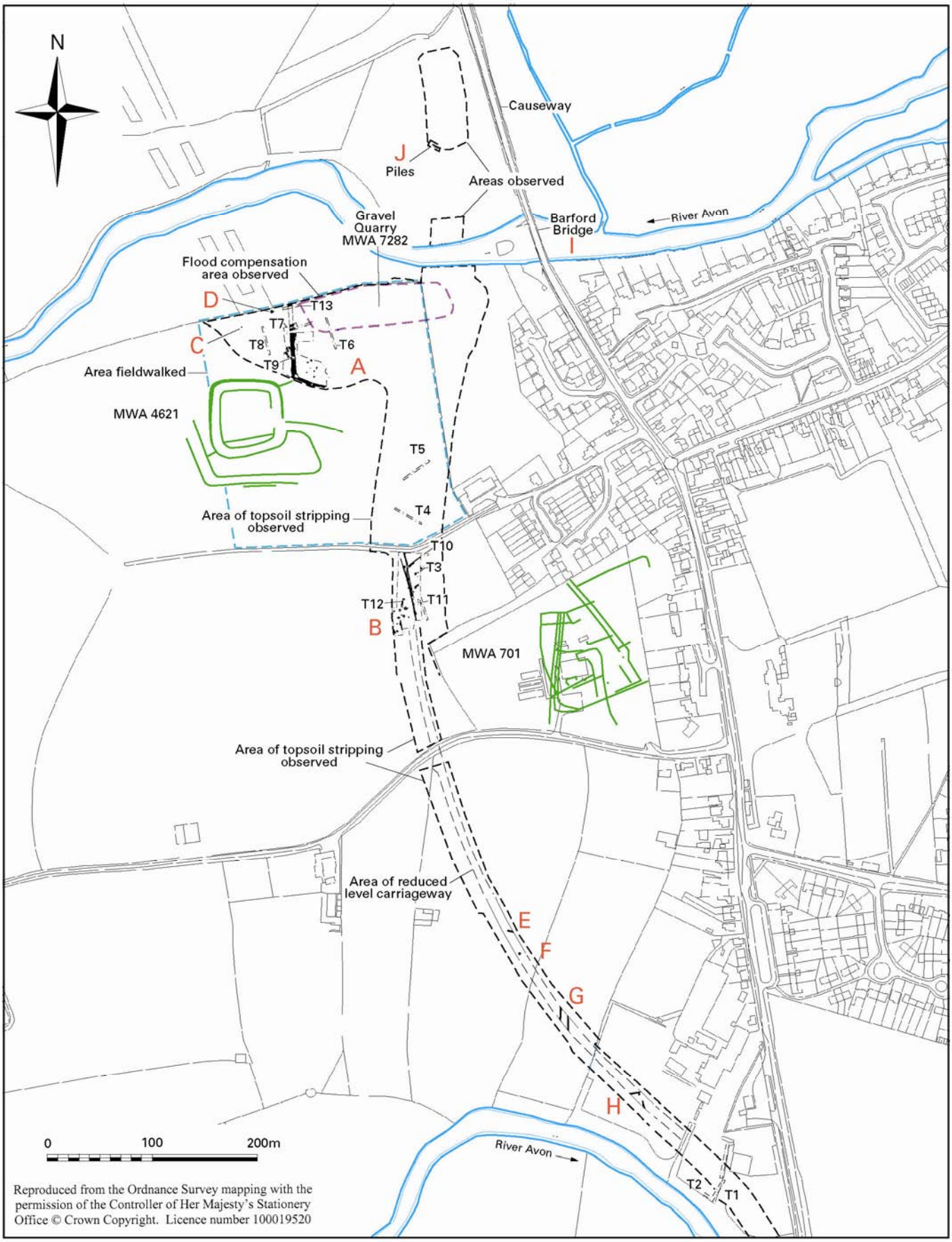


Fig 2: Location of excavated trenches and sites along the bypass route

## Medieval

The outline of the modern settlement pattern in the area had developed by the late Saxon period (800–1066). The Domesday survey of 1086 records manors at Sherbourne (*Scireburne*) Wasperton (*Wasmertone*) and two at Barford (*Bereforde*) corresponding to the modern parishes. Medieval (1066–1540) Barford village lay mainly on the east side of the main road which 'then as now' runs along the Avon valley between Stratford and Warwick, the appellative ford indicative of its position at a river crossing.

Barford bridge is first recorded in 1484 and was probably built after 1339 when a document refers to the ford of Barford (NRO DDE Addit. 86/68, 16). In about 1540 the bridge is described by Leland as 'a greate stone bridge over Avon' consisting of '8 fayre arches' (Toulmin Smith 1907-10, V, 153; II, 46).

Each of the medieval villages would have been surrounded by communal open field systems. Each field and furlong was divided into strips or selions which make the characteristic ridge and furrow patterning. Little of this survives at ground level, although it is possible to see remnants from the air. Within the road corridor all the visible ridge and furrow is aligned north/south parallel with the main road.

## Post-Medieval

The main development during the post-medieval period (1540–1750) was the enclosure of the medieval open fields and their division into compact farms. This process, which gave the landscape its modern appearance, was spread over a period of nearly 250 years. Barford was enclosed under a Parliamentary Enclosure Act of 1760, although parts of the parish were enclosed earlier.

From 1638 the maintenance of Barford bridge can be traced in the Quarter Sessions records which show that the bridge had two elements: the medieval stone 'cart bridge' linked to a wooden 'horse bridge' which ran across the flood meadows. The existing causeway and two sets of flood culverts were built between 1783 and 1786 whilst the main part of the bridge was completely rebuilt between 1792 and 1795. The main road was made a turnpike in 1753-4 (Warwickshire Museum 2002) and during road widening in the 1965 the flood culverts on the north bank were widened with concrete box extensions.

## Archaeological Interventions

Surprisingly little archaeological fieldwork has been undertaken in the village of Barford (not shown on plan). In 1999 observations to the rear of 2 and 4 Wellesbourne Road revealed a single medieval pottery sherd, a few post-medieval sherds, an 18th century wall and a possible well (Warwickshire Museum 1999). In 2001 an evaluation at Oldhams Transport Depot yielded a single abraded Romano-British sherd (Warwickshire Museum 2001). During 2004 an archaeological trench excavated to the rear of a new property at Hemmings Mill revealed a series of undated gravel quarry pits (Palmer 2004a).

# 4. ARCHAEOLOGICAL PROGRAMME

Fieldwalking was undertaken in a single field. It was divided into 20m transects and finds collected within 60m stints (Fig 2). A small assemblage of prehistoric flint was recovered (see below).

Plate 3: Evaluation Trench 3 in Area B showing linear boundary gullies before excavation

A series of 13 trial trenches was machine excavated in August 2005 (Fig 2). Trenches 1 and 2 were dug around an existing building in an attempt to locate the possible barrow implied by a documentary reference (MWA 7287). Trenches 3-5 and 10-12 (Area B) were positioned over a flint scatter identified in 1994 (MWA 7288) and Trenches 6-9 and 13 (Area A) were positioned over and around a cropmark ditch which extended from a cropmark enclosure (MWA 4621) on the southern bank of the Avon (SP 2655 6090).

Substantial and well preserved deposits were encountered in Areas A and B, whilst no evidence for a barrow could be discerned in Trenches 1 and 2. The deposits in Areas A and B were sufficiently well preserved to warrant open area excavation.

The two areas were cleared of topsoil and older plough soils using a 20 ton tracked 360 degree excavator with a 2m wide ditching bucket. Spoil was double shifted to create heaps at the sides and ends of the opened areas. The weather throughout this process was hot, dry and sunny (Fig 3).

In addition to the excavation of Areas A and B, a watching brief was maintained during the initial stages of road construction. Work started in the vicinity of the flood relief pond immediately south of the Avon (Fig 2). Topsoil and other ploughsoils were removed unobserved, but the deeper ground reductions were watched, enabling two areas of archaeological deposits to be identified (Areas C and D). The line of the carriageway was stripped of topsoil and then older ploughsoils under archaeological supervision and a further four areas of archaeological deposits were identified (Areas E, F, G and H).

Plate 4: Excavations in progress (Area B)

The ground disturbance at both junctions with the former turnpike road were observed, but no significant deposits associated with the 18th century road construction could be discerned.

The construction of a new flood arch revealed that the 18th century stonework had been considerably damaged in the 1970s widening procedure although the current work allowed some detailed observations to be made.

# 5. EXCAVATION AND OBSERVATION RESULTS

## Phasing

The deposits and finds recorded along the length of the bypass can be divided into ten broad phases. These phases have been defined by the material evidence recovered or observed, augmented by a series of radiocarbon determinations. Table 1 details the phases and the area(s) in which they were evident.

## Natural

The geological natural across the length of the bypass varied from brownish-yellow sandy clay alluvium in the vicinity of Trench 1 at the south end, to reddish-yellow gravel overlying Mercia Mudstone in Area A on the south bank of the Avon. In Area

## Table 1: Phasing by Area

| Phase | | Area A | Area B | Area C | Area D | Area E | Area F | Area G | Area H | Area I | Area J | Field 13 | Field 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Late Mesolithic *c*6000-4000 BC | | Flint | | | | | | | | | Flint | Flint |
| 2 | Neolithic *c*4000 - 2200 BC | Flint | Flint Pit fill **116** | | | | | | | | | Flint | Flint |
| 3 | Late Bronze Age /Early Iron Age *c*1200 - 400 BC | | Pit fill **113** | | | | | | | | | | |
| 4 | Middle Iron Age /Late Iron Age *c*400 BC - AD 43 | Pit groups and L-shaped ditch | Pit groups | | | | | | | | | | |
| 5 | Romano-British *c*100 – 400 | L-shaped ditch fill **80** | Linear gullies | | | Gully | Pit **230** | Track-way | Entrance | | | | |
| 6 | Anglo-Saxon c500 - 700 | L-shaped ditch fill **77** | | | SFB **213** | | | | | | | | |
| 7 | Medieval/post-medieval | Ridge and Furrow | | | | | | | | | | Ridge and Furrow | |
| 8 | 18th century | Gun flint | | | | | | | | | Bridge culvert | | |
| 9 | Undated | | | Pit **217** | | | | | | Wooden piles | | | |

B the gravel contained more brown loam than in Area A and was scarred by a greater density of tree and root disturbance.

## Phase 1: Late Mesolithic

This phase was identified solely on the basis of flint tools and waste found during field survey. No features can be attributed to it.

## Phase 2: Neolithic

Alike Phase 1, this phase was represented by flints recovered during field survey albeit with the addition of a single sherd of pottery from pit fill **116** (Figs 7 & 8/BB). Fill **116** formed the upper fill within pit **114** and overlay fill **115** which yielded a Late Iron Age/Transitional sherd. The Neolithic sherd is therefore residual and must have been re-deposited, either deliberately as a curiosity or accidentally and from an otherwise unrecognised feature.

## Phase 3: Late Bronze Age/Early Iron Age


Plate 5: Pit **112** during excavation showing flat rubbing stone

### AREA B, PIT 112

Pit **112** in the south-east corner of Area B was circular, 0.61m in diameter, with sloping sides and a flat base 0.16m deep (Figs 7 & 8/Z). It contained what was initially conceived as a single fill comprising dark brown sandy loam (**113**) with frequent charcoal and a burnt quartzite stone with flat faces that may have been used as a hearth stone. It also contained charcoal of Pomoideae (hawthorn etc) and *Quercus* sp. (oak) and a little barley grain from which a radiocarbon date 210-20 Cal BC was obtained (SUERC-24744). The entire contents of the pit were excavated along with 36

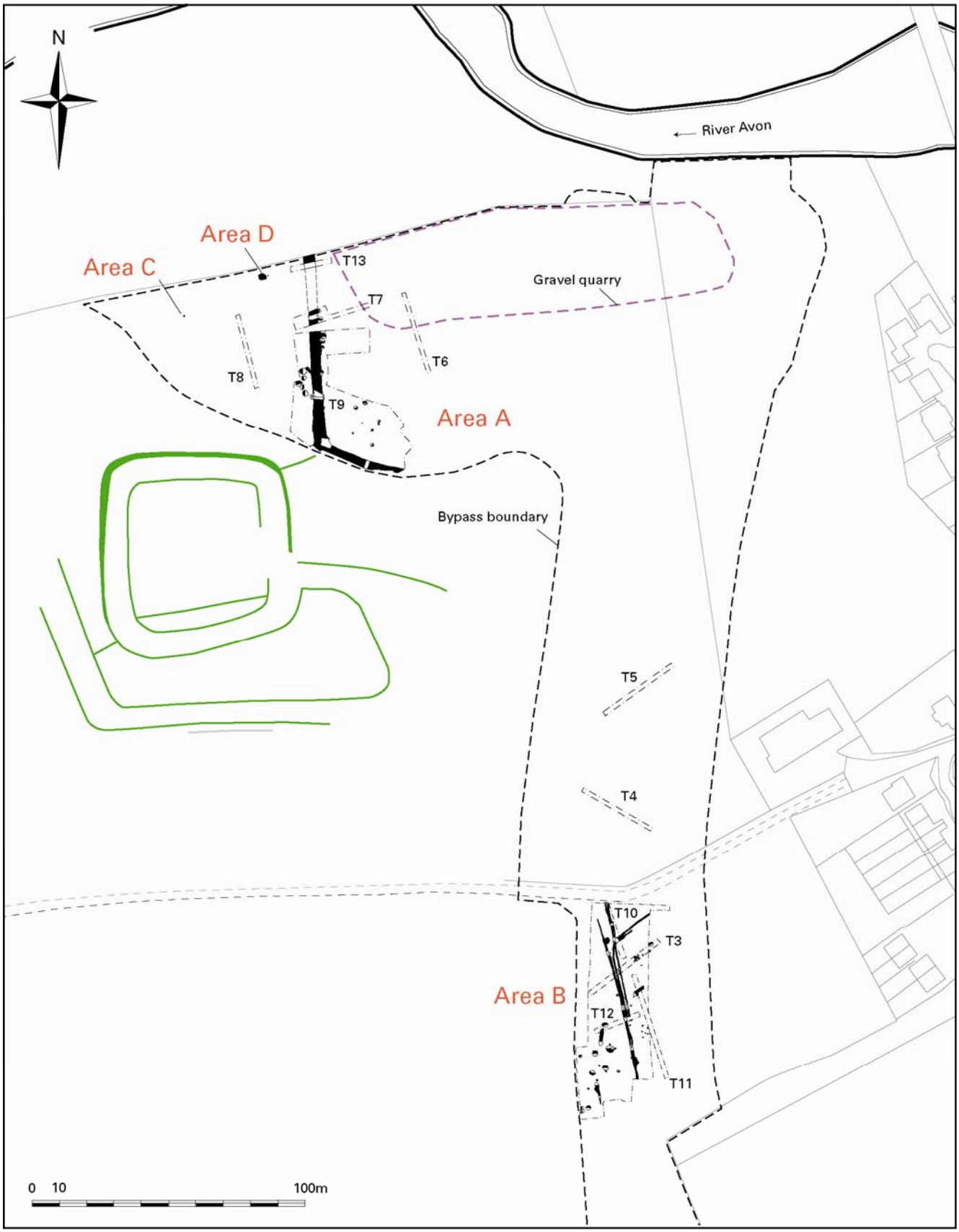


Fig 3: Areas A, B, C and D

sherds of Late Bronze Age/Early Iron Age pottery (Fig 16/1 & 2). Clearly the dated seed and the pottery were not contemporary. Whilst it is possible that the pottery was discovered in antiquity and subsequently reburied, or that an Iron Age feature was cut into the top of an existing Late Bronze Age/Early Iron Age pit, it remains most likely that an intrusive charred seed was dated and that the deposit was indeed of Late Bronze Age or Early Iron Age date.

## Phase 4: Middle – Late Iron Age

This phase is represented by a large L-shaped ditch in Area A and groups of pits in Areas A and B (Figs 4-8). Dating evidence derives from a few pottery sherds and radiocarbon determinations, although many features are dated by association only. Few of these features were stratified, although one linear alignment of pits was cut by the L-shaped ditch.

### Pit groups (Table 2)

A variety of pits were recorded across Areas A and B, albeit with distinct groupings in each area. The range of shapes and sizes encountered could reasonably be supposed to reflect their respective functions and so they have been divided into four types:

- Type 1a: in excess of 1.85m wide and 0.70m deep with vertical or near vertical sides
- Type 1b: as type 1 but with sloping or eroded sides
- Type 2: between 0.54m and 1.60m wide
- Type 3: less than 0.60m wide (possible postholes although evidence for posts was absent in each case)

AREA A (FIGS 3-6)

### Northern linear pit group (Table 2)

A group of seven Type 2 pits (**704, 706, 47, 35, 25, 27 & 75**) were aligned north/south in the northern part of Area A, pit **75** lying some 7m south of pit **27** (Fig 4). In general they were circular with uniformly vertical sides between 1.09 and 1.80m wide and flat bases between 0.25m and 0.55m deep. All but one were devoid of finds and appeared to have been relatively quickly infilled with material little different from that originally removed. Only pit **47** contained more than one fill, which in this case could represent a period of silting before deliberate infilling. A further possible pit **84** lay on the same alignment some 23m to the south of pit **75** and marked the inner corner of the later L-shaped ditch.

### Western linear pit group (Table 3)

A group of five Type 1b pits (**12, 9, 19, 16, 14**) were found broadly on a north/south axis on the west side of the northward arm of the L-shape. This group was significantly different to the alignment cut by ditch **24** in that the pits were generally larger and contained domestic detritus such as pottery, daub and burnt materials including heat cracked pebbles (HCP). Pit **9** yielded a significant dump of cleaned cereal crop, mostly wheat (**10**), which gave a radiocarbon date of 390–200 Cal BC (SUERC-24745).

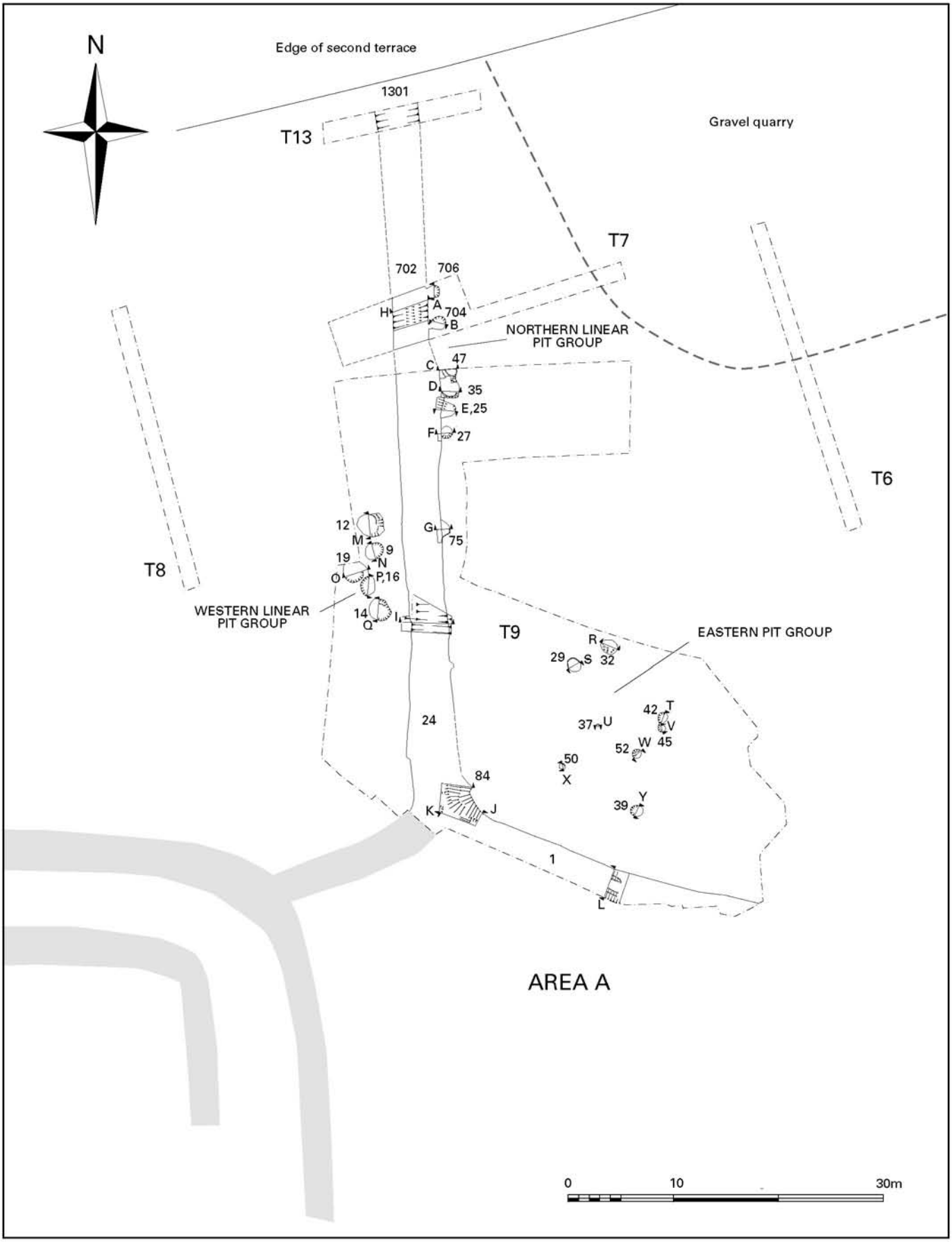


Fig 4: Area A detailed plan

Plate 6: Type 1b pit **9** viewed from the east

## Table 2: Northern linear pit group

| *Pit no.* | *Size (m)* | *Depth (m)* | *Shape* | *Filled with* | *Description* | *Finds* | *Section* |
|---|---|---|---|---|---|---|---|
| **Type 2** | | | | | | | |
| **704** | 1.39 | 0.29 | ?circular | | steep sloping sides and a flat base | | B |
| | | | | **705** | greyish-brown sandy loam with frequent gravel and a single heat cracked pebble (HCP) | | |
| **706** | 1.30 | 0.31 | ?circular | | steep sloping sides and a flat base | | A |
| | | | | **707** | greyish-brown sandy loam with frequent gravel | | |
| **47** | 1.60 | 0.50 | ?circular | | moderately sloping sides and flat base | | C |
| | | | | **48** | dark yellowish-brown sandy loam with infrequent gravel overlying **88** | Calcined bone, flint | |
| | | | | **88** | dark brown sandy silt with moderate gravel | | |
| **35** | 1.80 | 0.55 | ?sub-rectangular | | rounded corners, vertical sides and a flat base | | D |
| | | | | **36** | dark brown sandy loam with frequent gravel | | |
| **25** | 1.30 | 0.45 | ?circular | | near vertical sides and sloping base | | E |
| | | | | **26** | brown sandy loam with frequent gravel | | |
| **27** | 1.09 | 0.25 | ?circular | | steep sloping sides and flattish base | | F |
| | | | | **28** | dark brown sandy loam with gravel | | |
| **75** | 1.50 | 0.44 | ?circular | | steep sloping sides and flattish base | | G |
| | | | | **76** | dark reddish-brown sandy loam with frequency of gravel increasing towards the base | | |
| **84** | ?1.50 | ?0.20 | ?circular | | sloping east side and sloping base | | K |
| | | | | **85** | dark yellowish-brown loamy sand | | |

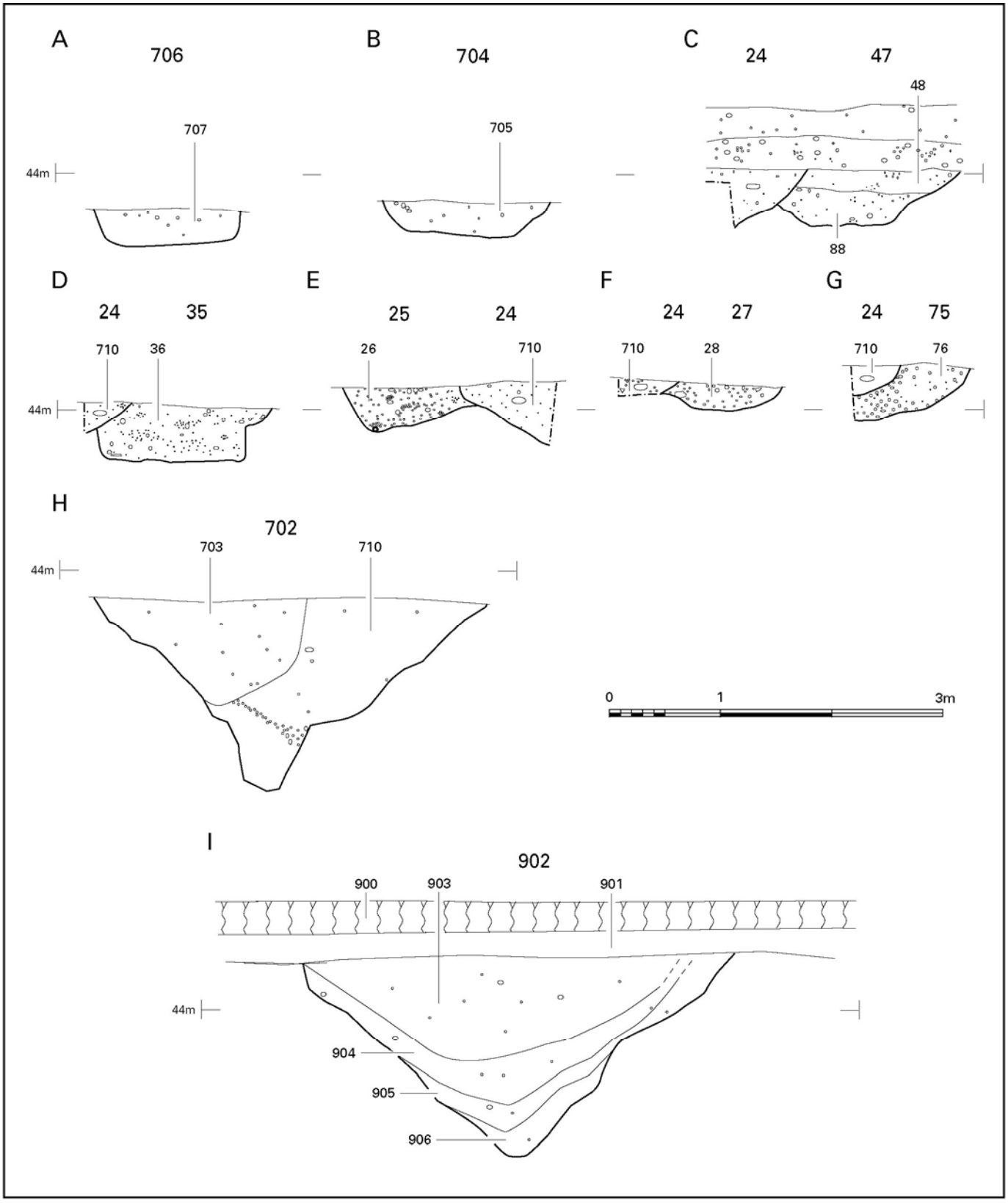


Fig 5: Area A sections A-I

Plate 7: The western linear pit group during excavation

## Table 3: Western linear pit group

| *Pit no.* | *Size (m)* | *Depth (m)* | *Shape* | *Filled with* | *Description* | *Finds* | *Section* |
|---|---|---|---|---|---|---|---|
| **Type 1b** | | | | | | | |
| **12** | 2.45 x 2.30 | 0.65 | sub-circular | | steep sloping sides and a flat base | | M |
| | | | | **13** | dark brown sandy loam with frequent gravel in the upper level and bands towards the base and few HCP | Fired clay | |
| **9** | 1.80 x 1.30 | 0.70 | sub-circular | | vertical sides and flat base | | N |
| | | | | **11** | reddish-brown loamy sand with occasional gravel overlaid by **10** | Fired clay | |
| | | | | **10** | dark brown loamy sand with moderate gravel and few HCP (wheat seed 390–200 Cal BC (SUERC-24745) | Pottery, bone | |
| **19** | 2.25 | 0.81 | sub circular | | steep sloping sides, flared on eastern lip and rounded base, possible recut half as deep | | O |
| | | | | **23** | patch of light brown loamy sand with very occasional gravel in pit base overlaid by **22** | Pottery | |
| | | | | **22** | reddish-brown sandy loam with moderate gravel overlaid by **21** | Pottery | |
| | | | | **21** | deposit of pinkish-red loamy clay with infrequent gravel possibly at the base of re-cut overlaid by **20** | Fired clay? | |
| | | | | **20** | brown loam with moderate pebbles clustered in centre of fill | Pottery | |
| **16** | 1.85 x 1.40 | 0.48 | oval | | steep sloping sides flared at the rim and flat base | | P |
| | | | | **17** | dark brown loamy sand with a concentration of gravel in the southern part | Fired clay, flint | |
| **14** | 2.10 x 1.88 | 0.42 | sub-circular | | moderately sloping sides and rounded base deeper and steeper to the south | | Q |
| | | | | **74** | reddish-brown loam, moderate gravel overlaid by **15** | | |
| | | | | **15** | brown loam with moderate pebbles | | |

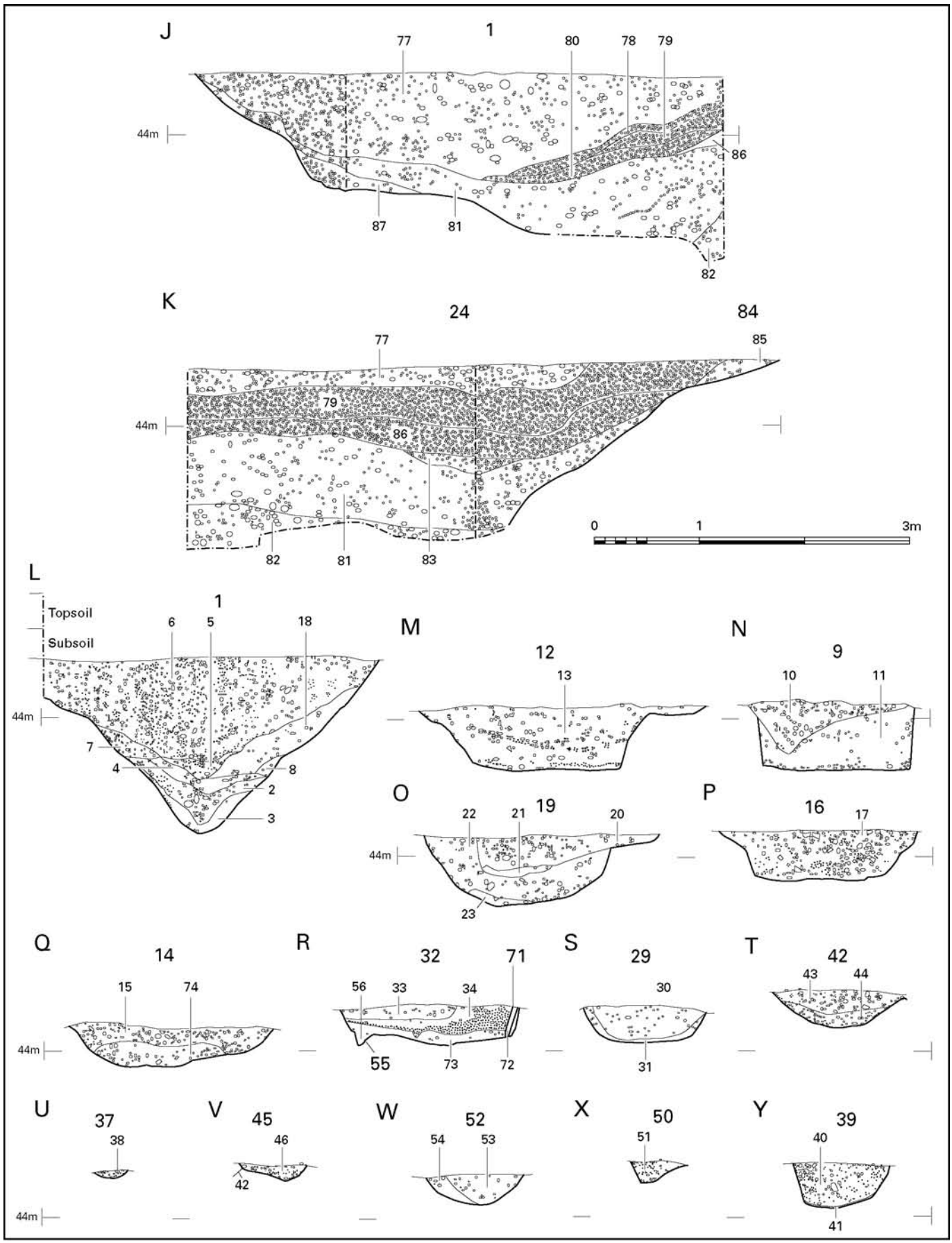


Fig 6: Area A sections J-Y


Plate 8: Pit **32** showing charred layer and stakeholes viewed from above

### Eastern pit group (Table 4)

A cluster of six Type 2 pits (**32, 29, 42, 45, 52, 39**) were examined in the eastern part of Area A. The northernmost example, pit **32**, was significant as it contained a deposit of charred processed barley (**34**) overlying a layer of redeposited natural (**73**). The barley yielded a calibrated radiocarbon date of 360–50 Cal BC (SUERC-24746). This layer was penetrated by a number of stakeholes some of which also cut through the pit base. The majority of stakeholes were positioned inside the edge of the pit with a further three forming a diagonal across the centre. The stakeholes also contained charred material including grain. The stakes appear to have supported a structure set within the pit, perhaps a lattice on which grain was stored. The lower fill (**73**) developed whilst it was in use and additional stakes were driven in as repairs during its lifecycle. Finally the grain, presumably along with the lattice and stakes, was burnt and fell to the bottom of the pit where the remains were covered in brown sandy loam (**33**).

The remainder of the pits form a reasonably compact group and it remains possible that some of them were associated with an otherwise invisible structure or activity area. Two Type 3 pits (**37** and **50**) were associated with this group.

## Table 4: Eastern pit group

| *Pit no.* | *Size (m)* | *Depth (m)* | *Shape* | *Filled with* | *Description* | *Finds* | *Section* |
|---|---|---|---|---|---|---|---|
| **Type 2** | | | | | | | |
| **32** | 1.70 x 1.30 | 0.40 | oval | | near vertical sides and flattish base cut by stakeholes **55, 57, 59, 61, 63, 65, 67, 69, 71, 150, 152, 154, 156, 158** (see Table 5) | | R |
| | | | | **73** | dark yellowish-brown sandy loam redeposited natural with frequent gravel overlaid by | | |
| | | | | **34** | very dark grey/black sandy loam with occasional gravel 50% charcoal and 10% burnt grain (360–50 Cal BC SUERC-24746) overlaid by | Pottery, fired clay bone | |
| | | | | **33** | brown sandy loam with moderate gravel | | |
| **29** | 1.40 x 1.15 | 0.37 | sub-circular | | steep sloping sides and flattish base possible recut slightly smaller | | S |
| | | | | **31** | yellowish-red loamy sand with moderate gravel overlaid by **30** | | |
| | | | | **30** | reddish-brown loamy sand with moderate gravel | | |
| **42** | 1.20 x 0.90 | 0.3`6 | oval | | moderately sloping sides and rounded base | | T |
| | | | | **44** | dark yellowish-brown sandy loam with frequent gravel overlaid by | | |
| | | | | **43** | dark brown sandy loam with frequent gravel | Pottery | |
| **45** | 0.80 x 0.70 | 0.15 | oval | | moderately sloping sides and obtusely pointed base – probable tree root hole | | V |
| | | | | **46** | dark brown sandy loam with frequent gravel with two black patches of manganese staining | | |
| **52** | 0.90 x 0.80 | 0.29 | oval | | moderately sloping sides and rounded base | | W |
| | | | | **54** | dark yellowish-brown loamy sand with moderate gravel overlaid by **53** | | |
| | | | | **53** | brown sandy loam with moderate gravel | | |
| **39** | 1.05 x 0.92 | 0.46 | sub-circular | | steep sloping sides and slightly rounded base | | Y |
| | | | | **41** | dark brown loamy sand overlaid by **40** | | |
| | | | | **40** | dark reddish-brown sandy loam with moderate gravel and frequent charcoal flecks | Pottery | |
| **Type 3** | | | | | | | |
| **37** | 0.30 | 0.07 | circular | | concave profile | | U |
| | | | | **38** | dark yellowish-brown sandy loam with gravel | | |
| **50** | 0.50 x 0.40 | 0.21 | sub-circular | | irregular sloping sides and base | | X |
| | | | | **51** | dark brown sandy loam with moderate gravel | | |

## Table 5: Stakeholes in pit 32

| *Pit no.* | *Size (m)* | *Depth (m)* | *Profile* | *Filled with* | *Description* |
|---|---|---|---|---|---|
| **55** | 0.16 | 0.13 | V shaped | **56** | dark yellowish-brown sandy loam |
| **57** | 0.15 | 0.15 | U shaped | **58** | dark yellowish-brown sandy loam |
| **59** | 0.16 | 0.28 | deep U | **60** | dark yellowish-brown sandy loam |
| **61** | 0.18 | 0.08 | concave | **62** | dark yellowish-brown sandy loam |
| **63** | 0.09 | 0.09 | V shaped | **64** | dark yellowish-brown sandy loam |
| **65** | 0.10 | 0.22 | V shaped | **66** | dark yellowish-brown sandy loam |
| **67** | 0.07 | 0.08 | square | **68** | black sandy loam with 10% charred grain |
| **69** | 0.07 | 0.55 | square | **70** | black sandy loam with 50% charred grain |
| **71** | 0.08 | 0.30 | rhomboid | **72** | dark brown sandy loam with 5% charred grain |
| **150** | 0.18 | 0.07 | bowl | **151** | brown sandy loam with 5% charred grain |
| **152** | 0.12 | 0.08 | flared U | **153** | brown sandy loam with 5% charred grain |
| **154** | 0.23 | 0.19 | flared U | **155** | brown sandy loam with 5% charred grain |
| **156** | 0.10 | 0.07 | V shaped | **157** | brown sandy loam with 5% charred grain |
| **158** | 0.20 | 0.15 | U shaped | **159** | brown sandy loam |

### L-shaped ditch (Table 6)

Ditch **24=902=702=1301** formed the northward arm of an L-shaped ditch and was at least 70m long, extending as far as the edge of the gravel terrace. It is not known if it continued northward onto the flood plain but in Trench 13 machined along the edge of the modern hedge line, the base of the ditch appeared to be deeper than the current floodplain surface, although this could not be measured precisely. In the other two sections excavated across its length the ditch was U-shaped, 3.6m wide by 1.7m deep, the lower 0.6m being a narrow (0.70m wide) central trough with near vertical sides. It was apparently contemporary with the eastward arm ditch **1** which could be traced for 30m within the excavation area. This arm had a similar profile albeit slightly more V-shaped at the base.

Plate 9: Ditch **1** viewed from the east

The ditches were filled with sandy loam and gravel with very little silt, and virtually no burnt or humic material that could have derived from nearby occupation activities. Some gravel tip lines were apparent, especially in the fork of the L-shape where they implied the former existence of a bank to the north-east. Similarly a bank was intimated on the north side of the eastward arm. The primary fill in each of the sections examined was sterile while the succeeding darker fills with low gravel content contained low quantities of domestic detritus. A fragment of human maxilla found in context **2** near the base of the ditch was radiocarbon dated to 390-200 Cal BC (SUERC-24967).

## Table 6: L-shaped ditch 24=902=702=1301=1 description of fills

| *Shown on Section* | *Cut no.* | *Fill* | *Comments* | *Inclusions* |
|---|---|---|---|---|
| J & L | **1** | **3** | primary fill of dark reddish-brown sandy loam with very occasional gravel overlaid by **2** | |
| | | **2** | dark reddish-brown sandy loam with frequent gravel (larger in the centre of the fill) overlaid by **4** | human maxilla 390-200 Cal BC (SUERC-24967) |
| | | **4** | dark brown sandy loam with occasional gravel (similar to **18**) overlaid by **7** and **8** | Flint |
| | | **7** | brown sandy loam with frequent gravel possibly a result of natural edge erosion overlaid by **6** | |
| | | **8** | dark yellowish-brown loamy sand with occasional gravel possibly as a result of natural edge erosion overlaid by **18** | |
| | | **18** | dark reddish-brown loamy sand with occasional gravel overlaid by **5** | |
| | | **5** | gravel in a matrix of dark reddish-brown loamy sand overlaid by **6** | |
| | | **6** | ultimate fill of undifferentiated dark reddish-brown loamy sand with very frequent pebbles | Pottery, flint, fired clay |
| I | **902** | **906** | primary fill of dark yellowish-brown loamy sand overlaid by **905** | |
| | | **905** | grey sandy loam with brown mottles and very occasional gravel overlaid by **904** | |
| | | **904** | brownish-grey sandy loam with occasional gravel and a few charcoal flecks at the base, overlaid by **903** | Fired clay |
| | | **903** | ultimate fill of undifferentiated greyish-brown sandy loam with occasional gravel with possible banding tipped in from the east | Pottery, fired clay |
| H | **702** | | section too deep to enter and record accurately. | |
| | | **710** | undifferentiated reddish-brown sandy loam with single tip line of gravel towards the base overlaid by **703** | |
| | | **703** | dark greyish-brown sandy loam with frequent gravel and very occasional charcoal flecks | Pottery |
| K | **1 & 24** | **87** | primary fill of dark yellowish-brown sand with frequent gravel overlaid by **81** | |
| | | **82** | lowest excavated level of ditch **24**; dark yellowish-brown sandy loam with infrequent gravel and patches of dark grey clay overlaid by 81 | Calcined bone |
| | | **81** | yellowish-brown sandy loam with infrequent gravel overlaid by **83** | Pottery, fired clay, bone, flint |
| | | **83** | dark yellowish-brown sandy loam with moderate gravel overlaid by **86** | |
| | | **86** | gravel in a matrix of dark yellowish-brown sandy loam overlaid by **80** | Calcined bone |
| | | **80** | dark greyish-brown loamy sand with frequent gravel overlaid by **79** | RB pottery, flint, fired clay, bone |
| | | **79** | gravel in a matrix of brown sandy loam overlaid by **78** | |
| | | **78** | gravel in a matrix of brown sandy loam overlaid by **77** | |
| | | **77** | ultimate fill of dark yellowish-brown sandy loam with moderate gravel | Saxon pottery, fired clay, bone |
| | | **49** | ultimate fill at eastern end of ditch **1** | Calcined bone |
| | **1301** | | section too deep to enter and not recorded | |

## AREA B

Four Type 1a pits, **102, 100, 104** and **186** were grouped together within 6m of each other in the south-east corner of the site (Fig 7). These pits could reasonably have been used as silos for storing grain although none produced any evidence for such. Pit **100** was spatially related to two Type 3 postholes **166** and **188**. Nearby Type 1b pit **93**, the largest pit on the site, was also spatially related to two Type 3 postholes (**114** and **120**) but with a further additional example **96** cut through its base prior to its backfilling. Posthole **114** is a curiosity; not only did it contain the residual Phase 2 sherd, but it also contained the only sherd of Transitional (Belgic Class E) pottery recovered from the excavations. Given its spatial association with the Phase 4 pit **93** it would seem to imply that Phase 4 extended into the very late Iron Age or early Roman period. The only other Type 1b pit **196** was located in the south-east corner was considerably smaller than **93** and may actually be described as a larger Type 2 pit.

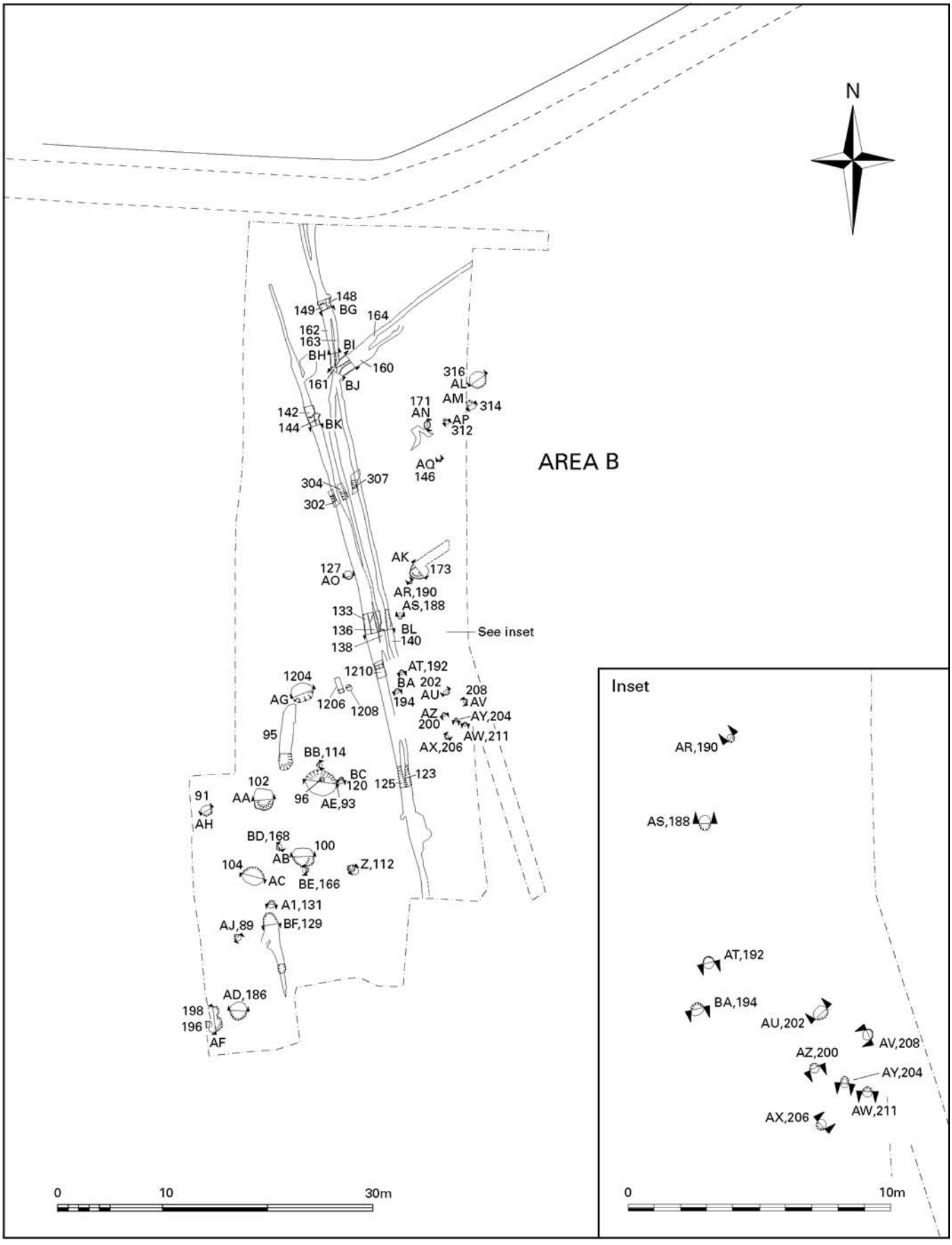


Fig 7: Area B detailed plan and inset showing posthole group

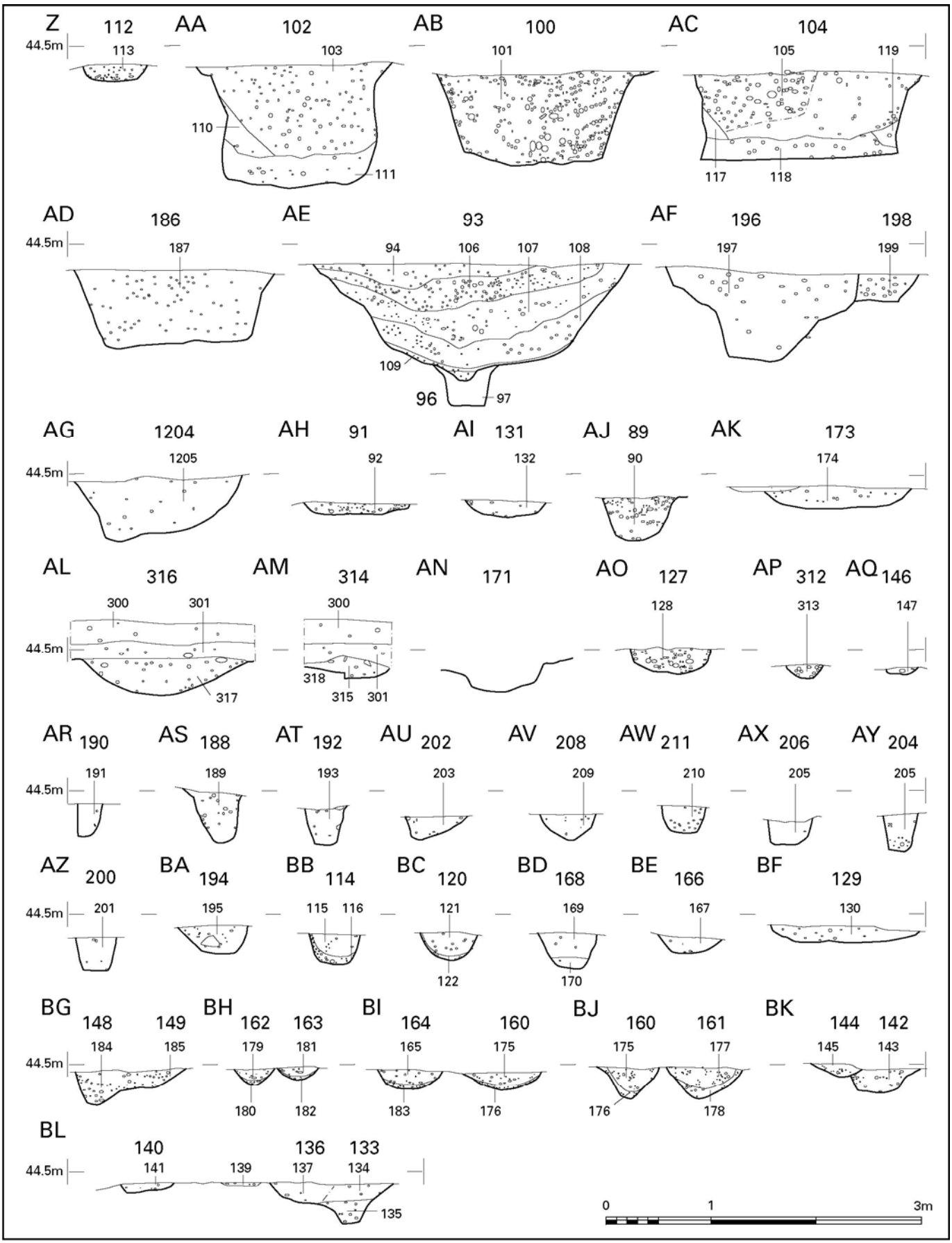


Fig 8: Area B sections Z-BL


Plate 10: Type 1b pit **93** viewed from the north

## Table 7: Type 1 pits, Area B

| *Pit no.* | *Size (m)* | *Depth (m)* | *Shape* | *Filled with* | *Description* | *Finds* | *Section* |
|---|---|---|---|---|---|---|---|
| **TYPE 1a** | | | | | | | |
| **102** | 2.00 | 1.25 | circular | | vertical/undercut sides with flared rim and flat base | | AA |
| | | | | **111** | reddish-brown mottled reddish-grey sandy loam with infrequent gravel and charcoal flecks | Pottery | |
| | | | | **110** | slump of yellowish-red natural sandy gravel | | |
| | | | | **103** | reddish-brown sandy loam with moderate gravel, charcoal flecks and a few HCP | Pottery, slag, fired clay? | |
| **100** | 2.05 x 1.75 | 0.85 | sub-circular | | very steep sloping sides and flattish albeit uneven base | | AB |
| | | | | **101** | reddish-brown sandy loam with moderate gravel | Fired clay | |
| **104** | 2.15 x 1.65 | 0.84 | sub-circular | | near vertical sides, undercut towards the flat base | | AC |
| | | | | **118** | yellowish-brown sandy loam with occasional gravel overlaid by **119** and **117** | | |
| | | | | **119** | slump of yellowish-red natural sand overlaid by **105** and **117** | | |
| | | | | **117** | slump of yellowish-brown natural sand with black patches at bottom overlaid by **105** | | |
| | | | | **105** | dark yellowish-brown sandy loam with moderate gravel in the upper eastern part and occasional gravel in remainder with a few patches of charcoal flecks | Pottery | |
| **186** | 1.90 | 0.70 | circular | | steep sloping sides and sloping base | | AD |
| | | | | **187** | brown sandy loam with moderate gravel | | |
| **TYPE 1b** | | | | | | | |
| **93** | 3.10 x 2.40 | 1.05 | oval | | moderately sloping sides and flattish base with posthole **96** cut through north of centre | | AE |
| | | | | **109** | basal fill of light reddish-brown sandy loam with very occasional gravel overlaid by **108** | | |
| | | | | **108** | reddish-brown sandy loam with moderate gravel overlaid by **107** | | |
| | | | | **107** | dark reddish-brown sandy loam with moderate gravel overlaid by **106** | | |
| | | | | **106** | reddish-brown sandy loam with frequent gravel overlaid by **94** | | |
| | | | | **94** | dark brown sandy loam with occasional gravel | Pottery, slag | |
| **196** | 1.85 | 0.85 | ?sub-circular | | irregular stepped sides leading to narrow flat base, cuts **198** | | AF |
| | | | | **197** | reddish-brown sandy loam with moderate gravel | | |

The majority of Type 2 pits, **1204**, **91, 131, 89** and **198** were scattered across the southern half of the excavated area and ranged between 0.10m and 0.52m deep. Pits **171** and **316** lay towards the north-east corner whilst pit **127** and **173** lay towards the centre of the area. Pit **314** at the north-east end of Trench 3 was lined with clay and may have formed the base of a hearth.

## Table 8: Type 2 pits. Area B

| *Pit no.* | *Size (m)* | *Depth (m)* | *Shape* | *Filled by* | *Description* | *Finds* | *Section* |
|---|---|---|---|---|---|---|---|
| **TYPE 2** | | | | | | | |
| **1204** | 1.60 | 0.52 | circular | | steep sloping sides and irregular sloping base | | AG |
| | | | | **1205** | greyish-brown sandy loam with occasional gravel and few HCP and charcoal flecks | Pottery | |
| **91** | 1.01 x 0.90 | 0.10 | sub-circular | | sloping sides and flat base | | AH |
| | | | | **92** | brown sandy loam with occasional gravel | Pottery | |
| **131** | 0.70 x 0.64 | 0.16 | sub-circular | | sloping sides and rounded base | | AI |
| | | | | **132** | dark brown sandy loam with occasional gravel | | |
| **89** | 0.72 x 0.70 | 0.41 | sub-circular | | steep sloping sides and rounded base | | AJ |
| | | | | **90** | very dark brown sandy loam with moderate gravel becoming less dense towards the bottom | Slag | |
| **198** | <0.54 | 0.21 | ?sub-circular | | steep sloping sides and flat base cut by**196** | | AF |
| | | | | **199** | reddish-brown sandy loam with frequent gravel | | |
| **173** | 1.80 x 1.10 | 0.20 | sub-circular | | sloping sides and flattish base | | AK |
| | | | | **174** | reddish-brown sandy loam with occasional gravel | Pottery | |
| **316** | 1.60 | 0.34 | ?sub-circular | | moderately sloping sides and rounded base | | AL |
| | | | | **317** | greyish brown sandy loam with moderate gravel | | |
| **314** | 0.64 | 0.18 | ?sub-circular | | moderately sloping sides and flattish base | | AM |
| | | | | **318** | reddish-brown clay lining base and sides overlaid by **315** | | |
| | | | | **315** | greyish brown sandy loam with 80% HCP and charcoal | Querns | |
| **171** | 0.80 x 0.67 | 0.13 | oval | | moderately sloping sides and rounded base | | AN |
| | | | | **172** | dark yellowish-brown sandy loam with occasional gravel with darker charcoal rich patches throughout and HCP | Pottery loom weight | |
| **127** | 0.80 | 0.25 | sub-circular | | steep sloping sides and rounded base | | AO |
| | | | | **128** | dark brown sandy loam with frequent gravel and HCP and occasional charcoal flecks | Pottery | |

Type 3 (possible postholes) were also found predominantly in the southern half of the excavated area although postholes **312** and **146** in the northern half aligned with postholes **190** and **188** in the central area, perhaps representing a fence line. A group of nine, **192, 202, 208, 211, 204, 206, 200, 1208** and **194** on the eastern side of the site may reflect the position of a building or structure, although no coherent pattern is evident and the posthole group may merely reflect an are of activity.

The remaining pits **114, 120, 96, 168** & **166** seem to have spatial relationships with the much larger Type 1a and Type 1b pits although their significance remains unknown.

Plate 11: Type 3 pit group forming possible roundhouse structure

## Table 9: Type 3 postholes, Area B

| *Pit no.* | *Size (m)* | *Depth (m)* | *Shape* | *Filled with* | *Description* | *Finds* | *Section* |
|---|---|---|---|---|---|---|---|
| *Fence line* | | | | | | | |
| **312** | 0.35 | 0.14 | ?sub-circular | | moderately sloping sides and rounded base | | AP |
| | | | | **313** | greyish-brown sandy loam with frequent gravel | | |
| **146** | 0.29 x 0.23 | 0.08 | ?sub-circular | | sloping sides and flattish base | | AQ |
| | | | | **147** | brown/black sandy loam with occasional gravel and charcoal flecks | | |
| **190** | 0.27 | 0.36 | circular | | near vertical sides and rounded base | | AR |
| | | | | **191** | reddish-brown sandy loam with very occasional gravel | | |
| **188** | 0.50 | 0.50 | circular | | near vertical sides and rounded base | | AS |
| | | | | **189** | dark brown sandy loam with occasional HCP and charcoal | fired clay | |
| *Posthole group* | | | | | | | |
| **192** | 0.60 x 0.40 | 0.35 | oval | | near vertical sides and flattish base | | AT |
| | | | | **193** | reddish-brown sandy loam with moderate gravel and charcoal flecks | bone | |
| **202** | 0.60 | 0.21 | circular | | near vertical western side whilst eastern side slopes moderately to form base | | AU |
| | | | | **203** | reddish-brown sandy loam with occasional gravel | | |
| **208** | 0.54 | 0.25 | circular | | moderately sloping uneven sides and narrow rounded base | | AV |
| | | | | **209** | reddish-brown sandy loam with very occasional gravel | | |
| **211** | 0.41 | 0.29 | circular | | near vertical sides and flat base | | AW |
| | | | | **210** | reddish-brown sandy loam with occasional gravel | | |
| **206** | 0.40 | 0.22 | circular | | vertical sides and flat base | | AX |
| | | | | **207** | reddish-brown sandy loam with occasional gravel | | |
| **204** | 0.33 | 0.36 | circular | | near vertical sides and flattish base | | AY |
| | | | | **205** | reddish-brown sandy loam with occasional gravel | | |
| **200** | 0.40 | 0.30 | circular | | near vertical sides and flat base | | AZ |
| | | | | **201** | dark brown sandy loam with occasional gravel and charcoal flecks and HCP | flint | |
| **1208** | 0.50 x 0.42 | 0.28 | oval | | near vertical sides and flattish base | | |
| | | | | **1209** | dark brown sandy loam with occasional gravel and charcoal flecks | | |
| **194** | 0.60 | 0.24 | circular | | moderately sloping sides and flat base | | BA |
| | | | | **195** | dark brown sandy loam with single medium (packing?) stone (0.18m x 0.10m) and occasional gravel | pottery | |

### Table 10: Other pits, Area B

| *Pit no.* | *Size (m)* | *Depth (m)* | *Shape* | *Filled by* | *Description* | *Finds* | *Section* |
|---|---|---|---|---|---|---|---|
| **114** | 0.48 | 0.28 | circular | | very steep sloping sides and slightly rounded base | | BB |
| | | | | **116** | reddish-brown sandy loam with moderate gravel overlaid by **115** | pottery | |
| | | | | **115** | strong brown sandy clay loam with occasional gravel and charcoal flecks | neolithic pottery | |
| **120** | 0.55 | 0.27 | circular | | moderately sloping sides and rounded base | | BC |
| | | | | **122** | dark brown sandy loam with occasional gravel overlaid by **121** | | |
| | | | | **121** | dark reddish-brown sandy loam with moderate gravel | slag x6 | |
| **96** | 0.45 | 0.32 | circular | | vertical sides and flat base dug in the base of pit **93** | | |
| | | | | **97** | brown sandy loam with moderate gravel and HCP | | |
| **168** | 0.57 | 0.35 | circular | | very steep sloping sides and flattish base | | BD |
| | | | | **170** | reddish-yellow sandy loam with occasional gravel overlaid by **169** | | |
| | | | | **169** | dark reddish-brown sandy loam with occasional gravel | | |
| **166** | 0.60 | 0.17 | circular | | moderately sloping sides and flat base | | BE |
| | | | | **167** | yellowish-red sandy loam with occasional gravel | | |
| **95** | 5.0 x 1.2 | 0.57 | sausage shaped | | Irregular sloping sides, west side near vertical, with slightly rounded base | | |
| | | | | **99** | dark reddish-brown sandy clay with frequent small pebbles overlaid by | | |
| | | | | **98** | Dark brown sandy clay | pottery | |

## Phase 5: Romano-British

AREA B

### Linear gullies (Table 11)

A number of gullies representing field boundaries bisected the excavation area on a NNW-SSE axis, and in some phases they turned sharply to the north-east to form field corners. They were all filled with an homogeneous sandy loam which prevented the definition of their respective relationships and no finds were recovered from their fills. It is also evident that some shallower phases were truncated during the machine removal of the topsoil and the following is therefore only a partial account. The gullies are attributed to this phase solely on morphological grounds.

Gully **123=138=304** extended SSE-NNW and turned to the north-east as **160** to form the north-west corner of a field. NNW-SSE gully **149=162** conjoined with north-east to south-west gully **164** at pit **161** to form the south-west corner of a field on the north side of **123=138=304=160**. Pit **161** was circular 0.71m in diameter with moderately sloping sides and a rounded base 0.28m deep. A primary fill of reddish-brown sandy loam with moderate gravel (**178**) was overlaid by reddish-brown sandy loam (**177**). Gully **148=163=307=140** was aligned NNW-SSE across the site and cut through the corner of **123=138=304=160** and also cut gully **149=162=164**. Gully **142=133=1210** extended across the area NNW-SSE and was cut by gully **144=302=136=125** which may have turned to the north-east to redefine the field corner.

A number of other NNW-SSE aligned gullies were recorded in the evaluation trenches but were evidently truncated during the removal of the topsoil. These were gully **1206** in Trench 12, gully **308** in Trench 3 and east to west gully **310**.

Plate 12: Roman field boundary gullies in Area B viewed from the north

### Gully 129

An 8.10m length of gully **129** was aligned roughly north to south at the southern end of the excavated area. It was up to 1.40m wide at its northern end, narrowing to 0.20m at the south and was 0.14m deep filled with dark brown sandy loam with occasional gravel and a few HCP (**130**), from which a fragment of tile was recovered.

## AREA F, PIT **230**

Pit **230** (Fig 9, BR) was rectangular with rounded corners 1.70m long by 1.0m wide with moderate sloping sides (steeper to the south) and a slightly rounded base 0.33m deep. It was filled with very dark brown silty sand with frequent (40%) gravel and HCP with concentrations of charcoal flecks around the edges and across the base (**231**). Two Roman sherds were recovered from the fill which also contained blobs of unfired clay and descending proportions of *Fraxinus excelsior* L. (ash), Pomoideae (hawthorn etc) and *Prunus* sp. (sloe) charcoal.

## Table 11: Linear gullies

| *Gully* | *Section* | *Cut no.* | Width (m) | Depth (m) | *Context no.* | *Description* |
|---|---|---|---|---|---|---|
| **123** | | **123** | 0.50 | 0.12 | | sharp sloping sides and rounded base |
| | | | | | **124** | brown sandy loam with occasional gravel |
| | | **138** | 0.40 | 0.03 | | flattish base |
| | | | | | **139** | yellowish-brown sandy loam with moderate gravel |
| | | **304** | 0.55 | 0.21 | | irregular sloping sides and a flattish base |
| | | | | | **305** | greyish-brown sandy loam with gravel and a single HCP |
| | BI | **160** | 0.75 | 0.17 | | moderately sloping sides and rounded base |
| | | | | | **176** | primary fill of reddish-brown sandy loam with moderate gravel overlaid by **175** |
| | | | | | **175** | reddish-brown sandy loam with occasional gravel |
| **149** | BG | **149** | <0.50 | 0.18 | | sloping west side and flattish base |
| | | | | | **185** | reddish-brown sandy loam with moderate gravel |
| | BH | **162** | 0.39 | 0.15 | | sloping sides and pointed base |
| | | | | | **180** | primary fill of reddish-brown sandy loam with moderate gravel overlaid by **179** |
| | | | | | **179** | reddish-brown sandy loam with occasional gravel |
| | BI | **164** | 0.62 | 0.20 | | steep sloping sides and flattish base |
| | | | | | **183** | primary fill of reddish-brown sandy loam with moderate gravel overlaid by **165** |
| | | | | | **165** | reddish-brown sandy loam with occasional gravel |
| **148** | BG | **148** | <0.40 | 0.35 | | steep sloping sides and narrow rounded base |
| | | | | | **184** | reddish-brown sandy loam with moderate gravel |
| | BH | **163** | <0.37 | 0.14 | | moderately sloping sides and rounded base |
| | | | | | **182** | primary fill of reddish-brown sandy loam with moderate gravel overlaid by **181** |
| | | | | | **181** | reddish-brown sandy loam with occasional gravel |
| | | **306** | 0.54 | 0.17 | | moderately sloping sides and a narrow rounded base |
| | | | | | **307** | greyish-brown sandy loam with occasional gravel |
| | BL | **140** | 0.50 | 0.90 | | sloping sides and uneven base **flint 6** |
| | | | | | **141** | dark yellowish-brown silty sand with moderate gravel |
| **142** | BK | **142** | 0.75 | 0.25 | | steep sloping sides and flat base |
| | | | | | **143** | brown sandy loam with moderate gravel |
| | BL | **133** | <0.75 | 0.33 | | steep sloping sides and flat base |
| | | | | | **135** | yellowish-brown sandy loam with gravel overlaid by **134** |
| | | | | | **134** | yellowish-brown sandy loam with gravel and rare charcoal flecks |
| | | **1210** | >0.45 | 0.33 | | V-shaped profile |
| | | | | | **1211** | greyish-brown sandy loam with gravel and charcoal flecks |
| **144** | BK | **144** | 0.50 | 0.13 | | shallow sloping sides and a rounded base |
| | | | | | **145** | brown sandy loam with moderate gravel |
| | | **302** | 0.41 | 0.20 | | moderately sloping sides and rounded base |
| | | | | | **303** | brown sandy loam with occasional gravel |
| | BL | **136** | 0.60 | 0.21 | | moderately sloping sides and flattish base |
| | | | | | **137** | yellowish-brown sandy loam |
| | | **125** | 0.52 | 0.20 | | steep sloping sides and pointed base |
| | | | | | **126** | brown sandy loam with moderate gravel |
| | | **1212** | >0.45 | 0.13 | | moderately sloping sides and sloping base |
| | | | | | **1213** | greyish-brown sandy loam with occasional gravel and charcoal flecks |

## AREAS E, G, H

### Linear gullies (see Table 12)

A series of axially aligned gullies identified during bypass construction appear to represent parts of a field system. The northernmost example, **232** in Area E (Fig 9) was aligned ESE-WNW and probably extended 50m to the east to conjoin with the probable northern extension of north to south gully **228** (Fig 10). Its eastern extent was obscured by modern disturbance **236**. Gully **226** (Fig 10) was aligned parallel with and 6.3m to the east of gully **228** and together they appeared to form a trackway aligned north to south. Two gullies in Area H, some 70m east of the trackway appeared to form an entrance some 7m wide. Gully **220** (Fig 11) formed the northern terminal, although its northern extent was obscured by Phase 7 feature **234** and the natural surface to the north of this feature was greatly reduced, thereby removing any indication of the continuance of **220**. Gully **222** (Fig 11) formed the southern terminal 7.2m to the south-east. Posthole **224** was cut into the base of gully **222** some 0.80m from the terminus.

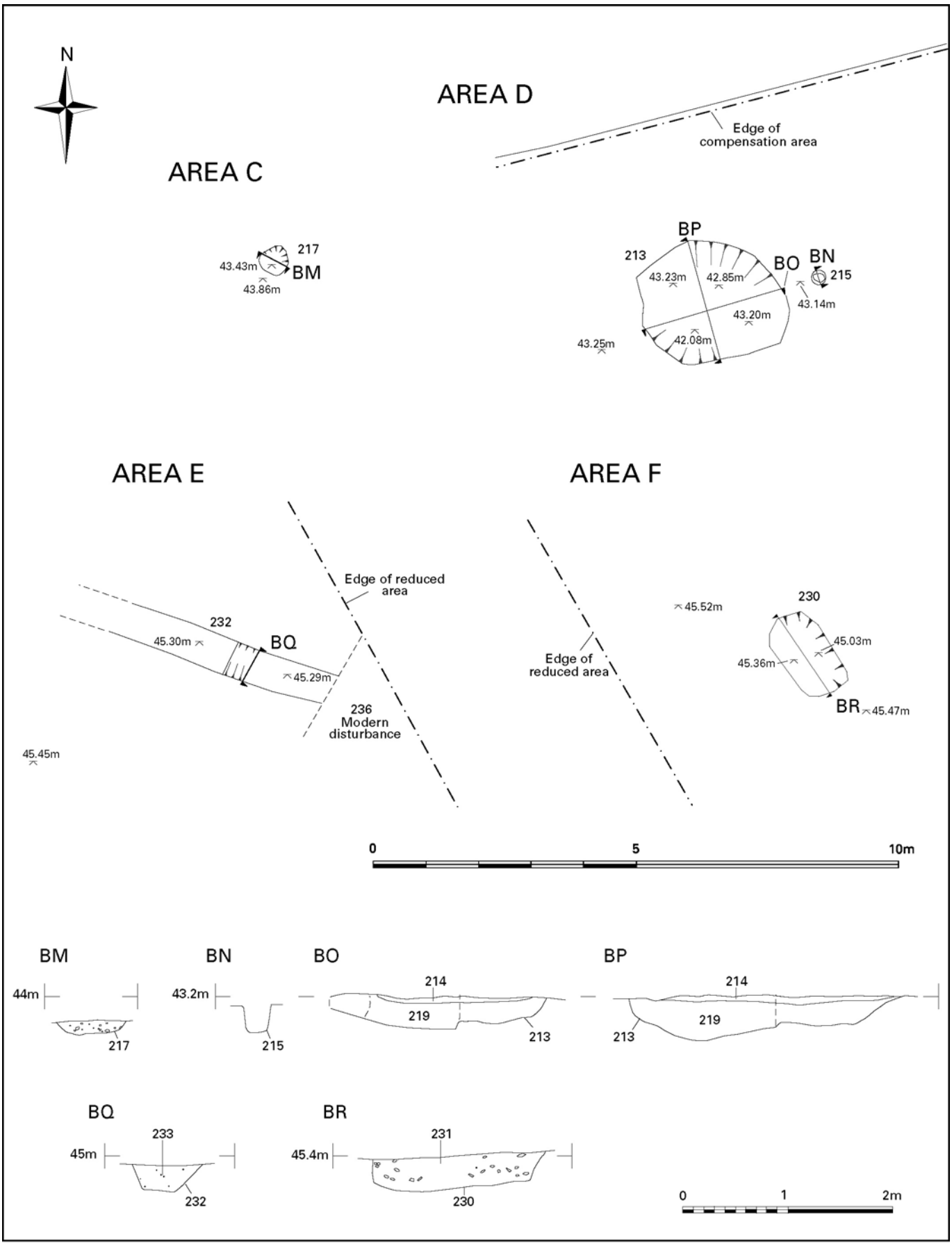


Fig 9: Areas C - F detailed plans and sections BM - BR

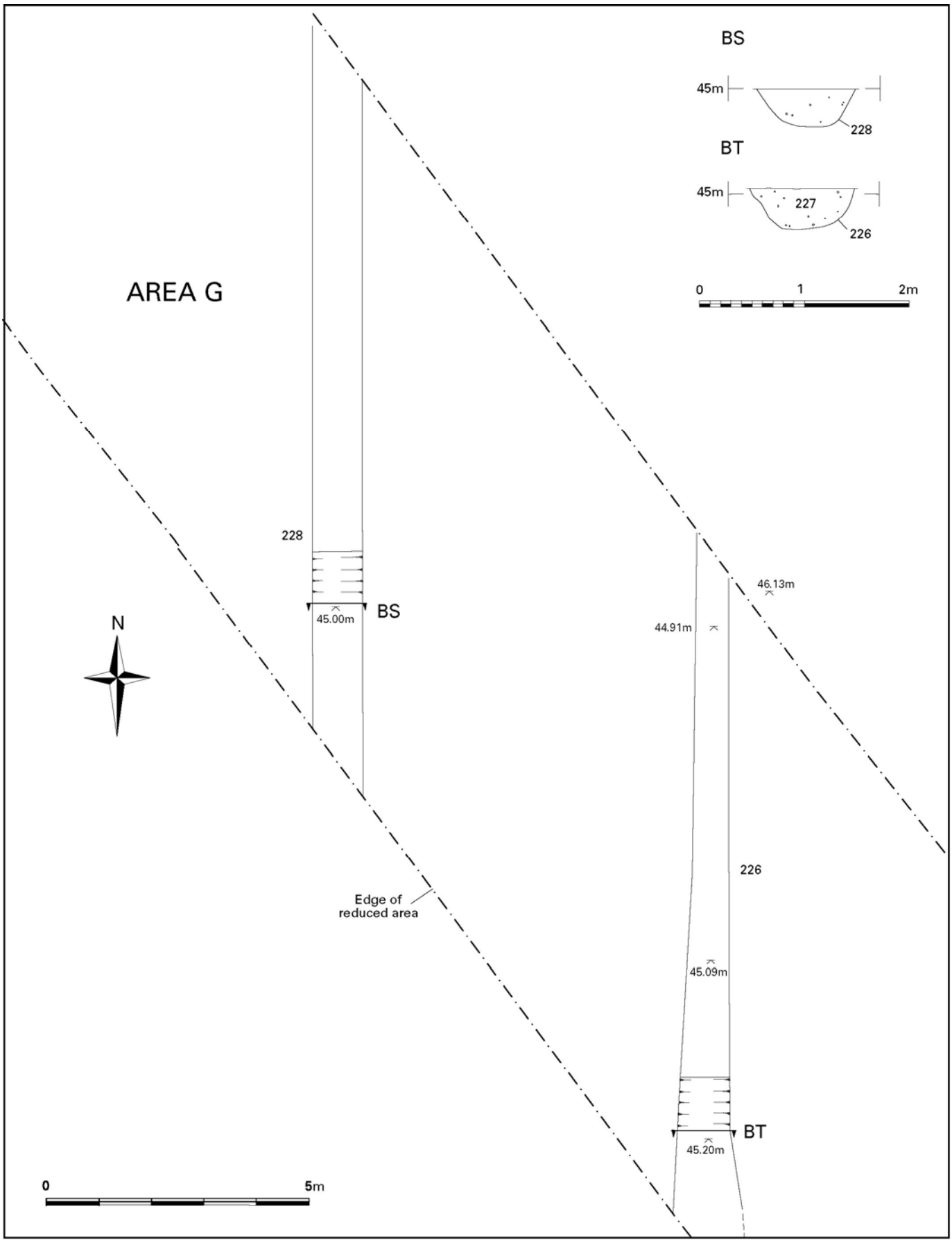


Fig 10: Area G detailed plan and sections BS - BT

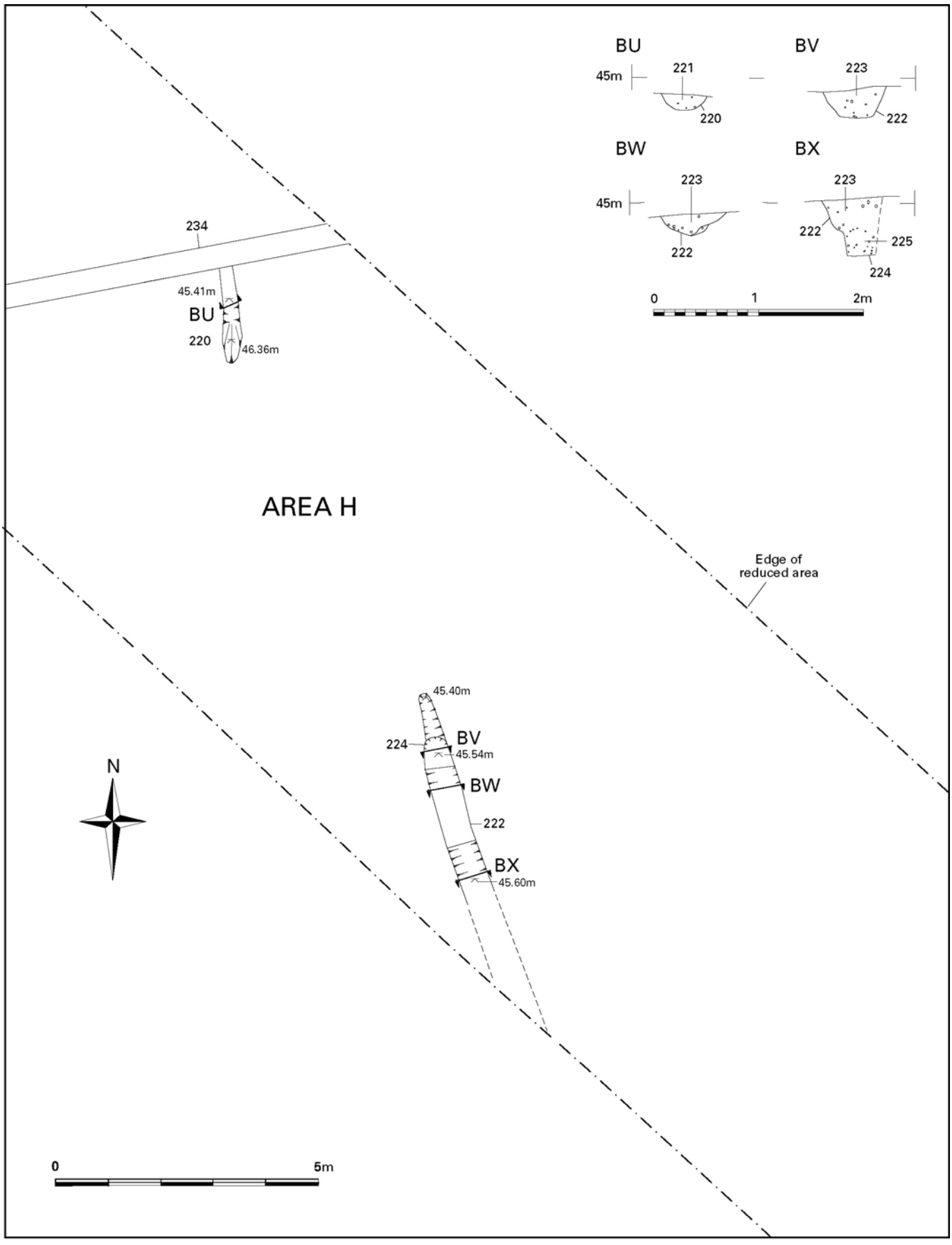


Fig 11: Area H detailed plan and sections BU - BX


Plate 13: Gully terminal **222**

## Table 12: Linear gullies and posthole

| *Gully* | *Section* | *Width (m)* | *Depth (m)* | *Context no.* | *Description* |
|---|---|---|---|---|---|
| **232** | 9/BO | 0.66 | 0.2 5 | | moderately sloping sides with sharp break of slope to flat base |
| | | | | **233** | greyish-brown silty sand |
| **228** | 10/BS | 0.95 | 0.35 | | moderately sloping sides with rounded break of slope to flat base |
| | | | | **229** | greyish-brown silty sand |
| **226** | 10/BT | 1.00 | 0.40 | | moderately sloping sides with rounded break of slope to flat base |
| | | | | **227** | greyish-brown silty sand |
| **220** | 11/BU | 0.43 | 0.15 | | concave profile |
| | | | | **221** | dark reddish-brown silty sand with frequent charcoal flecks |
| **222** | 11/BV, BW, BX | 0.60 | 0.30 | | moderately sloping sides and irregular base |
| | | | | **223** | dark grey/reddish-brown mottled silty sand with few HCP |
| **224** | 11/BX | 0.30 | 0.23 | | vertical sides and flat base cut through the base of **222** |
| | | | | **225** | reddish-brown silty sand |

## Phase 6: Anglo-Saxon

### AREA D

To the north of Area A, a sunken-featured building (SFB) was located adjacent to the edge of the river terrace (Fig 2/Area D; Fig 9) during the watching brief. It survived as two distinct cut features; hollow **213** representing the sunken-floor area and 0.6m to the west, posthole **215** aligned along its longer axis. This suggests that the minimum longitudinal dimension of the SFB was 3.6m. There was no indication as to the position of either the walls or the doorway.


Plate 14: SFB **213** during excavation

### Table 13: Sunken-featured building (SFB)

| *Feature.* | *Section* | *Size (m)* | *Depth (m)* | *Shape* | *Filled with* | *Description* | *Finds* |
|---|---|---|---|---|---|---|---|
| **213** | BO, BP | 2.70 x 2.30 | 0.45 | sub-square | | irregular sloping sides and flat base with deeper bowl depression on west side | |
| | | | | | **219** | basal fill occupying most of the hollow overlaid by **214** | |
| | | | | | **214** | secondary fill | Pottery, flint |
| **215** | BN | 0.22 x 0.22 | 0.25 | circular | **?** | posthole with near vertical sides and flat base | |

## Phase 7: Medieval/post-medieval

Ridge and furrow can be discerned on aerial photographs covering the area although none is extant. It was aligned north-west/south-east in both Areas A and B and NNE/SSW in the vicinity of Area G. Although noted during the excavations it was not recorded in detail.

## Phase 8: 18th century

### AREA J

A 4m wide section was cut through the causeway on the northern flood plain in order to insert a new concrete box culvert on the north side of the existing flood culverts (Figs 12 & 13). The process was undertaken in two phases in order that pedestrian traffic could continue to use the road. The remains of two stone wing-walls were revealed at the bottom of the cut and a cross section of part of the stone culvert was recorded as well as a cross section of the causeway, but no former flood channels could be recognised, possibly because of the high water levels at the time.

On the east side of the carriageway three courses of sandstone ashlar **241** survived forming the end of a wing-wall which extended some 2.5m wider than the flood arch. The protruding end had been cut vertically in order to insert a concrete culvert extension box. The lower, plinth course was 900mm wide and comprised large rectangular blocks (600mm-700mm long x 300mm wide x 200mm thick). The second course comprised slightly smaller blocks and was offset 300mm to the south with a 100mm overhang and was bonded with a sandy mortar. Only a fragment of the third course survived on the inner, southern, side but it was 750mm long.

The western wing-wall **270** survived as a complete quarter circle in plan, extending 2.5m wider than the stone culvert, although only two courses high. The lower, plinth, course was only partially visible and the 750mm wide second course was offset to the north by 350mm. The upper course was bonded with a hard, white mortar in which were set the remains of bricks (**271**) which had been removed by the machine.

The edge of the former culvert spandrel wall was visible in section and was composed of four courses of sandstone ashlar bedded onto a chamfered string course founded on the wing-wall. From the base of the wing-wall to the top of the spandrel was 1.7m. The infill behind the intrados (inner curve) was loosely coursed but that nearest the face was bonded with a very hard white mortar **264** similar to **271**, and that on the inner side was a soft brown sandy material.

The majority of identifiable layers in the causeway removed in the eastern cutting which was 2.3m below the modern road surface appeared to be undated dumps. The earliest was greyish-brown clay **252** which was overlaid by dark brown sandy clay **251** which was capped by brown silty sand **250**. All these layers were sealed by a dump of yellowish-brown sand **249**, itself capped with dark yellowish-brown silty sand **248** and sealed by a very dark greyish-brown silty clay loam former topsoil **247**. This layer was sealed by a thick layer of mixed brown and yellow silty sand **246** which must have been sealed by some form of modern turf growth which had already been removed prior to recording.

Dump **246** was cut by roadside drainage ditch **244** on its eastern side. Ditch **244** was in excess of 2.0m wide with a moderately sloping eastern edge, flattish base 0.62m deep and filled with dark yellowish-brown silty sand and overlying turf **245**. A modern service pipe was cut into this fill. The western side of ditch **244** was cut vertically prior to the insertion of modern road make-up layers **243=267** before being sealed by road surface **242=268**.

A less complicated sequence was visible in the western cutting which was only 1.9m below the modern road surface, but again the earliest deposits were all associated with the construction of the causeway. A large dump of reddish-brown silty sand **258=272** was overlaid by black/reddish-brown silty sand **260** representing an old

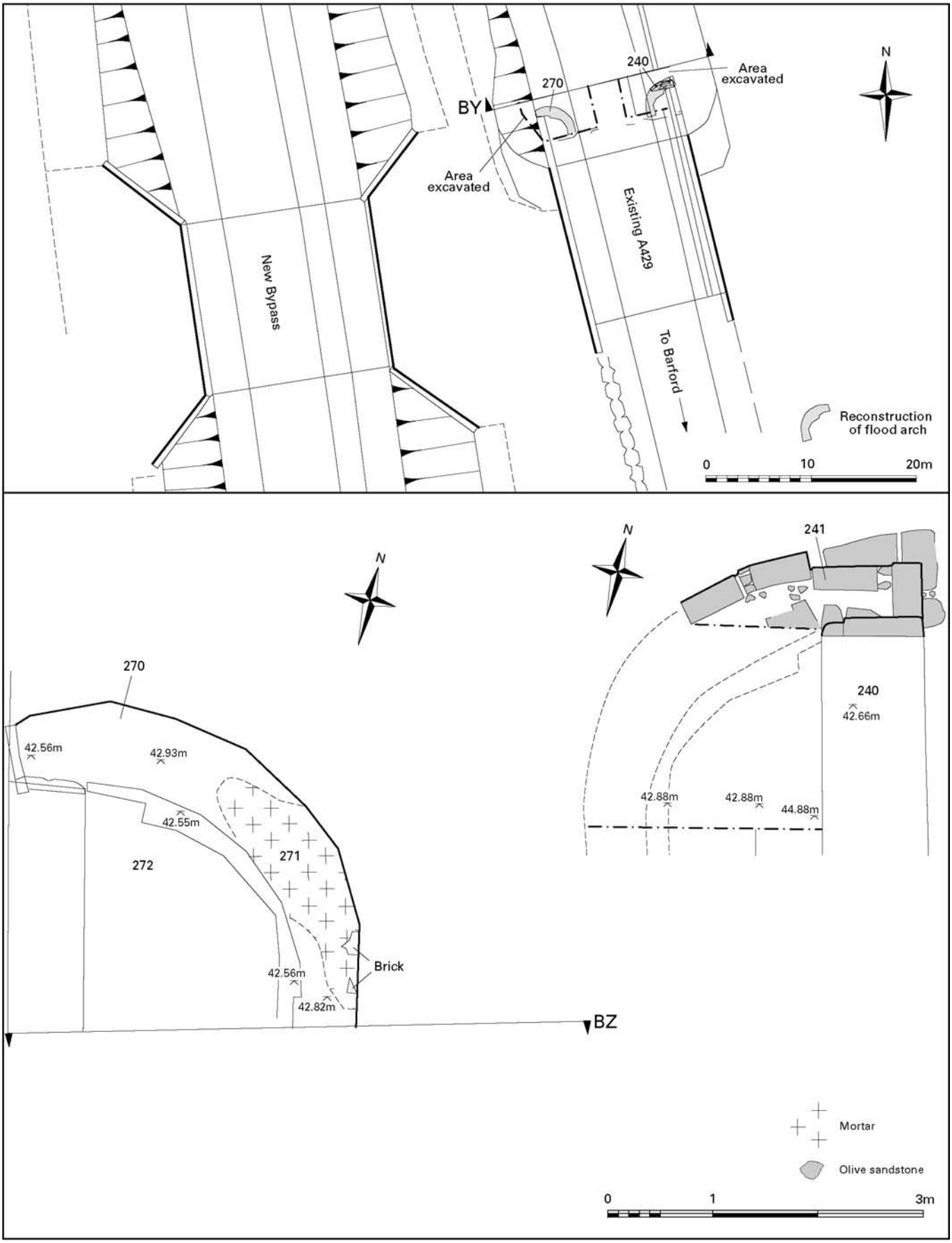


Fig 12: Area I detailed plan

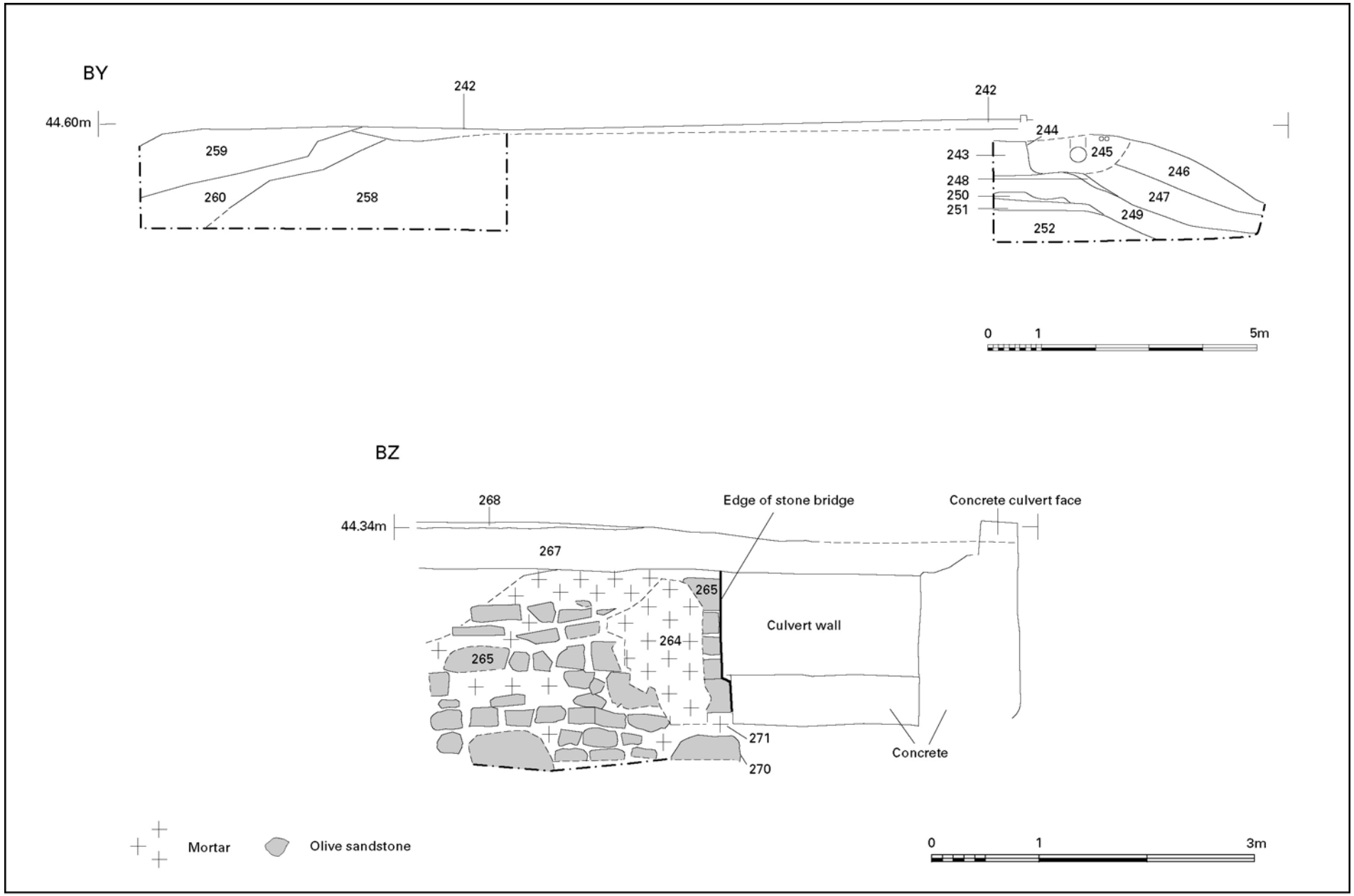


Fig 13: Area I sections BY - BZ

vegetation surface which was in turn overlaid by light reddish-brown silty gravel **259**.

The road widening and concrete extension to the stone culverts had evidently caused little damage to the original structure. The concrete slabs had been poured using the stonework as a 'former' although the wings had been partially dismantled in this process. Although two phases of causeway were visible in section no dating evidence was recovered from either of them. The earlier road make-up layers had been entirely replaced in the vicinity of the culvert.

Plate 15: Bridge spandrel and wing wall (Section BO)

## Phase 9: Undated

### AREA C: PIT 217

Pit **217** (Figs 2 & 9, section BM) was identified during the watching brief as the gravel was removed in the flood relief area north-west of Trench 18. It survived as a circular cut 0.66m in diameter with moderately sloping sides and a flattish base 0.13m deep although it may originally have been as much as 0.5m deeper. The lower part of the surviving fill **218** was very dark brown silty sand with very occasional small gravel.

### AREA I

A series of five wooden piles were found by contractors on the north bank of the Avon during the piling operations for the four span viaduct. Three of the piles were removed by the contractors but the two that remained in-situ can be described to context.

The piles formed a single line aligned north-west – south-east and were found *c.* 1.8m – 2.0m below modern ground level. They were imbedded in a deposit of dark grey silty sandy loam which was overlain by a dark grey silty clay layer which had been sealed by alluvium.

Plate 16: Wooden pile with poured concrete pile immediately adjacent

Plate 17: Two wooden piles removed by contractors

## 6. RADIOCARBON DETERMINATIONS

Four samples were sent to the Scottish Universities Environmental Research Centre AMS Facility for radiocarbon determinations. The samples comprised short lived cereal seeds and human bone. The human bone was selected for intrinsic interest and because it was likely to reveal the approximate timeframe in which the site was occupied. SUERC-24744 was originally thought to be from a Bronze Age deposit, whilst the two cereals seeds (SUERC-24745 and SUERC-24746) were from dump events which should therefore be dated by the samples.

### Table 14: Radiocarbon determinations

| *Lab No* | *Area* | *Context* | *Material* | $\delta^{13}C$ relative to VPDB | *Radiocarbon Age BP* | *Calibration 68.2%* | *Calibration 95.4%* |
|---|---|---|---|---|---|---|---|
| SUERC-24744 | **B** | **113/1** | Charred *Hordeum* (barley) seed | -23.0 ‰ | 2095 ± 35 | 170BC (68.2%) 50BC | 210BC (95.4%) 20BC |
| SUERC-24745 | **A** | **10/1** | Charred *Triticum Spelta* (spelt wheat) seed | -21.3 ‰ | 2235 ± 35 | 380BC (17.6%) 350BC<br>300BC (50.6%) 210BC | 390BC (95.4%) 200BC |
| SUERC-24746 | **A** | **34/1** | Charred *Hordeum* (barley) seed | -21.9 ‰ | 2145 ± 35 | 350BC (17.0%) 310BC<br>210BC (51.2%) 110BC | 360BC (25.6%) 280BC<br>260BC (69.8%) 50BC |
| SUERC-24967 | **A** | **2** | Human maxilla (jaw bone) fragment | -19.9 ‰ | 2235 ± 30 | 380BC (17.3%) 350BC<br>300BC (50.9%) 210BC | 390BC (24.8%) 340BC<br>330BC (70.6%) 200BC |

The radiocarbon dates confirm that Areas A and B were in use during the later 1st millennium BC within the conventional middle to late Iron Age. Finer resolution of the timeframe indicated by the dates is not possible on current evidence, because of the lack of stratification across the site and the absence of suitable material for radiocarbon dating.

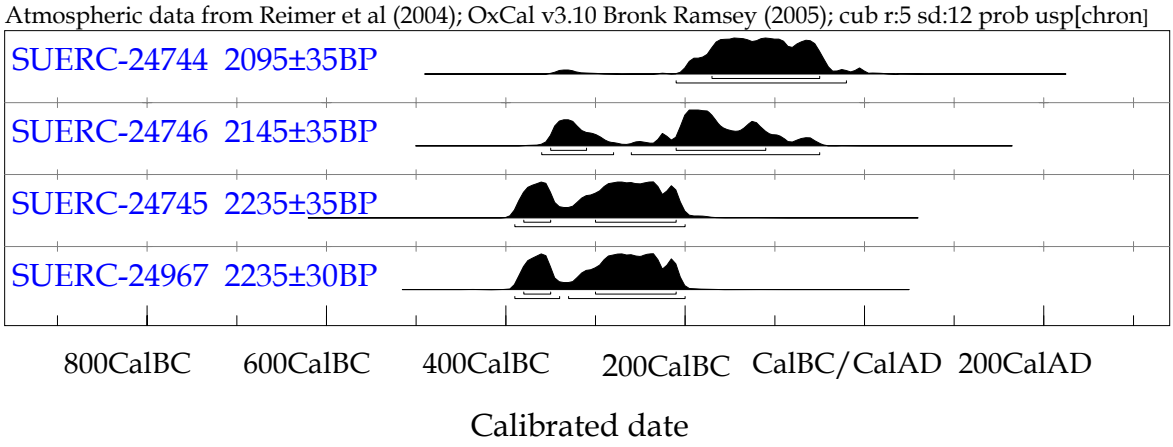


Fig 14: Oxcal probability distributions of radiocarbon dates

## 7. FLINTWORK by Lynne Bevan

### Introduction

The total flint assemblage comprised 34 items of worked flint, weighing a total of *c*188 grams, the majority of which came from Area A (see Table 15 for quantification of flint by location). In the report below the- flint from each discrete Area, Trench or Field will first be discussed as separate assemblages and then all of the assemblages will be discussed together in their broader local context.

**Table 15: Quantification of the total flint assemblage**

| Area/Other Location | Number of Flints | Total Weight (grams) |
|---|---|---|
| Area A | 16 | 54 |
| Area B | 7 | 26 |
| Area D | 1 | 2 |
| Trench 3 | 1 | 3 |
| Trench 12 | 1 | 9 |
| Field 13 Fieldwalking | 5 | 76 |
| Field 14 Fieldwalking | 3 | 18 |
| Totals: | 34 | 188 |

### Methodology

The flint was examined, classified and catalogued with the aid of a hand lens at x10 magnification. The weights of all items were recorded and the data were tabulated according to the number and artefactual make-up of the individual flint assemblages.

Only tools and cores have been catalogued here (Nos 1-12), with the best and most chronologically-diagnostic artefacts being selected for illustration (Fig 15/1-3). In the interests of clarity, non-catalogued material is referred to by individual finds/context number only when individual pieces are discussed, although a full record of all flint is available in the site archive.

## Raw Material

All of the flint tools and waste were struck from small flint pebbles of a generally good quality. When present, remnant cortex was thin and compacted and characteristic of pebble flint from secondary deposits, the most probable source being local river gravels. The appearance of the flint was almost exclusively glossy and fresh and very little post-depositional edge-abrasion or hinge fractures were noted. Flint colours ranged from light grey and light brown to medium and darker brown and grey, with the majority of pieces being translucent rather than opaque. There was hardly any evidence for white recortication (resulting from chemical changes in the soil) and burning noted among the struck flint.

## Quantification

Table 16 shows the quantification of tools and waste categories recovered from Areas A, B, D, Trenches 3 and 12 and from fieldwalking in Fields 13 and 14.

**Table 16: Flint tools and waste from various locations (Areas, Trenches and Fields)**

| | *Flake/Chunk* | *Core/Core Frag/Trimming* | *Scraper/Other Retouched item* | *Possible Gunflint* |
|---|---|---|---|---|
| Area A | 12 flakes, mainly broad and 1 chunk | 1 CTF (blade - Early Neolithic) | 1 retouched flake | 1 rectangular flake |
| Area B | 4 flakes | 1 CTF (blade – Later Mesolithic), 1 CF (flakes – Later Neolithic – Bronze Age | 1 scraper | |
| Area D | 1 | | | |
| Trench 3 | 1 | | | |
| Trench 12 | | | 1 retouched flake on CTF (blade – Later Mesolithic) | |
| Field 13 Fieldwalking | | 1 flake core, 1 CF (flake –both Later Neolithic to Early Bronze Age), 1 CTF (blade – possibly Later Mesolithic – Early Neolithic) | 1 scraper, 1 retouched flake made from blade core fragment – possibly Later Mesolithic – Early Neolithic | |
| Field 14 Fieldwalking | 1 | 1 CF (blades – possibly Later Neolithic) | 1 retouched flake/possible arrowhead preform on a CTF (blades - Later Neolithic) | |
| Totals: | 20 | 7 | 6 | 1 |

### AREA A

The assemblage from Area A consisted of 16 items weighing a total of 54 grams. With the exception of a rectangular-shaped fragment of flint weighing nine grams, which might have been intended for use as a gunflint (Unstrat, SF 9), all of the flints are regarded as being of prehistoric date. Although this was the largest group of flint in the total assemblage, the majority of pieces consisted of undiagnostic unretouched flakes and only two of the other items had any broad dating potential. These were a core trimming flake with a series of narrow blade detachments which probably dated to the Early Neolithic period and a flake with marginal retouch to which a general Neolithic date can probably be assigned.

## AREA B

The assemblage from Area B consisted of seven items weighing a total of 26 grams. The earliest item in the assemblage was a Later Mesolithic core trimming flake with a series of narrow blade detachments (Fig 15/1). A small fragment from a flake core (SF 12, Phase 4 posthole fill **201**) was probably of Later Neolithic to Bronze Age date. Similarly-broad dating may be assigned to a broken scraper. The other items consisted of undiagnostic waste flakes.

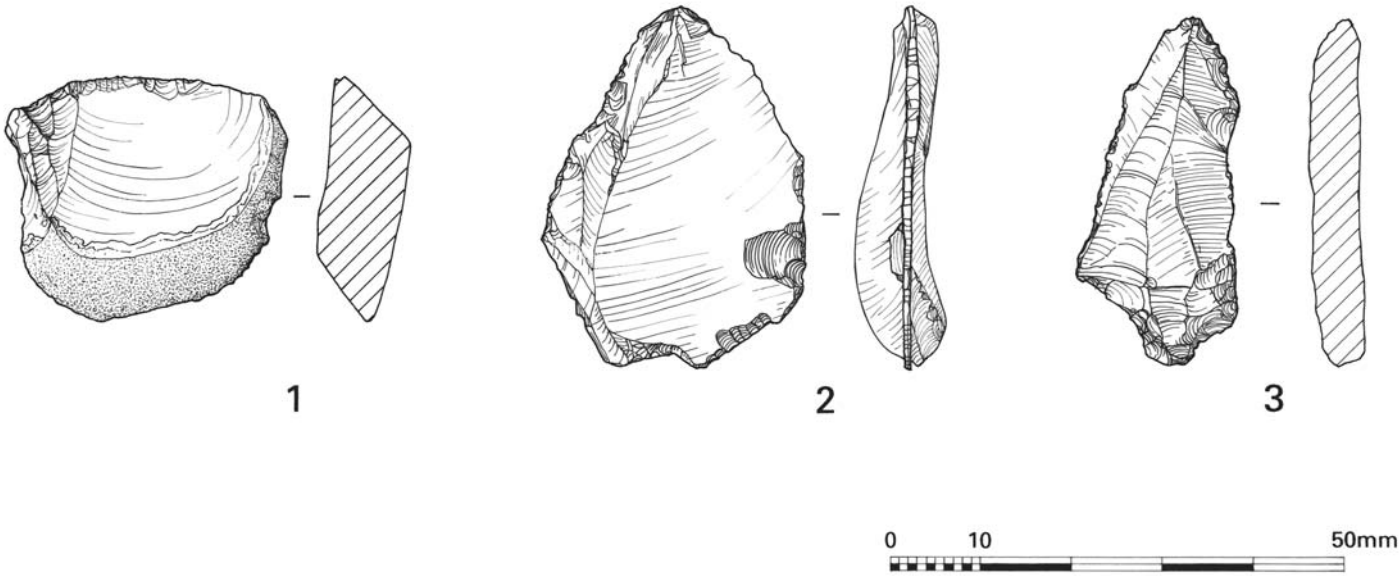


Fig 15: Flint 1 - 3

### Catalogue

1. Core trimming flake with a series of narrow blade detachments. Mid-grey semi-opaque flint. Later Mesolithic in date. Length: 27 mm, width: 32 mm, thickness: 8 mm. Weight: 9 grams. Small Find 19, Topsoil **212**.

2. Retouched core trimming flake with one platform from which very narrow blades have been detached. Light grey opaque flint. Later Mesolithic in date. Length: 42 mm, width: 30 mm, thickness: 10 mm. Weight: 9 grams. SF 20, Topsoil **1200**.

3. Retouched flake, possibly a preform for a barbed and tanged arrowhead, made from a flake with blade detachments on the dorsal. Light to mid-grey in colour, semi-opaque. Possibly of Late Neolithic date. Length: 39 mm, width: 20 mm, thickness: 5 mm. Weight: 12 grams. WA 7288.

## AREA D

One undiagnostic waste flake weighing two grams (SF 1, Phase 6 SFB fill **214**) was recovered from Area D.

## TRENCH 3

One undiagnostic waste flake weighing three grams (SF 8, Topsoil **300**) was recovered from Trench 3.

### TRENCH 12

One find was recorded from Trench 12; a retouched core trimming flake weighing nine grams (Fig 15/2). The narrowness of the blades which had been detached from one platform indicate a Later Mesolithic date for this retouched tool.

### FIELD 13

All five items collected from Field 13 by fieldwalking were datable to some extent and were tools of one sort or another. The earliest finds were probably of Late Mesolithic to Early Neolithic date. These comprised a retouched flake made from a blade core fragment and a trimming flake from a small blade core. Cones of percussion near to the short, marginally-retouched edge of the flake attested to the use of a hard hammer technique.

Two finds were attributed to the Later Neolithic to Early Bronze Age periods. These comprised a flake core and a flake core fragment. A scraper with a steeply-retouched, utilised working edge was probably also of Later Neolithic to Early Bronze date.

### FIELD 14

Three items weighing a total of 18 grams were collected from Field 14 by fieldwalking, two of which were broadly datable to the Later Neolithic period. These comprised a retouched flake with blade detachments on the dorsal (Fig 15/3) and a fragment from a rough mixed blade and flake core. The retouched flake was possibly a preform for a barbed and tanged arrowhead. The other item from Field 14 was an undiagnostic waste flake.

## Discussion

Though small in size, several chronologically-diagnostic items were identified in this assemblage. The earliest items were of Late Mesolithic and Later Mesolithic to Early Neolithic dates, in common with earlier elements recorded in a number of Warwickshire assemblages, including nearby Wasperton (Bevan 1995) and Tiddington (Barfield forthcoming). Other chronologically-diagnostic elements of the small assemblages from the Barford Bypass date to the Later Neolithic to Bronze Age periods, in common with similar Warwickshire assemblages from Wasperton (Bevan 1995), the Arrow Valley (Bradley 2000), Tiddington (Barfield forthcoming), Walton (Bevan in press) and Wellesbourne (Fennell 1978; Wise & Bond 1992). Similar tool types have been found in all of these assemblages. Many of the unretouched flakes from Barford might also be broadly dated to this period due to their broad squat shape which is typical of later flint industries (Pitts 1978).

Interestingly, some elements of a slightly smaller assemblage from Park Farm, Barford which also contained identifiably Later Neolithic to Bronze Age tools, were interpreted as possibly being in contemporary use with an Iron Age enclosure there (Pickin 1994, 22). This does not appear to have been the case with the Barford Bypass assemblage since the flints have generally been carefully worked. The standard of flintworking observed in this assemblage is more typical of Later Neolithic to Early Bronze Age industries than Later Bronze Age and Iron Age flintworking (see Bevan forthcoming; Young & Humphrey 1999; Humphrey & Young 2003). As such, the flints are more likely to have been broadly contemporary with Neolithic (Oswald 1969; Loveday 1989) and Bronze Age (Loveday 1989; Hingley 1996) activities in the Barford area.

# 8. THE POTTERY by Annette Hancocks

## Introduction

A total of 257 sherds (*c*.3.3kg) of pottery with an average sherd weight of 14.3g was recovered. The assemblage comprised mainly body sherds (77.5%); together with decorated body sherds (9%); rim sherds (7%); base sherds (6%) and a single handle (0.5%).

The assemblage is primarily of Late Bronze Age / Early Iron Age (Period 3); Middle / Late Iron Age (Period 4) and Roman (Period 5) date. There is also a small, but significant amount of Anglo-Saxon material (Period 6).

The pottery derived from pit and ditch groups in Areas A and B, and a sunken-featured building (SFB) in Area B. In addition, a small quantity of unstratified pottery recovered from evaluation trenches 7 and 9 was rapidly scanned. There is an element of Roman material from Areas F and H. The quantification of the pottery recovered is summarised in Table 17.

### Table 17: Quantification of pottery by area

| Area | Feature type | NOSH | Weight (g) |
|---|---|---|---|
| A | U/S | 4 | 114 |
| A | Topsoil | 1 | 99 |
| A | Ditch | 22 | 203 |
| A | Pit | 14 | 588 |
| ***Subtotal*** | | ***41*** | ***1004*** |
| B | U/S | 2 | 43 |
| B | Topsoil | 2 | 35 |
| B | Pit | 89 | 769 |
| B | SFB | 37 | 419 |
| B | Posthole | 1 | 23 |
| ***Subtotal*** | | ***131*** | ***1289*** |
| F | Pit | 1 | 65 |
| ***Subtotal*** | | ***1*** | ***65*** |
| H | Gully | 84 | 990 |
| ***Subtotal*** | | ***84*** | ***990*** |
| **Total** | | **257** | **3348** |

The assemblage was characterised by a total of 19 rim forms. From Period 3 (LBA / EIA) a single globular and a single ovoid jar form, from Period 4 (Iron Age) a couple of ovoid jar forms and from Period 5 (Roman) two bowls, one beaker and a necked jar. From Period 6 (Anglo-Saxon) two globular and one plain cooking pot form were recognised. A further plain cooking pot form with lug rim was recorded as a residual element in Period 8. All other forms are post-medieval/modern in date.

## Methodology

The material was recorded and coded according to a system devised by David Knight (1998) and in conjunction with the Prehistoric Ceramics Research Group (PCRG) guidelines for the analysis and publication of later prehistoric pottery (PCRG 1997). The minimum variables for the recording of later prehistoric pottery were adhered to. The assemblage was quantified by sherd count, weight (g), fabric, form, surface treatment and decoration. Only rim equivalents (EVEs) are published, but

percentages for bases are recorded in the archive. The level of abrasion was recorded for individual sherds.

## Fabrics

Prehistoric fabrics were recorded in accordance with the Warwickshire Prehistoric and Romano-British Type Fabric Series (Class P), whilst Roman fabrics were not recorded in great detail, but to general fabric type, such as quartz, grog, rock or shell-tempered or common Roman fabrics such as Black-Burnished Ware 1 (BB1). This was due to the small size of the assemblage**.**

### Prehistoric Fabric Catalogue

P11 A handmade fabric with common moderate sand temper *c* 0.3mm and occasional large brown and white quartzite inclusions *c* 3-6mm. Fabric neutral 2. Gas House Lane, Alcester (Evans 1996), Marsh Farm Quarry, Salford Priors (Hancocks forthcoming a), Walton, Wellesbourne (Hancocks in press), Tiddington (Booth forthcoming)

P12 A hand-made fabric with common medium sand temper *c* 0.3-0.4mm and some organic temper voids (similar to P11, but with some organics). Princethorpe (Evans 1998, 70); Arrow Valley (Evans 2000, 122); Ling Hall Quarry (Hancocks forthcoming b); Tiddington (Booth forthcoming); Walton, Wellesbourne (Hancocks forthcoming); Marsh Farm Quarry (Hancocks forthcoming); TR99 (Evans 2010)

P21 A hand-made reduced fabric with a grey-brown core, orange brown margins and black surfaces, with some-common angular white quartz *c*1-5mm and common moderate sand temper *c* 0.3mm. Bubbenhall (Evans forthcoming), Coleshill (Booth 2005), Tiddington (Booth forthcoming)

P23 A reduced hand-made fabric with common large angular black stone inclusions *c* 3-10mm. Arrow Valley (Evans 1999, 122); Walton, Wellesbourne (Hancocks in press)

P47 A reduced hand-made fabric with oxidised external surfaces and common fine red/brown grog (*c* 0.25mm) and common coarse (1-3mm) fossil shell; Walton, Wellesbourne (Hancocks in press)

P53 A reduced hand-made fabric with oxidised external surface and common fine shell temper <0.25mm. Coleshill (Booth 2006)

### PHASE 2: NEOLITHIC (0.39%)

A single flint-tempered body sherd (P21) was recovered residually from a small pit fill **116** in Area B.

### PHASE 3: LATE BRONZE AGE/EARLY IRON AGE (14%)

Material of this date derived from a single small pit fill **113** in Area B. 36 sherds, mainly in fabrics P11 and P47 were recorded. These included a single globular jar with upright neck and flattened, pinched out rim (Fig 16/1) and an ovoid jar with upright neck and flattened, pinched rim (Fig 16/2). Both are decorated with finger-tipping on the shoulder and body and may represent elements of a feasting set (cf Woodward 1998; 2000), given the diameter of the two vessels (130mm and 250mm respectively).

PHASE 4: IRON AGE (31.5%)

Within Area A an L-shaped ditch complex was dated by ceramics to the Middle to Late Iron Age period. A small amount of Roman and Saxon material from later fills (**77** and **80**) included a Saxon ceramic bucket. Only two sherds, with no diagnostic rim forms were recovered from fills **6** and **81**. Additional material came from evaluation trench contexts **703, 900** (topsoil) and **903** including a single, neckless ovoid jar with rounded direct rim in fabric P23 (Fig 16/3) and a flat base angle in P23 from the topsoil (Fig 16/4). No other diagnostic rim forms were recovered from this ditch complex.

Small quantities of Iron Age pottery were recorded from the Western linear pits **22**, **23**, and Eastern linear pits **34, 40** and **43** within Area A.

Within Area B, 13 sherds of pottery were recovered from the following pit fills **92**, **94**, **103** and **105**, in either fabric P11 or P12. Two are from type 1a pits, one from a type 1b pit and one from a type 2 pit. A further series of type 2 pits (fills **128, 172** and **174**) have produced 37 sherds of pottery all in fabric P47. The latter fabric distinction may represent a chronological development. It certainly appears to reflect spatial organisation in that the two groups are distinctly separate, but it is less clear if it also represents a functional distinction.

A single rim from context **195** (fabric P53), may represent a foundation deposit, if indeed the interpretation of a building posthole is correct. The only sherd recovered is a single ovoid, neckless jar form (Fig 16/5), with a diameter of 250mm and sherd thickness of 9.5mm and finger-tipping on the rim. A further Middle/Late Iron Age sherd was recovered from context **98** (P28).

PHASE 5: ROMAN (33.5%)

The Roman pottery assemblage was recovered from two gullies **220** and **222**, both in Area H. Gully fill **221** comprised some Black-Burnished Ware 1 diagnostic forms such as a necked jar and bowl and a Severn Valley Ware greyware beaker. These are of 2nd to 4th century AD date. Material of the same date and form was recovered from gully fill **223**, including a fine greyware beaker and bowl (not illustrated). A single, undiagnostic greyware body sherd was recovered from context **231**, Area F.

PHASE 6: ANGLO-SAXON (17.5%)

Within Area B a single feature, identified as a sunken featured building (SFB) produced two Saxon globular jars with concave neck and everted rim (diameters of 100mm and 180mm) from context **214** (Fig 16/8-9).

PHASE 7/10: POST-MEDIEVAL/MODERN (3%)

Small quantities of post-medieval pearlware and Cistercian ware were recovered from the topsoil.

### Surface finishes and decoration

Surface furnishing was restricted to all over burnishing on the Period 6 Anglo-Saxon pottery (39 sherds), whilst decoration was split between the Late Bronze Age and Early Iron Age material (Phase 3) which demonstrated finger-tipping and finger-nail

decoration on the shoulder, body and rim and the Roman (Phase 5) classic Black-Burnished Wares with all-over burnish and linear/arc motifs on the body of vessels.

## Forms

A minimum of nineteen vessels were recognised within the assemblage. Illustrated forms are listed below. Ovoid, neckless jars with flattened direct or rounded direct rims are a feature of Middle/Late Iron Age assemblages.

### ILLUSTRATED FORMS BY PHASE

#### Phase 3 (LBA/EIA)

FABRIC CLASS P11

1 Handmade, globular jar with upright neck and flattened pinched out rim with finger-tipping below rim and finger-nail impressed decoration on shoulder. External and internal sooting. Area B, **113**, Pit, diameter 250mm (12%)

2 Handmade, Ovoid, neckless jar with flattened, pinched rim. Smoothed surfaces with external sooting. Area B, **113**, Pit, diameter 130mm (25%)

#### Phase 4 (Iron Age)

FABRIC CLASS P23

3 Handmade, ovoid, neckless jar with rounded direct rim. Area A, Trench 7, **703**, Ditch, diameter indet

4 Base angle (FLT) Handmade flat base angle. Area A, Trench 9, **900**, Topsoil, diameter 90mm (15%)

5 Handmade, ovoid, neckless jar with everted bevelled rim and finger-tipping below shoulder. Smoothed surfaces, Area B, **195**, posthole, diameter 250mm (9%)

#### Phase 6 (Anglo-Saxon)

FABRIC CLASS Saxon granodirite

6 Handmade, globular jar with concave neck and everted rim. Internal sooting. Area B, **214**, SFB, diameter 180mm (15%)

7 Handmade, globular jar with concave neck and everted rim. Area B, **214**, SFB, diameter 100mm (11%)

8 & 9 Additional unstratified Saxon pottery

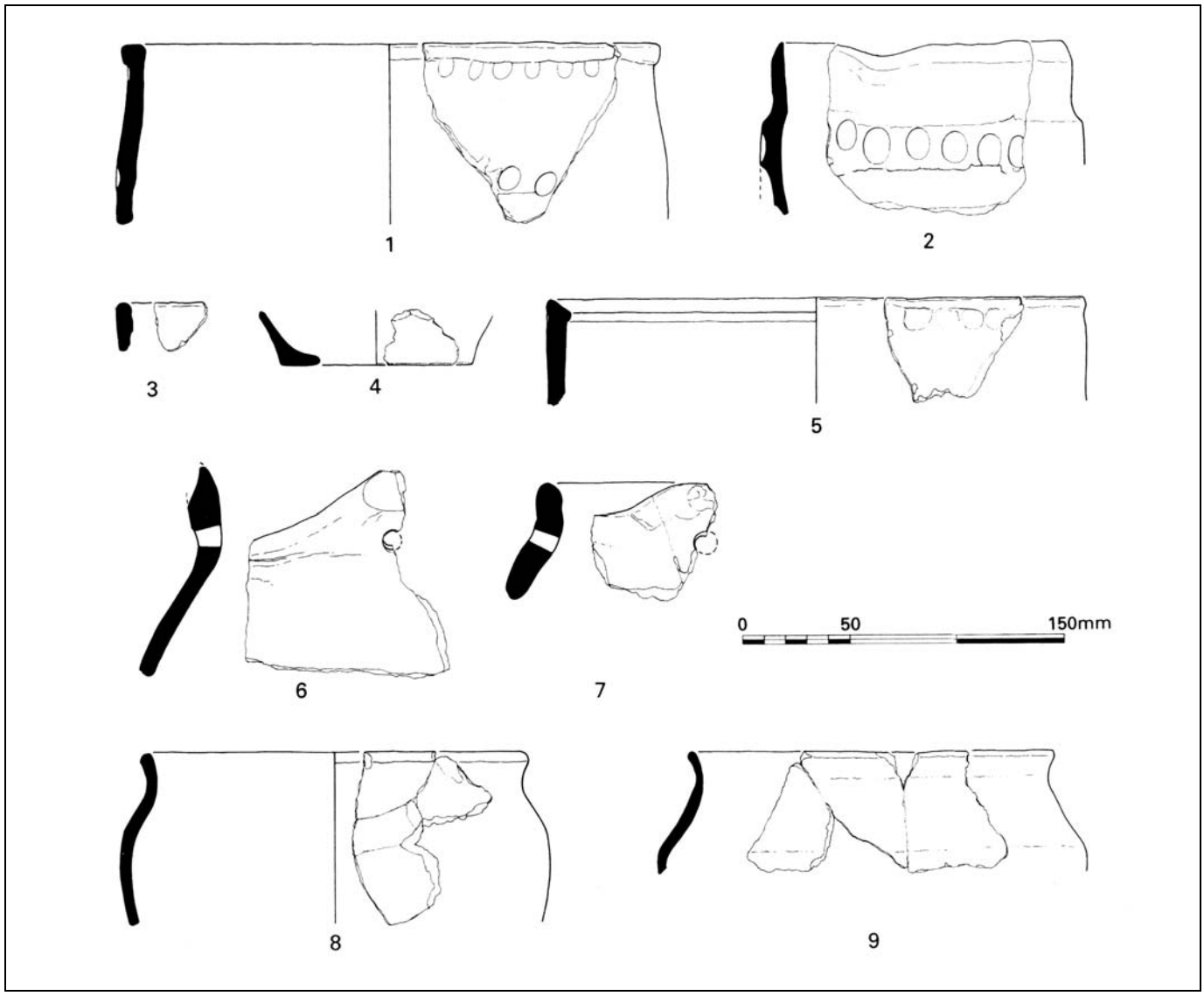


Fig 16: Late Bronze Age/Early Iron Age pottery 1-2, middle/late Iron Age pottery 3-5, Anglo-Saxon pottery 6-9

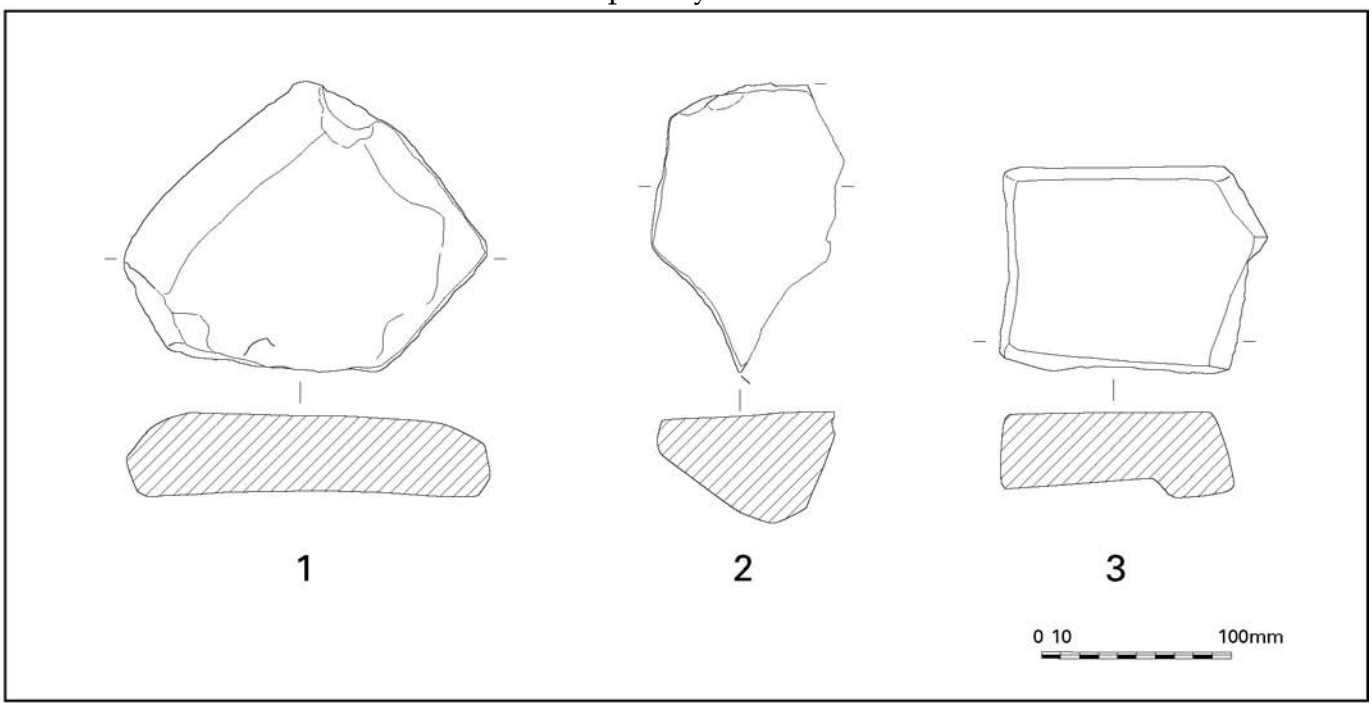


Fig 17: Querns 1 - 2 and rubbing stone 3

### Discussion

Apart from the single possible Neolithic sherd from small pit fill **116** the pottery assemblage forms at least four discrete ceramic phases (3 to 6). The Late Bronze Age/Early Iron Age group from Area B is defined by the ceramics from pit **113**, which may form part of a feasting set, similar to those identified at Wasperton (Woodward 1998, 5), Salford Priors (Woodward 2000, 39-43) and Hampton Lucy (Hancocks 2008). This interpretation is largely based on the presence of the large cauldron fragments, paralleled at Broom and Wasperton (respectively, Vessels 1 and E), which may represent communal containers (Woodward 1998, 6). A small group of probable Late Bronze Age pits with more mundane ceramic assemblages was identified at Park Farm, Barford (Cracknell & Hingley 1994).

The Middle and Late Iron Age in the Lower Warwickshire Avon region has been defined by sites such as Wasperton (Woodward unpublished), Marsh Farm Quarry, Salford Priors (Hancocks forthcoming), Walton, Wellesbourne (Hancocks in press), and Park Farm, Barford (Cracknell & Hingley 1994). The pits and L-shaped ditch complex from Area B have provided limited evidence in terms of diagnostic ceramic material.

A small, but interesting group of 2nd to 4th century AD ceramics was recovered from the two gullies in Area H. This is a typically rural assemblage (cf Evans 2000, 121; 2006, 167) with material which, with the exception of the Black-Burnished wares and Severn Valley wares, is all likely to have been produced locally. There was a distinct lack of finewares or imported wares and other regionally traded wares.

Of particular interest was the presence of a small assemblage of Anglo-Saxon material recovered from a SFB in Area B (context **214**) and unstratified within the topsoil. Recent work at Tiddington has provided limited evidence for small-scale, possibly seasonal Anglo-Saxon activity at 119 Tiddington Road and Rayford Caravan Park (Evans & Mills 2010; forthcoming). A boundary ditch at 119 Tiddington Road, yielded at least five handmade ceramic vessels representing three forms (figs 16 & 17), although no diagnostic rim forms were recorded at the latter site. Nevertheless two separate foci of Anglo-Saxon activity along the Tiddington Road have been mooted. The diagnostic ceramic evidence from Barford; plain burnished cooking pots with evidence of a lug on the rim and the other globular jars imply an early/middle Saxon date (450-650 AD). This date is further supported by the recovery of 34 sherds of Anglo-Saxon pottery of 5th to 7th century AD date from excavations at Long Itchington, on the route of the Transco Churchover to Newbold Pacey pipeline (Evans 2006, fig 45).

## 9. STONE ARTEFACTS by Nicholas Palmer
(with geological identifications by Jon Radley, Warwickshire Museum)

The site produced three stone artefacts, a stone for fine grinding (3) from a late Bronze Age/early Iron Age pit fill (**113**), and a small, sub-pentagonal upper stone from a saddle quern (1), and a fragment of lower stone (2), either from a quern or for grinding, from a middle-late Iron Age pit fill (**315**). None were of instantly identifiable stone type. All may have been picked up from the local drift, and may therefore represent opportunistic use of local resources rather than items acquired by trade.

CATALOGUE (Fig 17, 1-3)

1. Upper stone of saddle quern, coarse-grained sandstone, probably Carboniferous, possibly not from Warwickshire, sub-pentagonal with slightly concave grinding surface with linear wear striations. 190mm x 150mm, Th *c*50mm. (**315**, SF 3)

2. Lower stone fragment, (very) fine grained sandstone, probably Triassic, fairly local, possibly Bromsgrove Sandstone, with slightly uneven, pecked grinding surface. 155mm x 95mm, Th 58mm. (**315**, SF 2)

3. ?Lower stone of rubber, slightly reddish, micaceous, fine-grained sandstone, subrectangular with smooth, flat grinding surface, for fine grinding. 130mm x 100mm, Th 44mm. (**113**, SF 5)

## 10. SLAG

Four Phase 4 contexts in Area A produced a total of 190g of slag and these are listed in Table 18. The slag was predominantly (by count) lightweight vesicular fuel-ash slag, but of particular note is the fragment of smithing hearth bottom from pit **103**. All the slag came from secondary contexts in pits and postholes within a 9m radius of pit **100**, which could suggest that it derived from somewhere close by. The fragment of smithing hearth bottom clearly demonstrates that despite the absence of any ironwork on the site ironworking was undertaken in the vicinity.

**Table 18: Slag by context**

| *Area* | *Context* | *Context type* | *Weight* | *Type* |
|---|---|---|---|---|
| A | **90** | fill of posthole **89** | 5g | fuel-ash slag |
| A | **94** | fill of pit **93** | 10g | fuel-ash slag |
| A | **103** | fill of pit **102** | 155g | smithing hearth bottom |
| A | **121** | fill of posthole **120** | 20g | fuel-ash slag |

## 11. HUMAN BONE by Malin Holst

Fragments of human bone were recovered from a single context (**2**) towards the base of L-shaped ditch **1**.

**Table 19: Summary of disarticulated human bone assemblage**

| *Skeletal element* | *No of fragments* | *Side* | *Age* | *Sex* | *Other* |
|---|---|---|---|---|---|
| Maxilla | 2 | right half of maxilla and one left tooth | young adult | - | little dental wear, slight calculus, deep DEH lesions, one tooth with ante-mortem fracture and subsequent wear |
| Zygomatic | 1 | right side | - | - | - |

The preservation of the skeletal remains was good and though the bones were moderately fragmented, they did not display evidence for erosion. A single individual was represented. The limited dental wear suggested that this individual was an adult aged between 18 and 25 years old, probably in the older, rather than the younger part of this age category. Sex estimation was not possible, because the characteristics required for sex determination were not present or were too eroded to

be of use. However, the jaw bone and teeth were relatively small, perhaps indicating a female.
A total of eight of the usual 32 tooth positions were present (only the right half of the maxilla was recovered as well as the left canine) and eight teeth were found. One tooth had been lost post-mortem. Calculus was observed on two teeth and was slight. Calculus mineralises and forms concretions on the tooth crowns, along the line of the gums. Calculus (dental plaque) is commonly observed in archaeological populations whose dental hygiene was not as rigorous as it is today. Dental wear tends to be more common and severe in archaeological populations than in modern teeth. The dental wear was slight.

*Dental enamel hypoplasia* (DEH) lesions were observed in three teeth. DEH is the manifestation of lines, grooves or pits on the crown surface of the teeth, which represent the cessation of crown formation. The defects are caused by periods of severe stress during the first to seventh year of childhood, including malnutrition or disease.

The left canine displayed a fracture of the crown, which had been so severe that it had exposed the inner part of the tooth (pulp), making it susceptible to infection. Wear on the fractured parts of the tooth implied that the fracture had occurred some time before death. It is possible that the fracture had been sustained as a result of a blow, knock or fall.

The dental health of this individual was good. The individual suffered from little mineralised plaque, which is very common in skeletons from archaeological sites. No dental cavities or abscesses were observed.

Deposition of human remains in domestic features in the Iron Age is not uncommon and frequently involves infant skeletons or skull fragments, as was the case at Barford.

## 12. ANIMAL BONE

The small assemblage of animal bone recovered was largely composed of unidentifiable fragments in a very poor state of preservation or calcined pieces of indeterminate species (see Table 20). The assemblage was too small for any detailed analysis.

### Table 20: Animal bone by context

| *Area* | *Context* | *Context type* | *Phase* | *Type* | *No* |
|---|---|---|---|---|---|
| A | **10/2** | fill of pit **9** | 4 | fragment | 1 |
| A | **49** | L-shaped ditch fill | 6 | fragments | 8 |
| A | **77** | L-shaped ditch fill | 6 | fragments | 3 |
| A | **80** | L-shaped ditch fill | 5 | calcined | 3 |
| A | **81** | L-shaped ditch fill | 4/5 | fragments | 4 |
| A | **82** | L-shaped ditch fill | 4/5 | fragments | 19 |
| A | **86** | L-shaped ditch fill | 5 | fragments | 20 |
| A | **48** | northern pit **47** | 4 | fragments | 3 |
| A | **34/5** | fill of pit **32** | 4 | calcined | 3 |
| A | **34** | fill of pit **32** | 4 | calcined | 1 |
| A | **34** | fill of pit **32** | 4 | fragments | 6 |
| B | **193** | roundhouse posthole **192** | 4 | calcined | 9 |
| WB | **238** | gully fill | 5 | cattle horn | 1 |

# 13. CARBONISED PLANT REMAINS by Mark Robinson

## Methods

Soil samples were taken by the excavator either on a 'most likely to produce results' basis, such as charcoal-rich deposits, or because of their intrinsic interest due to their respective finds contents. Samples were wet sieved and floated off onto a 0.5mm mesh to recover carbonised plant remains and the flots air dried. Eight flots were available for analysis.

The flots were scanned under a binocular microscope at magnifications of up to x20. Two of the Iron Age flots were found to contain high concentrations of cereal grains. These samples were sub-sampled by weighing and the use of a riffle box. Any grain, chaff and weed seeds in the samples or sub-samples were identified and counted. The results are listed in Table 21, the sample volumes being the volume of soil processed which yielded the quantity of flot analysed.

A representative range of charcoal fragments from each flot were broken, so that transverse sections could be examined under a binocular microscope at x50 magnification. This is a reliable method for the identification of the ring-porous taxa that are present (*Quercus* and *Fraxinus*) but the identifications of the other taxa , which are diffuse porous, must remain tentative. Estimations of the quantities of the taxa identified are given in Table 21 for each sample.

## Results

### Pit 112

The sample from pit **112** (**113/1**) contained a little barley grain along with charcoal of Pomoideae (hawthorn etc) and *Quercus* sp. (oak). Although initially considered to be a Late Bronze Age/Early Iron Age sample, the subsequent Late Iron Age radiocarbon date indicates contamination.

### Iron Age

Very high concentrations of carbonised plant remains were found in two Iron Age pits (**9** and **32**). Exceptionally large quantities of grain were found in sample **34/1** from pit **32**, such that it was only necessary to analyse the flot from 1 litre in detail. The grain was well-preserved and the majority of it could be identified as hulled *Hordeum* sp. (hulled barley). The proportion of twisted lateral grains was high enough to suggest that all the barley could have been hulled *H. vulgare* (hulled six-row barley). Traces of lemma and palea were present on many of the grains showing that it had not been fully de-husked. However, there were no awns and only two *Hordeum* rachis nodes in the flot in comparison with 733 *Hordeum* grains. This suggests that the barley had not been burnt as ears but that the ears had been broken into hulled grains and winnowed of chaff. A small quantity of hulled wheat grain was also present but it only comprised 4% of the total grain. Most of the grains were *Triticum spelta* (spelta wheat) or possible *T. spelta*. There were sufficient wheat glumes to suggest that the grain could have been burnt in spikelet form. Although most of the glumes were of *T. spelta*, there was a single glume of *T. dicoccum* (emmer wheat). Weed seeds comprised 2.9% of the total items in the sample. Most numerous were seeds of *Bromus* cf. *secalinus* (brome grass), a large-seeded grass which readily grows as a weed of cereal crops. Seeds of *Chenopodium album* (fat hen) were also present.

Although the concentration of cereal remains was not as high as in the previous sample, sample **10/1** from pit **9** was also very rich in grain. Grain of *Triticum spelta* and possible *T. spelta* predominated. There was a very high ratio of grain to chaff with grain 100 times more numerous than hulled wheat glumes. When cereals come into contact with fire, chaff is more vulnerable to complete combustion than grain, so if spikelets of spelt wheat are burnt, grain will outnumber glumes in any resultant carbonised material. However, the proportion of grain in sample **10/1** was so high as to suggest that most of the grain had been dehusked and cleaned before it had been charred. A little grain of barley, including *Hordeum vulgare*, was also present but it only comprised 3% of the total grain. Weed seeds made up a higher proportion of the remains in Sample **10/1** than in the previous sample, comprising 13% of the total items. Three quarters of the weed seeds were *Bromus* cf. *secalinus* but seeds of other possible arable weeds, including *Atriplex* sp. (orache) and *Polygonum aviculare*, were also present.

### Romano-British and Anglo Saxon

Carbonised plant remains were very sparse in two Roman samples from gullies **220** and **222**, although the sample from pit **230** contained much charcoal but other plant remains were absent. *Fraxinus excelsior* (ash) predominated but there was also much Pomoideae (hawthorn etc) charcoal and some *Prunus* sp. (sloe etc) charcoal.

The concentration of remains was also low in sample **214/1** from Anglo-Saxon SFB **213**. However, the grain included three species of cereals: free-threshing *Triticum* sp. (bread or rivet wheat), *Hordeum vulgare* (six-row hulled barley) and *Avena* sp. (oats). Four taxa were represented by charcoal: Pomoideae indet. (hawthorn etc), *Alnus* or *Corylus* sp. (alder or hazel), *Quercus* sp. (oak) and *Fraxinus excelsior* (ash). Very few items were present in Sample **147/1** from an undated pit.

## Discussion

The crop remains from the sites conform to the expected chronological sequence for the region. Six-row hulled barley and spelt wheat were apparently the main Iron Age cereals although there was also a slight presence of emmer wheat. In contrast, the only wheat from the Anglo-Saxon context was a free-threshing variety. Another crop which made its first appearance in the Anglo-Saxon sample was oats. Although oats are sometimes present at an earlier date, before the Saxon period they more usually represent wild oats growing as weeds. Six-row hulled barley remained in cultivation in the Anglo-Saxon period.

The charred remains from Iron Age pits **9** and **32** represented partly cleaned crops which had been burnt rather than the processing waste which is more usually found on settlement sites. The material from pit **32** comprised barley grains, which although clean of weed seeds, ear fragments and awns, retained their lemma and palea. These would probably have had to be rubbed off to render the grain suitable for human consumption. The spelt wheat grains from pit **10** had been fully de-husked although there was quite a high proportion of weed seeds amongst the grain. However, the majority of the weed seeds were of brome grass. These seeds are similar in size and shape to small cereal grains. This makes them difficult to remove during the cleaning of the crop but they are edible and can be ground to flour along with the grain. The grain could therefore be regarded as ready for use. It is uncertain whether the grain in both pits was burnt in the same event. It is argued (above) that stake holes around pit **32** were from a structure which held the grain.

The charcoal showed that the range of trees and shrubs used for fuel largely remained the same from the Late Bronze Age to the Anglo-Saxon period.

## Table 21: Charred plant remains

| | Period | LBA-LIA | M/LIA | M/LIA | RB | RB | RB | AS | ? |
|---|---|---|---|---|---|---|---|---|---|
| | Phase | 3/4 | 4 | 4 | 5 | 5 | 5 | 6 | ? |
| | Feature | Pit **112** | Pit **9** | Pit **32** | Gully **220** | Gully **222** | Pit **230** | SFB **213** | PH **146** |
| | Context | **113** | **10** | **34** | **221** | **224** | **231** | **214** | **147** |
| | Sample | **113/1** | **10/1** | **34/1** | **221/1** | **223/1** | **231/1** | **214/1** | **147/1** |
| | Sample volume (litres) | 13 | 8 | 1 | 10 | 10 | 30 | 16 | 1 |
| | No. items/litre (excluding charcoal) | 1.0 | 102.1 | 849 | 0 | 0.2 | 0 | 0.25 | 1.0 |
| CEREAL GRAIN | | | | | | | | | |
| *Triticum* cf. *dicoccum* Schübl. | emmer wheat | - | 4 | 1 | - | - | - | - | - |
| *T. spelta* L. | spelt wheat | - | 54 | 17 | - | - | - | - | - |
| *T.* cf. *dicoccum* Schübl. or *spelta* L. | emmer or spelt | - | 389 | 16 | - | - | - | - | - |
| *Triticum* sp. - free-threshing | bread or rivet wheat | - | - | - | - | - | - | 1 | - |
| *Hordeum vulgare* L. - hulled lateral | six-row hulled barley | 2 | 3 | 313 | - | - | - | 1 | - |
| *Hordeum* sp. - hulled median | hulled barley | 2 | 2 | 193 | - | - | - | - | - |
| *Hordeum* sp. - hulled | hulled barley | 6 | 15 | 150 | - | - | - | 1 | - |
| *Hordeum* sp. | barley | - | 1 | 77 | - | 1 | - | - | - |
| *Avena* sp. | oats | - | - | - | - | - | - | 1 | - |
| Cerealia indet. | | 2 | 236 | 45 | - | 1 | - | - | - |
| Total cereal grains | | 12 | 704 | 812 | 0 | 2 | 0 | 4 | 0 |
| CHAFF | | | | | | | | | |
| *Triticum dicoccum* Schübl. - glume | emmer wheat | - | - | 1 | - | - | - | - | - |
| *T. spelta* L. - glume | spelt wheat | - | 5 | 7 | - | - | - | - | - |
| *T.* cf. *dicoccum* Schübl. or *spelta* L. | emmer or spelt | - | 2 | 2 | - | - | - | - | - |
| *Hordeum vulgare* L. - rachis | six-row barley | - | - | 1 | - | - | - | - | - |
| *Hordeum* sp. - rachis | barley | - | - | 1 | - | - | - | - | - |
| Total chaff items | | 0 | 7 | 12 | 0 | 0 | 0 | 0 | 0 |
| OTHER FOOD PLANTS | | | | | | | | | |

| | Period | LBA-LIA | M/LIA | M/LIA | RB | RB | RB | AS | ? |
|---|---|---|---|---|---|---|---|---|---|
| | Phase | 3/4 | 4 | 4 | 5 | 5 | 5 | 6 | ? |
| | Feature | Pit **112** | Pit **9** | Pit **32** | Gully **220** | Gully **222** | Pit **230** | SFB **213** | PH **146** |
| | Context | **113** | **10** | **34** | **221** | **224** | **231** | **214** | **147** |
| | Sample | **113/1** | **10/1** | **34/1** | **221/1** | **223/1** | **231/1** | **214/1** | **147/1** |
| | Sample volume (litres) | 13 | 8 | 1 | 10 | 10 | 30 | 16 | 1 |
| | No. items/litre (excluding charcoal) | 1.0 | 102.1 | 849 | 0 | 0.2 | 0 | 0.25 | 1.0 |
| cf. *Pisum sativum* L. | pea | - | - | - | - | - | - | - | 1 |
| WEED SEEDS | | | | | | | | | |
| *Chenopodium album* L. | fat hen | - | 1 | 9 | - | - | - | - | - |
| *Atriplex* sp. | orache | - | 3 | - | - | - | - | - | - |
| *Polygonum aviculare* agg. | knotgrass | - | 14 | - | - | - | - | - | - |
| *P. persicaria* L. | red shank | - | 2 | - | - | - | - | - | - |
| *Fallopia convolvulus* (L.) Löv. | black bindweed | 1 | 1 | - | - | - | - | - | - |
| *Bromus* cf. *secalinus* L. | brome grass | - | 78 | 15 | - | - | - | - | - |
| Gramineae indet. | grass | - | 1 | - | - | - | - | - | - |
| weed indet. | | - | 6 | 1 | - | - | - | - | - |
| Total weed seeds | | 1 | 106 | 25 | 0 | 0 | 0 | 0 | 0 |
| CHARCOAL | | | | | | | | | |
| *Prunus* sp. | sloe | - | - | - | - | - | ++ | - | - |
| Pomoideae indet. | hawthorn, apple etc | ++ | - | - | - | + | +++ | + | + |
| *Alnus* or *Corylus* sp. | alder or hazel | + | - | - | - | - | - | ++ | - |
| *Quercus* sp. | oak | ++ | - | - | + | - | - | + | - |
| *Fraxinus excelsior* L. | ash | - | - | - | - | - | ++++ | + | + |

+ present, ++ some,+++ much, ++++ very much

# 14. GENERAL DISCUSSION

## Mesolithic and Neolithic

Evidence for earlier prehistoric activity on the route of the Barford Bypass was predominantly from flint tools and waste products found during surface survey, in the topsoil and residually in Iron Age, Romano-British and Anglo-Saxon features. Late Mesolithic (6500–4000 BC) and Later Mesolithic to Early Neolithic (6500–3000 BC) pieces were recovered along with diagnostically Later Neolithic to Bronze Age (3000–800 BC) forms. A single sherd of Neolithic pottery was also found residually in an Iron Age pit.

The type and frequency of the finds ostensibly suggests a low-level and intermittent use of this part of the valley throughout these periods which is best considered as evidence for transient occupation, perhaps occasional hunting forays along the valley in the Mesolithic with perhaps herding in the Neolithic. A similar scenario can be evinced along much of the Avon and its tributary valleys (Palmer 2000; 2002a; 2003; 2007b; 2010b; in press; forthcoming a; forthcoming b; Loveday 2003; Hughes & Crawford 1995). This might seem a surprising assertion given that some major Neolithic and Early Bronze Age monument complexes are located along the Avon Valley, particularly the nearby Barford (Oswald 1969; Loveday 1989), Wasperton (Hughes & Crawford 1995) and Charlecote (Ford 2003; Loveday 2003) complexes, which seem to have been well established by the middle Neolithic (Palmer 2007a). Yet the flintwork densities on all these excavated sites have been low when compared to that for instance in the Cotswolds (Lambrick 1988) and other regions (Barfield 2007): intensive surface survey in some fields around the Longbridge cursus yielded next to no earlier prehistoric flintwork (Palmer 2002b; 2007c).

Notions that the region suffered from a paucity of local flint of suitable quality can reasonably be dispelled since the evidence from Neolithic pit groups such as those excavated at Salford Priors (Palmer 2000) and Church Lawford (Palmer 2007a; in press) provide ample evidence that some depositional practices incorporated significant concentrations of good quality flint material. The now mounting evidence points to an alternative explanation whereby the gravel terraces were only intermittently exploited by local communities. This model accords well with recent comprehension that earlier prehistoric populations probably retained a basically mobile lifestyle much later than had previously been thought (Thomas 1999; Whittle 1999). Other former orthodoxies such as one that insisted that monuments were constructed by sedentary agriculturalists in cleared landscapes have also collapsed with the mounting evidence that Neolithic peoples inhabited what were essentially 'treescapes', as opposed to 'landscapes' (Pollard & Reynolds 2002).

## Late Bronze Age/Early Iron Age

The nature of the occupation during the Late Bronze Age and Early Iron Age is more equivocal than that of the earlier prehistoric. The only secure evidence for activity of this date was a small assemblage of pottery in pit **112** in Area B.

It is, though, clear that Late Bronze Age/Early Iron Age activity was extensive at Wasperton (Ann Woodward *pers comm*) and Hampton Lucy (Palmer 2008), which suggests that the valley was probably widely exploited for agriculture at this time. At Hampton Lucy spelt wheat was the principal crop, although the presence of a few barley grains was thought to have represented occasional plants growing as volunteers, despite the likelihood that barley was an important crop in the region around the transition from the Bronze Age to the Iron Age (Robinson 2008).

The major boundary that bisects the Wasperton river loop compares with other features in the region that demonstrate land division and tenure beginning in this period (Palmer 2000). This could have been concomitant with a climatic down-turn that may well have provoked social and economic pressures in the agricultural landscape which manifested in the demarcation of property boundaries (Champion 1999).

When comparing the cropmark complexes along this part of the valley it is noticeable that the Barford river loop contains a simple focal enclosure, whereas, Sherbourne, Wasperton and Hampton Lucy (technically two widely separated complexes) have complicated multi-layered palimpsests which indicate periodic shifts in settlement foci. If this evidence is taken as representative of the underlying archaeological features, as it can be at Wasperton, it suggests that occupation within the Barford loop was somehow less intensive or of shorter duration.

## Middle to Late Iron Age

Features assigned to this phase include the majority of the pits in Areas A and B and the L-shaped ditch in Area A. The four radiocarbon dates acquired suggest that these areas were in use between 390 and 20 Cal BC (95% confidence), and this is largely corroborated by the pottery typology.

It is clear that at least the northern linear pit group in Area A predated the ditch, or at least the final version of this feature. These Type 2 pits seem unlikely to have been part of a conventional pit alignment, a class of boundary feature that is common in the Avon Valley and on Dunsmore (Palmer 2002a; forthcoming a), being too irregularly shaped and spaced. There is, though, a growing corpus of linear pit groups alongside Iron Age boundaries in the region and both the northern (Type 2) and western (Type 1b) linear groups seem better viewed in this context, despite their obvious characteristic differences.

Similar Type 2 sized sterile pits were found alongside the enclosure ditch at Marsh Farm Quarry in the Arrow Valley, in positions that suggested they would have been covered by an internal bank, and it was argued that they must have had a significance prior to the construction of the ditch (Palmer forthcoming b). It would be reasonable to suppose that these features demarcated a boundary that predated the construction of the ditch and the nature of the fills and the absence of domestic detritus seems to imply that they predated the occupation of the site. Whether this indicates some form of ceremonial or symbolic setting out procedure remains unknown but, must be a possibility. At Long Itchington in the Itchen Valley a linear arrangement of sterile (Type 2) pits was found between two apparently successive enclosure ditches. At this site the outer ditch cut across the end pits in the group but there was no obvious functional explanation for their locations (Palmer 2010b). A Type 2 linear pit group excavated alongside a boundary at Southam Cement Works, Stockton revealed domestic detritus similar to that in the western group at Barford and it was reasoned that linear arrangements of pits incorporated arcane symbolic concepts for some local Iron Age people (Palmer 2009a).

The Type 1b western group, however, has closer parallels with the linear groups at Walton in the Dene Valley where pits (Type 1a storage pits) were dug alongside a boundary ditch and backfilled with midden material as well as crouched inhumations (Palmer in press). In this instance the position alongside the ditch was seen as reinforcing the significance of the boundary. Type 1a storage pits at Ryton on Dunsmore were broadly linearly aligned and were cut by later boundary gullies (Palmer forthcoming c).

The pits within the eastern pit group in Area A were predominantly of Type 2 but had little else in common. As a group they much more resemble an activity area, no doubt performing a variety of functions. Of particular interest was pit **32** which included a stake-supported structure of uncertain function but in which a charred dump of cereals was deposited.

None of the other pits in Area A contained significant quantities of charred or cultural material. The four virtually sterile Type 1a pits, of which two were associated with a pair of nearby postholes, and one of which had a centrally positioned posthole in its base, were reminiscent of an example found adjacent to the enclosure at Long Itchington which had a central posthole in its base (Palmer 2010b). Further examples of pits with centrally placed postholes occur at Hampton Lucy (Palmer 2008) and Southam Cement Works (Palmer 2009a). Despite the growing corpus of these features, the posthole associations remain enigmatic and even favoured functional interpretations such as, for instance, footings for supports for a protective superstructure, or part of a mechanism for emptying the pit, remain unconvincing.

### L-shaped ditch

It is regrettable that it was not possible to examine more thoroughly the point at which the L-shaped ditch attached to the cropmark enclosure to the south-west, as this would have enabled the relationship between the two features to be firmly established. Nevertheless the cropmark appears to suggest that the L-shaped ditch and the outer enclosure ditch were conjoined by a short spur. Ostensibly, the northern arm of the L-shaped ditch would appear to act as a barrier between the enclosure and the edge of the terrace and the eastern arm as part of system of ditches that funnelled into the enclosure entrance: the most plausible explanation being for the control and management of stock. The sweeping cropmark ditches on the south side of the enclosure clearly represent a trackway which funnels from the west. Implicit with this is the requirement that stock was herded through an agriculturally sensitive area, which presumably included cornfields and gardens. This clearly suggests a model of a mixed economy which can be broadly paralleled at the majority of farmsteads of this period (Haselgrove 1999, 117), but which is still only rarely demonstrable in the county (Palmer 2007a; forthcoming d).

However, even as today, the floodplain to the north of the enclosure is under pasture and one might expect the funnel to lead directly to it rather than circumvent the enclosure in such an extravagant manner. The clue to this conundrum might well be the excavated pit groups in Area A, which conceivably extend across the land within the meander and if so probably demarcated a significant boundary alignment. If the boundary was territorial it would suggest that the land to the west was in different tenure to that to the east. The fact that the enclosure opens against the boundary does not preclude this as the antennae could have been added much later at a time when tenure was renegotiated, or, as has been seen on Dunsmore, the actual line of the boundary was somehow only notional and fluid (Palmer 2002a; forthcoming a). A similar scenario was witnessed at Wasperton whereby an enclosure initially faced and later was extended to cross the territorial boundary (Crawford 1982, 32).

That boundaries in the Iron Age had symbolic attributes is now widely argued (Bowden & McOrmish 1987; Hingley 1990; Hill 1995), and there is compelling evidence to suggest that functional explanations do not always adequately explain them. This aspect is also hinted at by the human maxilla found in the bottom of the eastward arm of the L-shaped ditch: human remains are so commonly found on Iron Age settlement sites that it is thought credible that bones were used post-mortem in rituals and as display totems (Cunliffe 1995, 109), often after a period of excarnation

(Carr & Knüsel 1997). Locally, the human skull found placed in a pit alignment at Wishaw (Powell *et al* 2008, 360) bears comparison.

Clearly the enclosure to the south of Area A was a farming settlement with a mixed economy based on arable agriculture and pastoralism. There is no evidence to suggest a specialised function or even whether cows, sheep or horses were dominant. Cereals grown included six-row hulled barley and spelt wheat, which were the typical cereals of the period, and the farm-scape was probably framed with hedges of hawthorn with stands of oak, ash and hazel/alder in the vicinity, from which fuel could be acquired.

## Romano-British

The boundary gullies examined in Areas B, E, G and H seem likely to belong to field systems. Only the Area H examples were securely dated and they appeared to form an entry point, although into or between what, remains unknown. The concentration of finds in the terminals certainly suggests a nearby occupation site but there are no further clues as to the location. The gullies in Area B curiously align axially with the modern trackway immediately to the north and with certain of the cropmark linear features to the south-east (MWA 701), which stand out from the north to south aligned elements. This latter part of the complex is aligned on the same axis as the Area H gateway and the Area G trackway. The Area E feature is clearly different although exact alignments are not requisite for field boundaries in any period. The combined evidence appears to suggest that at least two phases of field system lie beneath the extant post-medieval and modern system.

There is very little convincing evidence for pre-Roman fields in Warwickshire other than later Iron Age examples on Dunsmore (Palmer 2004b; 2007a; forthcoming d) and a few gullies with late Iron Age pottery at King's Newnham (Palmer 2003, 71) and Longbridge Manor, Warwick (Warwickshire Museum 1997). A putative early 1st millennium BC example at Wasperton (Ann Woodward pers comm) has yet to be validated, but it is therefore not unreasonable to suppose that others will survive across the region, despite their absence many of the large-scale linear infrastructure projects carried out in the region such as the Transco pipelines (Palmer 2010; Thompson & Palmer in press) and the M6 Toll (Powell *et al* 2008). Whether the earliest of the Barford Bypass examples was constructed before the Roman period remains unknown given that it is entirely possible that the reorganisation of the landscape took place during the Roman period. A good example of this occurred in the Arrow Valley at Salford Priors, where an early Roman field system was completely changed in the later Roman period when a villa was constructed (Palmer 2000).

Clearly the MWA 701 cropmark to the east of the bypass is a likely candidate for a Romano-British settlement from which the field system emanates and the angularity of the cropmark could be taken to indicate a later rather than earlier foundation. This would preclude the site being the direct successor to the Area A settlement; the latter may therefore have migrated southward within the area of its holding.

Although the system of trackways and fields had been imposed within the loop at least by the Roman period, the range of vegetation probably remained about the same. One can assume that the trackways were used to herd stock between fields of cereals etc from outlying pastures and no doubt the fields were hedged or at least developed a tangle of woody species.

## Anglo-Saxon

Anglo-Saxon activity was represented by a single sunken-featured building (SFB) located on the edge of the river terrace at the north end of Area A, found during ground reductions for the flood alleviation area. This feature yielded a small assemblage of pottery. Although it is possible that the sunken area represented by hollow **213** corresponded closely to the actual dimensions of the building, at 2.70m by 2.30m it falls well within the range of SFBs outlined by Rahtz (1981, 75; Tipper 2004): the position of the posthole **215** suggests that the structure was at least 3.60m long. SFBs in general have internal post settings, either along their axis, in their corners or around their edges (for a recent discussion of these features see Palmer 2000, 208-10). This present example however bears close comparison in terms of size with similar features excavated at Broom in the Arrow Valley which represented smaller variants to the classic type (*ibid* fig 83: 806, 810 and 811).

Unlike some sites *(ibid*) there was no evidence to suggest a function for the Barford SFB, although it remains possible that a post-built hall structure, which would normally be expected in a settlement of this date, was undetected during the soil stripping in this area.

At least two SFBs were identified at Wasperton, from which, although both examples were sited amidst an earlier and probably contemporary cemetery, no pottery was recovered (Crawford 1983). Further examples of SFBs are known from Baginton (Wilkins 1975, 122), Brandon Grounds (Bateman 1978, 8-9), Hatton Rock (Hirst & Rahtz 1973, 160-177) and Stretton-on-Fosse (Ford 1996). At Baginton and Brandon Grounds only single examples were recorded, whilst at Hatton Rock further examples are indicated by cropmarks and at Stretton-on-Fosse two examples were excavated. The low frequency of buildings on these sites seems to suggest that the local population was widely dispersed during the early Anglo-Saxon period which is in contrast to the great village sites of Mucking in Essex (Hamerow 1993) and West Stow in Suffolk (West 1985). Recent work at Tiddington, Stratford-upon-Avon, has identified at least two 5th/7th century foci in locations which could suggest continuity from the end of the Roman period (Palmer 2009b, 2010a).

Ford (1976, 277) suggested that the evidence from cemeteries indicated that the earliest Anglo-Saxon occupation of Warwickshire was confined to a few, possible mercenary, sites along the Avon valley and that this was followed by a period of integration with existing native Romano-Britons along the major tributary valleys with their light easily tilled permeable river terraces in much the same way as prehistoric settlement developed in the county. However, recent advances in prehistoric settlement patterns have shown that this model is too simplistic and that non-gravel sites were also exploited and indeed may have been wealthier than those on the gravel in the later prehistoric period. This earlier bias was a result of an over-reliance on gravel quarrying and cropmark evidence, which is prolific on gravel sites and retarded on other geologies.

The gravel terraces may well have been intensively settled but were probably nutrient poor and of only marginal quality by the later Roman period (Esmonde-Cleary 1982, 25-27). There is circumstantial evidence for 5th century AD population decline, perhaps enhanced by a period of hostile weather, plague and famine (cf Higham 1992) which encouraged the populace to abandon marginal areas in favour of more productive ones, thereby allowing early immigrants to settle in their stead.

The name Barford probably refers to the 'ford which can carry a load of corn' (Gover *et al* 1936, 249), although it was not recorded until Domesday (*Bereforde*). It lies at the north-eastern edge of the early 7th-century kingdom of the Hwicce (Hooke 1985, 7), and the inhabitants may well have been referred to as the sub-group Stoppingas.

## Medieval/ Post-Medieval

The Barford loop was undoubtedly extensively farmed during the medieval and post-medieval periods as ridge and furrow ploughing was evident along the entire route of the bypass.

## Barford Bridge

The existing flood culverts comprise six circular brick cylinders, now visible as three paired cylinders as a result of the construction of the 1965 concrete extension boxes, at the edge of the flood meadow on the north side of the Avon. Photographs taken before and during the construction of the concrete extensions clearly show four stone-built wing-walls, two at each end, built to the level of the causeway parapet and stone façade arches over the cylinders. One photograph shows the north-west wing-wall being dismantled. The observation of the insertion of the new concrete culvert revealed two fragments of sandstone wing-wall and a cross-section of the causeway. No dating evidence was recorded. The causeway itself was undoubtedly constructed as a series of dumped layers, the latest of which was almost certainly associated with the addition of the two concrete box culvert extensions.

The earliest reference to the causeway and the wooden bridge which presumably ran along the top of the causeway is found in the Proceedings of the Quarter Sessions of 1641 (Easter Session) when the parish of … Sherbourne has been indicted for not repairing and gravelling the wooden bridge adjoining the said stone bridge … although it is entirely possible that a causeway had been constructed to the medieval bridge. There is no record of any previous stonework associated with a ford crossing.

The Proceedings of the Quarter Sessions list various other orders to do with the maintenance of the bridge and by 1659 the wooden bridge was 'in decay' but seems not to have been satisfactorily repaired by 1674, 1682 1688, 1690, or 1692. In 1693 it still needed 'gravelling' and more repairs were undertaken in 1694 and further repairs were called for in 1696.

The existing causeway and two sets of flood culverts were built between 1783 and 1786 whilst the main part of the bridge was completely rebuilt between 1792 and 1795. The main road was made a turnpike in 1753-4 (Warwickshire Museum 2002) and during road widening in 1965 the flood culverts on the north bank were widened with concrete box extensions.

The Sherbourne Estate Survey of 1729 depicts a large construction crossing the Avon and its flood plain. The bridge itself has three arches and there are three groups of openings under the causeway: from the river northward, four flood arches, two flood arches and a further two flood arches in the approximate position of the current culverts.

# 15 IN CONCLUSION

The archaeological investigations triggered by the construction of the Barford Bypass have proven a useful opportunity to study and record the evidence for human activity within a transect across a River Avon meander. River meanders such as this appear to have been exceptionally important in the development of the Warwickshire landscape and have hitherto received only limited attention. The work has revealed evidence for activity covering at least 8000 years of human interaction with the river valley environment, a period which covers most of the Holocene epoch since the retreat of the most recent glacial episode.

In common with other recent linear infrastructure projects within Warwickshire, a major benefit of the work has been the opportunity to examine the landscape between the known settlement and ceremonial sites. It is increasingly apparent that there is a wealth of data between the cropmarks and artefact scatters which can provide essential context to such sites and which warrants careful and particular prospecting and analyses.

In retrospect we can see that the initial phases of prospecting survey and assessment were too restrictive and that the landscape warranted a more thorough evaluation. The entire easement should have been fieldwalked and if necessary ploughed in advance to give the best possible chance for artefact scatters to be collected and recorded. Trial trenching, at a minimum of 4% by area frequency, should have been conducted along the entire easement to minimise the risk of missing isolated features and deposits: it is worth noting that whilst the actual trenching programme correctly identified the linear features, none of the pit groups was apparent until the topsoil was removed over a wide area. Given the apparent lacuna of archaeobotanical and environmental evidence in the region, the river's edge should have been investigated for palaeochannels and other waterlogged deposits in which such evidence could be trapped, before it was destroyed by the construction of the new river crossing.

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