

# Archaeological investigations on the route of the Crawley High Street relief road, Crawley, West Sussex

by M. John Saunders

with contributions by  
Jeremy S. Hodgkinson  
John B. Letts  
David Richards  
Kevin Rielly  
Jane Timby  
Jessica Winder

*This report describes an excavation along the route of Crawley High Street Relief Road. Several deposits of medieval date were examined and a relatively small but useful corpus of medieval pottery was recovered. The excavation has produced further evidence for the importance of Crawley in the Wealden iron industry during the medieval period. Detailed site description and some specialist reports are on microfiche.*

## INTRODUCTION

Between May 1995 and June 1996 excavations were carried out along the line of a proposed dual carriageway relief road on the west side of the High Street in Crawley, West Sussex (NGR TQ 266366) (Fig. 1). While much of the route of the relief road lies on land formerly used as car parks or follows the line of existing streets, some demolition of existing buildings was necessary on the southern part of the route, including a much altered house fronting the High Street which incorporated some timber framing of later 15th-century date. The relief road lies at a height of c. 69 m above OD. Its route slopes gently to the north and lies mainly on the Upper Tunbridge Wells Sand (BGS 1981), which consists of mudstones, thinly-bedded sandstones, silts and occasional clay ironstones. From the northern end of Orchard Street to its junction with the High Street, however, the route crosses Weald Clay and an alluvial deposit on the western fringe of the affected area marks the line of an old watercourse flowing south-west to north-east to a now infilled pond on the north side of The Driftway.

## ARCHAEOLOGICAL BACKGROUND

Much of the archaeological potential of the development area derives from its location in the core of what was a 13th-century 'new town'. A number of historic buildings are present in the area,

while the town itself appears to have been involved in the production of ironwork, forming a centre for the medieval Wealden iron industry as witnessed by the discovery of a number of sites relating to this activity. The evidence for iron-working takes the form of numerous finds of forging slag, tap slag, bloomery slag and occasionally, almost complete, furnace bottoms. Furnace cinder and medieval pottery have also been found at a number of locations close to the line of the relief road. Excavations at the Old Post Office site, 15–17 High Street (Stevens 1997) revealed a number of medieval features including 13th- to 14th-century pits and associated deposits of iron slag suggestive of the close presence of a forge. More recent investigations by Wessex Archaeology (in prep.) on the site of the proposed Leisure Park, an area of land bounded by London Road and Ifield Road, have produced evidence for the smithing and forging of iron during the second half of the 14th or early 15th centuries. In addition, an Iron Age site is known to have existed in the Southgate area, although this is a little distance from the study area.

## THE EXCAVATIONS

(Detailed accounts of the excavation of each site are on microfiche.)

The desk-top study had located a number of areas on the route of the relief road which had archaeological potential and the subsequent

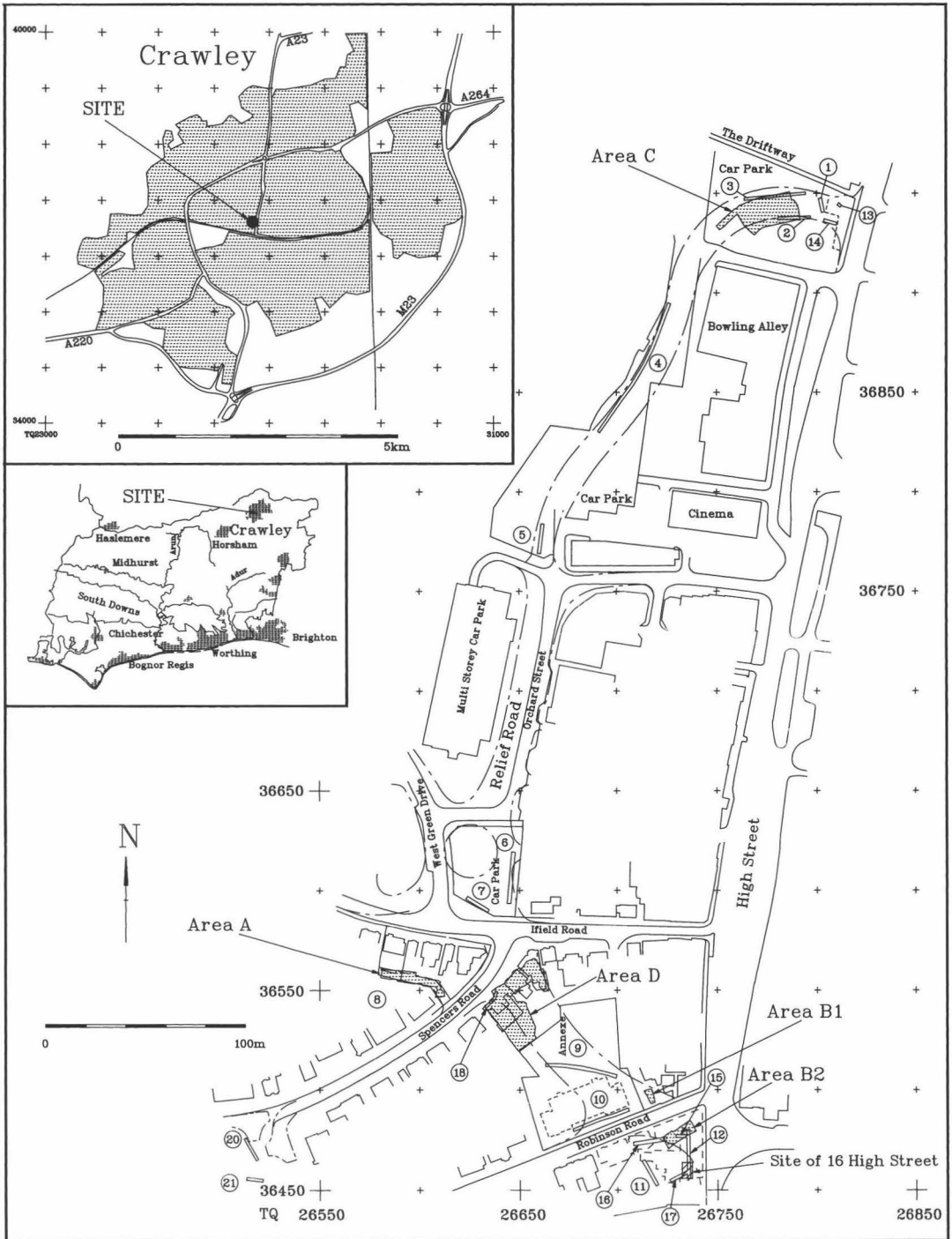


Fig. 1. Crawley High Street relief road showing the location of evaluation trenches, excavated areas and the location of the site in Sussex and Crawley.

evaluation of 20 trenches revealed that concentrations of archaeological features were situated in four main areas which were to be disturbed by the construction works (Fig. 1, Areas A, B, C & D). The deposits excavated during the evaluation were all of medieval date, consisting largely of discrete archaeological features such as pits and ditches. Finds included medieval pottery, brick/tile, iron slag, and a little metalwork. Two struck flints were found: a broken blade of Mesolithic date from Trench 6 (F2) and an earlier Neolithic leaf-shaped-arrowhead from a medieval pit (F30) in Trench 2.

**AREA A** (Fig. 2 & Fig. 3, sections, on microfiche)

This area, situated to the rear of nos 16–30 Ifield Road (Fig. 1), was located to determine the full extent of a probable medieval iron-working site found in 1988 during building works to the rear of 5–7 Spencer's Road (NGR TQ 26563653). A total of 28 features were excavated, comprising 12 pits, 6 gullies, 4 post-holes, 4 probable ploughmarks, 1 scoop and a large dump of slag.

Gwynne (1990, 34) has suggested that until the Conquest, Crawley was marked by a crossroads at West Green with a south-west to north-east route following the line of Horsham Road and Small's Lane and an east-west route formed from Ifield Road and a footpath to the east of the present High Street leading to Worth. West Green itself spread north and south of the crossroads. To the east of the crossroads lies Area A, roughly between West Green and the new Crawley High Street. The 1839 Tithe map of Ifield (West Sussex Record Office MF81/147 TD/W156) shows no buildings to the south side of Ifield Road in the area excavated and the presence of the vestiges of possible plough marks or, more probably spade marks, would seem to confirm that in the early period at least this was cultivated land, albeit on a small scale. Two features at least were found to contain pottery of an early date, especially gully F502 which contained material from the 10th to 11th centuries, although this could equally well be residual. It would be feasible to assume either that the features in Area A were on the extended backlands of properties running eastwards from the High Street, or that a number of medieval tenements once fronted on to Ifield Road. In either case, the evidence in the form of pits containing pottery and iron slag reflects domestic occupation with an emphasis on iron-working. Faunal remains were mostly absent from excavated sites on the relief road

and their survival in features on Area A may be a product of differential preservation. A number of sheep/goat horn-cores recovered from pit F503 seem to suggest that horn-working or tanning was being carried out in the vicinity.

It is clear from the excavation evidence that occupation of this area of Crawley continued at least until the 15th century.

**AREAS B1 AND B2** (Fig. 4)

Area B1 was situated on the north side of Robinson Road, a little way to the west of its junction with the High Street (Fig. 1). This area contained just one feature (F503), a circular shallow pit approximately 2.6 m in diameter and 0.30 m deep. Its primary fill contained post-medieval pottery, together with a small quantity of iron slag, several fragments of clay pipe stem, wood, and brick.

Area B2, an area considerably disturbed by modern building activity, was located to the south of Robinson road in the angle formed by its junction with the High Street (Fig. 1). The excavation of this area revealed a stone-built wall (F506), and a drainage culvert (F507), neither of which were closely datable. The wall was constructed of sandstone blocks and the culvert had a base of roof tile and a covering of sandstone slabs. Insufficient evidence was recovered from adjacent areas to determine whether this wall was part of a structure, such as a house, or was a boundary feature.

**AREA C** (Fig. 5 & Fig. 6, sections, on microfiche)

Area C was located at the northern end of the relief road in a car park on the west side of the High Street and immediately to the south of the Driftway (Fig. 1). This area contained 54 features, including pits, post-/stake-holes, gullies and a well. Pottery was recovered from 28 of these features.

One interpretation would consider these features to indicate the use of land to the rear of properties fronting the High Street, with the linear gullies representing plot boundaries. Pottery from the site had a restricted date range from the 12th to 14th centuries with no evidence for either late medieval use or for post-medieval use of the site until the late 19th century.

Most of the features contained iron slag and several had been backfilled with this material. Particularly large quantities of both smelting and forging/consolidation slags were present. Tap slag and furnace cinder were found and, more interestingly, a number of fragments of plano-

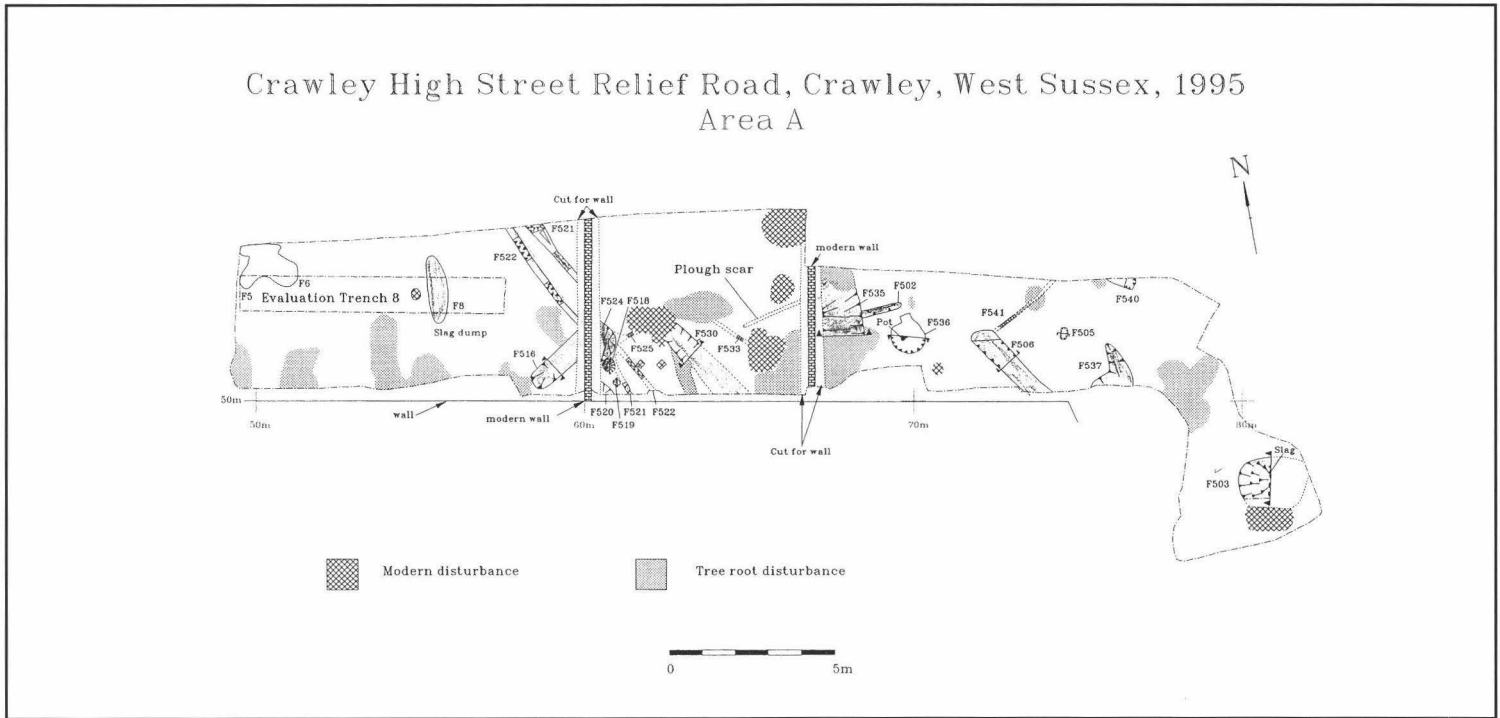


Fig. 2. Plan of Area A.

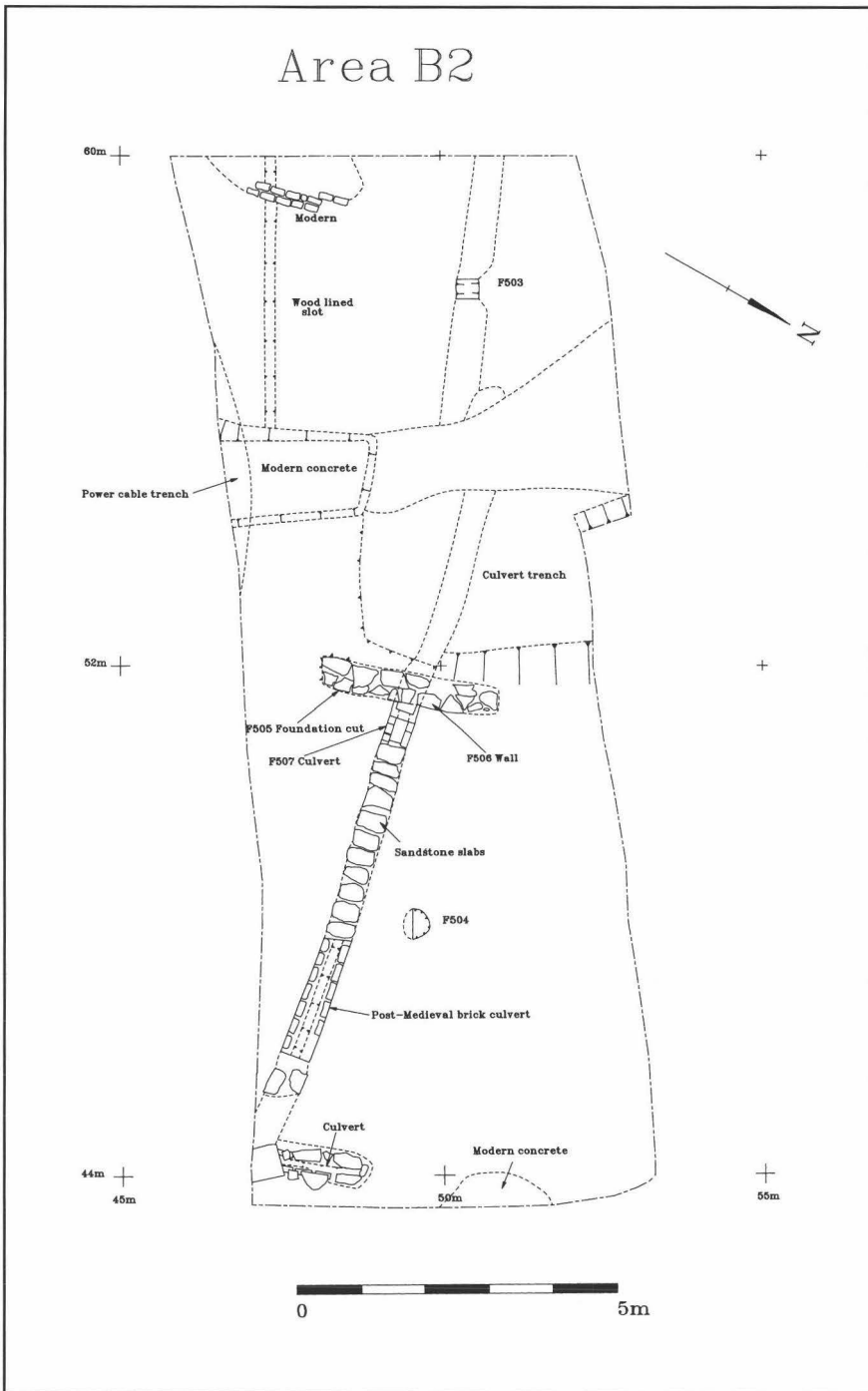


Fig. 4. Plan of Area B2.

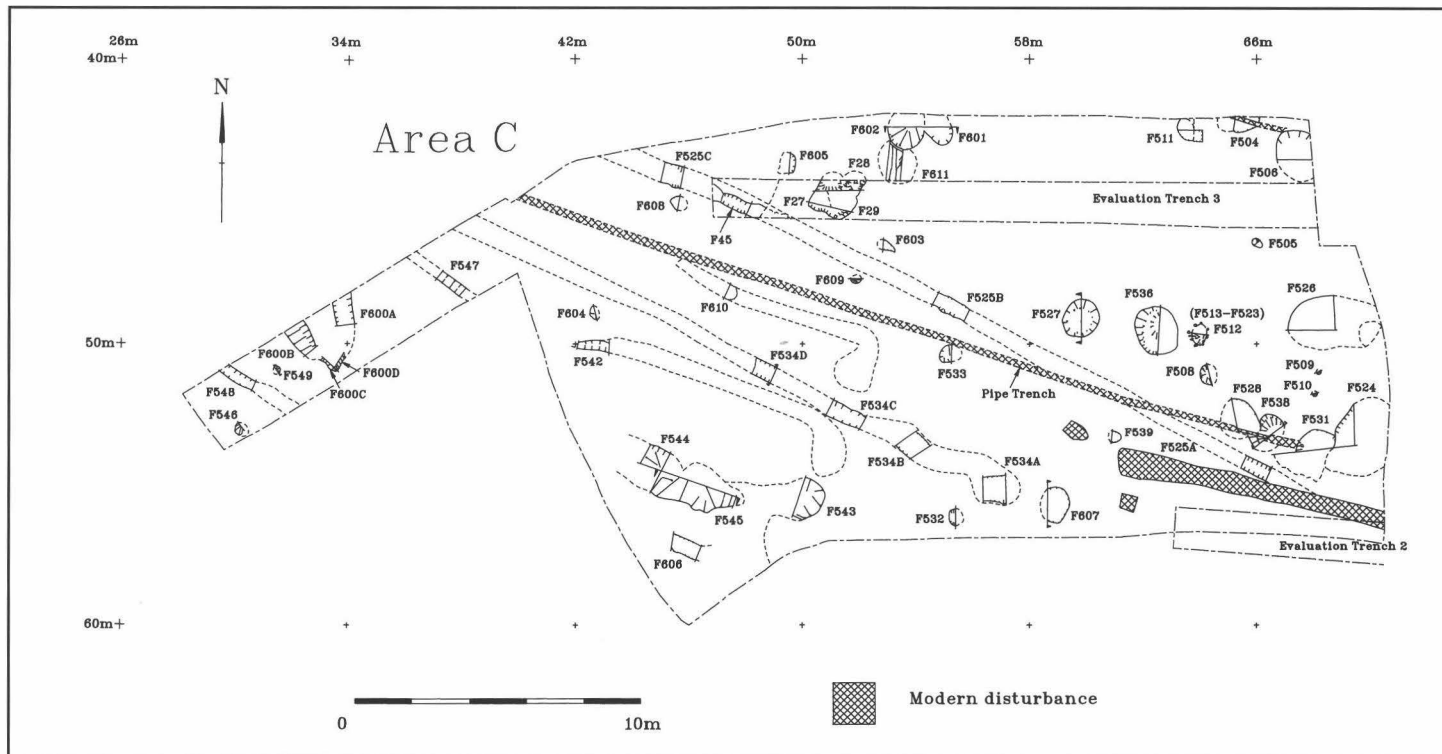


Fig. 5. Plan of Area C.

convex hearth bottoms came from pit F536, suggesting that both smelting and primary reworking were being carried out nearby. While no actual iron-working surfaces or hearths could be positively identified, pit F531 contained a layer of ash and burnt material suggestive of a possible hearth. The well, F527, may have been a source of domestic water, but equally well may have been used in part of the iron-working process — for washing the ore or for quenching.

The discovery of areas that may have been used for iron-working is not unexpected. Evidence from cartographic and documentary sources, principally the Ifield Tithe map of 1839, implies the presence of iron-working in this area, although it is clear that this information does not relate directly to Area C. The Tithe map shows two buildings to the south of the Driftway; the site of one is currently under the bowling alley, that of the other is on the southern side of the relief road. A photograph of a print taken from an engraving made in 1821 by J. G. Strutt, on display in Crawley Museum, indicates another building, which appears to be medieval in style, and which would have lain directly on the route of the relief road close to the High Street. Deeds of 1357 (West Sussex Record Office Add. Ms 27001) onward show a two-acre piece of land denoted as 'tyes', a medieval term for the troughs in which iron ore was washed. The holding was sold in 1367 to Thomas Blast, whose family were local ironmasters (West

Sussex Record Office Add. Ms 27002).

#### AREA D (Figs 7 & 8 on microfiche)

Area D was situated to the east of evaluation Trench 18 and south of the junction of Ifield Road and Spencers Road. Much of the ground was heavily disturbed owing to the demolition of nos 6–8 Spencers Road and additional modern buildings to the south of the site. As a consequence, it was only possible to excavate a reduced area. Nevertheless, in addition to the four features discovered during the evaluation, a further 25 features were examined (Figs 7 & 8): they comprised 10 pits, 3 post-holes and 3 spreads, and several features of modern origin.

Although the majority of this area had been severely disturbed by post-medieval and modern foundations and the demolition of the present buildings, two small areas produced evidence for iron-working in the near vicinity. Each comprised a group of pits, most of which contained iron slag and charcoal, although no actual hearths or obvious working surfaces were identified.

Most of the features, other than those of modern origin, can be dated no later than the 14th century, so it seems unlikely that any are related to the 17th-century building still standing to the north-east of the site (number 10, Ifield Road), although the pit group comprising F517, F518 and F525 may be associated with an earlier building.

## THE FINDS

### IRON SLAG by Jeremy S. Hodgkinson

Evidence of early iron-making in Crawley is plentiful. In the late Iron Age smelting was carried out at a settlement in Goffs Park (NGR TQ 263363) and contemporaneously and during the subsequent period of Roman occupation, at Broadfield (centred on NGR TQ 263354) (Cartwright 1992). Evidence of iron-working in the later medieval period has been found at a number of locations both east and west of Crawley High Street (Wealden Iron 1973, 14–15; 1988, 8–9; 1989, 2; 1990, 2–3; 1995, 2; 1996, 2–3). In the post-medieval period blast furnaces were established at Tilgate and Bewbush, and finery forges at Ifield, Blackwater Green and Tinsley Green.

Evidence of iron-making was present in evaluation trenches 2, 3, 4, 8, 11, 12, 17 and 18. The location of Trench 8 was subsequently examined as Area A, and a larger quantity of slag was recovered. All the slag recovered was the product of the direct or bloomery iron-making process.

The predominant evidence of iron-making was slag from the consolidation stage, although tap slag was found in Area A (incl. Trench 8) and in Trench 18. All the slag was recovered from pits, gullies or post-/stake-holes and no evidence was found of iron-working surfaces or hearths. The most interesting

group was recovered from pit F536 in Area C, where a number of fragments of plano-convex hearth bottoms, as well as pieces of tap slag, were identified, suggesting that both smelting and primary reworking were carried out close by. Evidence of secondary reworking, in the form of hammer scale, came from both evaluation Trench 18 and excavation Area A, further pointing to a greater concentration of activity in this vicinity. Both smelting and forging/consolidation slags have been found in most of the locations, although in no instance has evidence of smelting or forging hearths been found. A number of the locations suggest quasi-domestic activity in the closes behind medieval tenements; examples being the finds at nos 15, 43, 101 and 103 High Street (east side). The slag found in evaluation trenches 11 and 17, behind the site of the former 16 High Street (west side) corresponds to these finds. The lack of slag evidence from behind other properties on the west side of the High Street is more related to the progress of recent building development and the opportunities to watch site clearance than to the possible non-existence of such evidence.

Of particular interest is the evidence revealed in the area around Spencers Road, some 150 m west of the High Street. Trenches 8 (rear of no 28 Ifield Road) and 18 (front of nos 6 and 8 Spencers Road) and the subsequent excavation of Area A (rear of nos 18–28 Ifield Road), all lie close to an unexcavated

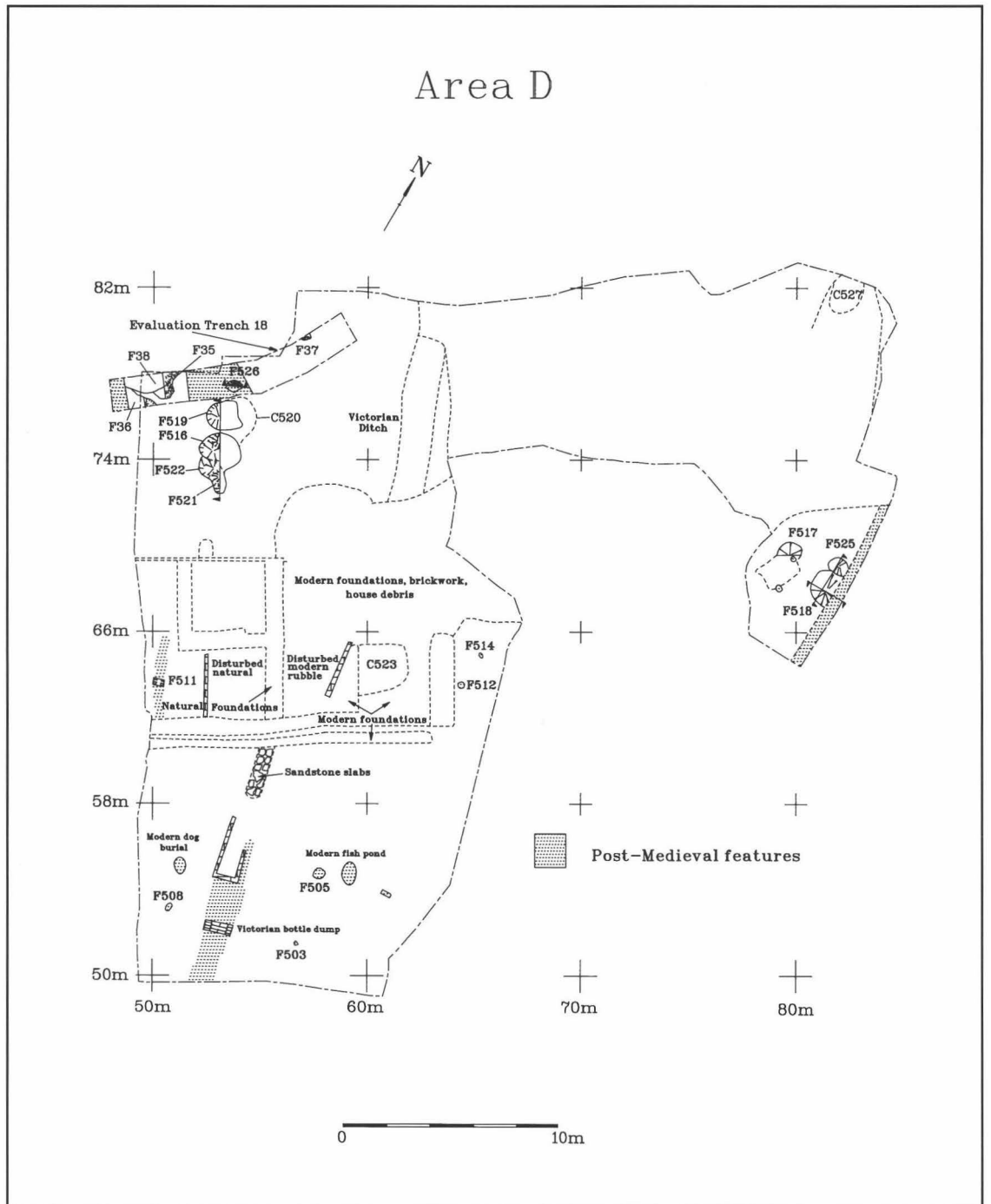


Fig. 7. Plan of Area D.



site, where slag and medieval pottery were found after topsoil was stripped from the former gardens of nos 5 and 7 Spencers Road (Wealden Iron 1989, 2). The abundance of slag in the High Street area, associated with late medieval pottery, is strong evidence of a quasi-domestic, or even more highly organized, craft industry in that period.

## THE POTTERY by Jane Timby

### Introduction

The archaeological work produced a relatively small assemblage of approximately 1200 sherds, 17.7 kg, of pottery. Most of the material dates to the medieval period with few later post-medieval pieces, the latter mainly recovered from surface layers. The pottery was recovered from 55 individual features, of which only seven (gully F506 and pits F503 and F536 in Area A; gully F525 and pits F524 and F607 in Area C; and pit F516 in Area D) contained more than 50 sherds, (the sherds from pit F516 came mainly from one vessel). Some joins are evident between fills both within and across features suggesting some contemporaneity of activity. The material is of variable condition with, on the one hand, the substantial part of three jugs present in F607 and F527 (both in Area C), and, on the other, a much more fragmented collection.

The assemblage was sorted into fabric types and quantified by sherd count, weight and estimated vessel equivalent (eve) for each context. A representative sherd of each medieval fabric identified during the initial analysis was examined by Luke Barber of Archaeology South-East, who provided a cross-reference to the fabrics identified from other recent work in the High Street area of Crawley to try and provide some element of consistency for the medieval assemblage from the town.

### Medieval wares

Fifteen medieval fabrics have been defined (some of the original groups being later amalgamated), most of which can be cross-referenced into the Archaeology South-East type fabrics (ASE 00). A quantified summary is presented in Table 1 (microfiche). Fabric descriptions can be found in the site archive.

#### Earlwood-type wares (M1, M2, M10)

Fabrics M1/M2 (= ASE fabric 1b). Forms: Cooking-pots, bowls and decorated glazed jugs. The cooking-pots and bowls are generally plain. The jugs include the two semi-complete examples from pit F537 (Area A) (Fig. 9:1–2) with a glossy dark olive green mottled glaze over a white slip and a sgraffito design. Also within this group is the polychrome jug from pit F607 (Area C) decorated with overlapping barbotine scales (Fig. 10:13). Other jug sherds are decorated with vertically combed lines and impressed double circles, again with a white slip and a more patchy green glaze (Fig. 9:9). Less common, but broadly within the same group, are jugs decorated with crisscross lines of slip under a clear (brown) glaze. Bases are generally thumbled whilst handles include both strap and rod types.

M10 (=ASE fabric 1a). Forms: Cooking-pot body sherds only, one with an applied thumbled strips and glaze splatters.

#### Sandy wares (M4/M11, M5/M7, M6, M8/M15, M9)

M4/M11 (= ASE fabric 3b). Forms: The majority of sherds came from handmade cooking-pots with slightly sagging bases, mainly plain, although two examples from pit F531 and scoop F545 (both Area C) had applied thumbled strips. A single handle was recovered from pit F504 (also Area C).

M5/M7 (= ASE fabric 3c). Forms: A small group of eight body sherds, mainly from cooking-pots. One sherd from pit F602 (Area C) has an applied thumbled strip, another from gully F525 (also Area C) has a line of finger-nail impressions around the shoulder zone.

M6 (= ?ASE fabric 3a). Forms: Most of the sherds belong to plain cooking-pots. A single rod handle from a jug was also recorded.

M8/M15 (=ASE fabric 2). Forms: Cooking-pots, jugs and cisterns. Some body sherds show a partial pale green internal glaze. Jug sherds are rare. A bung-hole from a cistern was recovered from pit F536 (Area A).

M9 (=ASE fabric 8). Forms: Plain cooking-pots and bowls.

#### West Sussex type (M14)

M14 (=ASE fabric 4). Forms: Jugs with a pale olive or brownish-green glaze. Decoration includes vertical combed lines on one example and a combination of vertical applied strips and horizontal combing on another. Only represented by seven body sherds.

#### Shelly wares (M3/M12)

M3 (= ASE fabric 9). Forms: Handmade cooking-pots.

M12. Forms: Wheel-made plain sherds, probably largely from cooking-pots although no featured sherds were present.

#### Surrey Border wares (M13, CBW, TG)

M13 ?Kingston whiteware. Forms: Represented by jug sherds, one example with combed decoration under a pale green glaze with some reddish-black mottling.

CBW - Coarse Border Ware (Pearce & Vince 1988, 9). Forms: Mainly cooking-pots with flanged and lid-seated rim forms

Table 1. Summary of fabrics.

Fabric	No.	%	Weight	%	EVE	%
M1: Earlwood-type	574	48	9730	56.5	279	43
M10: Earlwood-type	8	*	65	*	0	*
M4: sandy ware	152	13	2493	14.5	126	19
M5/M7: sandy ware	30	2	255	1	17	2.5
M6: sandy ware	132	11	1404	8	73	11
M8: sandy ware	29	2	579	3	15	2
M9: sandy ware	77	6.5	859	5	46	7
M14: West Sussex type	7	*	59	*	0	*
M3: shelly ware	18	1.5	211	1	30	4.5
M12: shelly ware	8	*	66	*	0	*
M13: Kingston	17	1.5	142	*	10	1.5
CBW: Border ware	128	11	1257	7	56	8.5
TG: Tudor Green	4	*	8	*	5	*
<b>TOTAL</b>	<b>1184</b>	<b>100</b>	<b>17,128</b>	<b>100</b>	<b>657</b>	<b>100</b>

(Pearce and Vince, types 1 and 2) and dripping-pans and to a lesser extent jug fragments. Many of the cooking-pots had internal glazing and applied thumb-strips.

TG - Tudor Green (Pearce & Vince 1988, 10 & 79 ff.). Forms: Represented by just four sherds, one of which is from a cup.

## DISCUSSION

The majority of the sherds analyzed, c. 56 per cent by weight (48 per cent by count) fell within the Earlswood type of wares. The excavated kiln at Earlswood, north of Reigate, Surrey, dated by the excavator to the 14th century, produced a range of cooking-pots, bowls and decorated jugs (Turner 1974). The range of vessels from the Crawley deposit would broadly accord with a 13th- to 14th-century date. The style of decoration used on the jugs, in particular sgraffito patterning, matches well with several of the Crawley products (e.g. Fig. 9:1, 9 & 11). Of the other fabric groups, Coarse Border wares, sandy fabrics M4/M11 and M6 make an almost equal contribution of 11–13 per cent each by sherd count. In London the earliest groups to contain Coarse Border ware and Kingston ware date to the middle of the 13th century (Pearce & Vince 1988, 13ff.). Kingston-type ware appears to be well-established by the later 13th century. By the mid-14th century Surrey whitewares were the commonest type of pottery in the City of London and Coarse Border ware was almost twice as common as Kingston ware. The dominant form at Crawley is the cooking-pot with examples of Pearce and Vince (1988, 61–2) types 1 and 2. Type 2, characterized by a lid seating, appears from the 15th century and was present in pit F503 (Area A) and ditch F534 (Area C).

The sandy grey wares M4/M11, M6 are probably local products. Fabric M4/M11 could potentially date to the 12th to 13th centuries, M6, with its wheel-made forms, probably a little later.

The other fabrics identified all contribute less than 5 per cent by weight to the overall assemblage. Possibly amongst the earlier wares are M3 (shell-tempered) and M12 (sand- and shell-tempered). The former, featuring as handmade cooking-pots, typologically resemble the London early-medieval shelly wares (EMSH) which are common in the north-west Kent area in the late 11th to mid-12th centuries (Vince & Jenner 1991, 64). Their presence at Crawley alongside later material suggests possible redeposition or longevity of use.

Other named wares include a few sherds of Kingston ware current from the late 12th century but surprisingly few West Sussex-type jugs (M14), although Crawley may fall just on the periphery of the main market area for these products (Barton 1979, 93). A few sherds of Tudor Green dating to the 15th to 16th century are also present, although only associated with one feature, pit F536 (Area A).

The generally low scatter of material in most of the features precludes too detailed an analysis for the purposes of determining a chronological progression. Leaving aside the sherds from pit F607 (Area C) which largely constituted a single vessel, the main fabrics from the other six features with more than 40 sherds were examined with regard to percentage weight (gully F506 and pits F503 and F536 - Area A; pit F524 and gully F525 - Area C; pit F516 - Area D). It is difficult to be certain whether the observed differences are chronological, or caused by other factors. In four cases Earlswood products dominate the groups, the exceptions being pits F503 (Area A) and F516 (Area D). Pit F503 (Area A) contained a high percentage of Coarse Border wares and a significant proportion of Kingston ware, perhaps indicating that this feature may be

slightly later in the overall sequence. Pit F516 (Area D) had a particularly high proportion of grey sandy wares but no Coarse Border ware, perhaps suggesting that this may date to the 13th century. Coarse Border wares were also absent in gully F506 (Area A), pit F524 and gully F525 (both Area C) which may, therefore, have been abandoned before the later 14th to 15th centuries. Gully F506 (Area A) is also significantly different in that it contains 31 per cent by weight shelly ware, fabric M3, suggesting it may be amongst the earlier features, although the high proportion of Earlswood suggests it must be at least 13th-century. In contrast to the finds from pit F516 (Area D), however, fabric M4/M11 is not so well-represented. The only other features to contain fabric M3 are pits F536 (Area A) and F538 (Area C). With its Tudor Green sherds and one of the more diverse ranges of material, pit F536 (Area A) would appear to have still been receiving material in the 15th century, although this may simply be a reflection of the fact that it is the largest single group.

Sherds from the same or very similar decorated jugs were present in pits F516, F521 and F520 (all Area D) suggesting some contemporaneity of fill. Other joins were evident between pit F528 and gully F525 in Area C.

## Catalogue of illustrated pottery (Figs 9 & 10)

- 9.1. Almost complete baluster-type jug with a fluted base and round-section handle. The body is decorated with sgraffito pattern below a white slip and glossy glaze, which is a lustrous green mottled with darker green. The glaze covers the top two-thirds of the vessel. Fabric M1/M2. from the well F527 (593). Area C.
- 9.2. Base of a second jug of identical finish. Fabric M1/M2. Well F527 (593). Area C.
- 9.3. Wheel-made cooking pot with occasional glaze splatters. Sooted exterior. Fabric M1/M2. Well F527 (593). Area C.
- 9.4. Handmade cooking pot in a reddish-brown, vesicular ware with a grey core. Fabric M3. Gully F506 (553). Area A.
- 9.5. Jug with a round-section, intermittently slashed handle. The exterior is covered with a mottled green and brown glaze. Traces of decoration just visible on the body. Fabric M1/M2. Pit F536 (583/589). Area A.
- 9.6. Rim from a dripping pan. Coarse Border ware. Pit F536 (583/589). Area A.
- 9.7. Handmade cooking pot in a coarse, reddish-brown, vesicular ware. Fabric M3. Pit F536 (583/589). Area A.
- 9.8. Wheel-made cooking pot decorated with applied thumb-strips. Fabric M11. Pit F536 (583/589). Area A.
- 9.9. Jug decorated with incised combed lines alternating with incised double ring circles and vertical wavy incised lines. The vessel is covered in a white slip and a patchy, light green, glaze. Fabric M1/M2. Pit F516 (564). Area D.
- 9.10. Plain, wheel-made cooking pot in a dark grey, sandy ware with a reddish core. Fabric M6. Pit F516 (564). Area D.
- 9.11. Jug with sgraffito decoration. White slip under a pale green glaze. Fabric M1/M2. Pit F531 (578). Area C.
- 9.12. Wheel-made, plain cooking pot. Fabric M1. Pit F518 (567) Area D.

(Fig. 10)

- 10.13. Semi-complete but fragmented polychrome handled jug with a fluted base. Most of the rim and part of the neck area are missing. The upper body, handle, and neck area, have been brush-slipped creating a slightly streaky cream and dark purplish brown effect. The lower body is

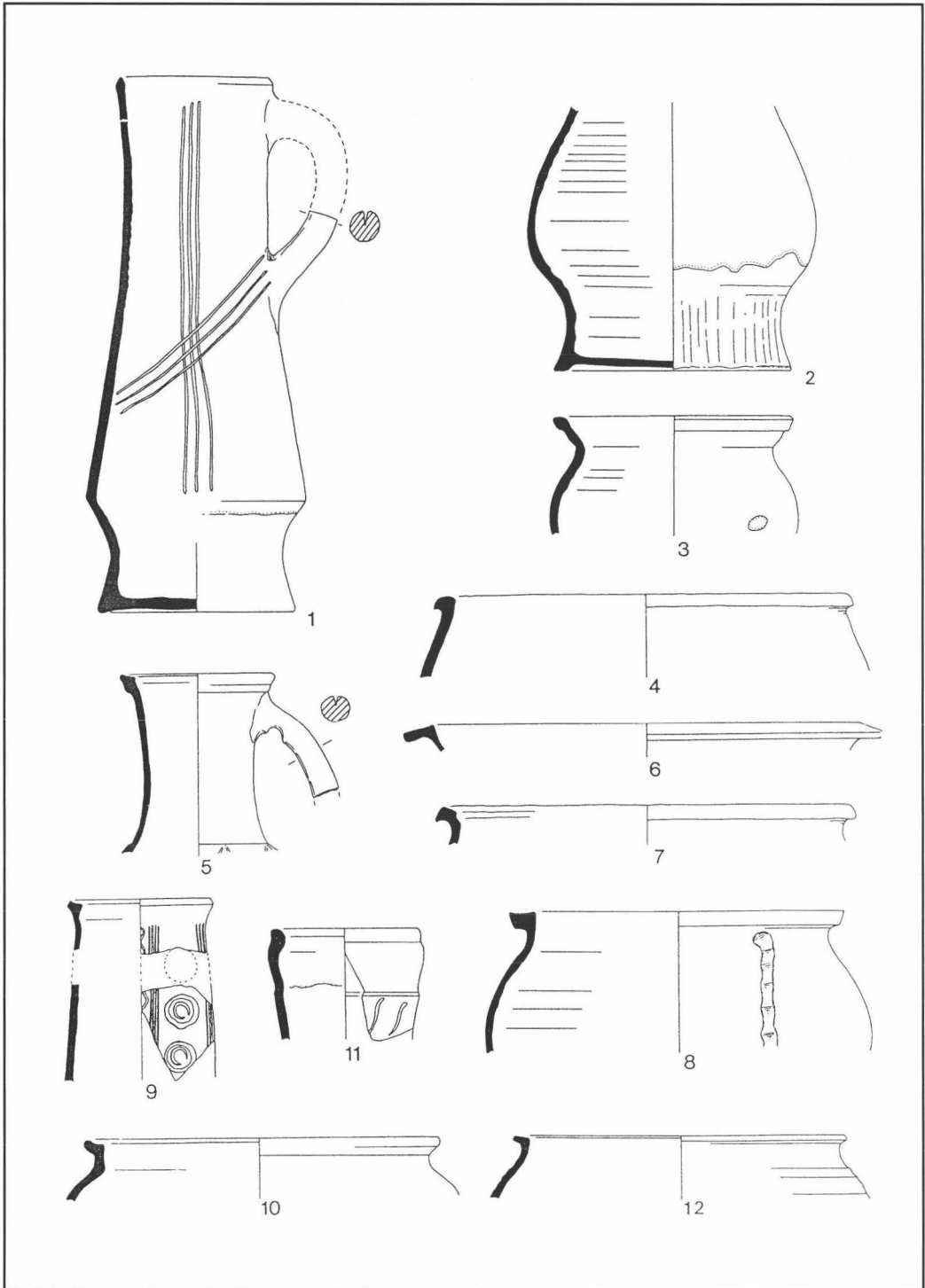


Fig. 9. The pottery.

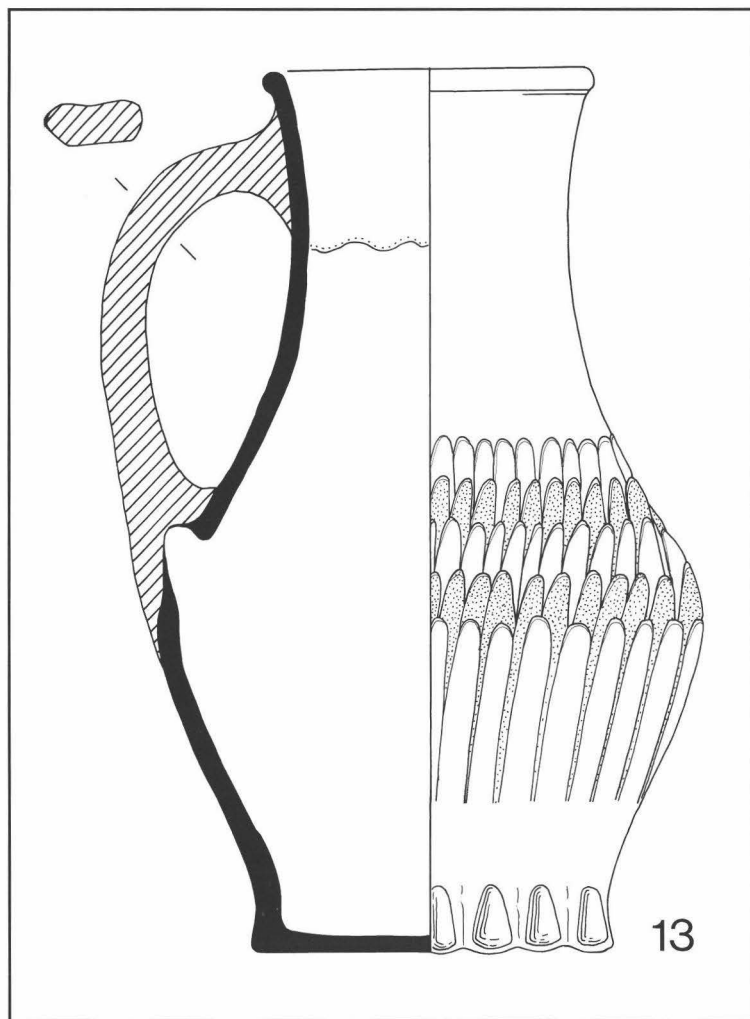


Fig. 10. The pottery.

decorated with applied barbotine scales with alternating bands of cream and dark purplish brown. The oval-section handle has been applied by pushing through from the lower body into the base of the handle creating a hollow. The vessel is covered with a patchy, incomplete, thin clear glaze.

In conclusion, therefore, it would appear from the range of wares present that most of the activity in the High Street area dates from the mid- to late 13th through to the 15th centuries. The range of material is good, and the relatively high proportion of decorated jugs indicates that this is the rubbish from moderately well-appointed establishments.

#### Post-medieval wares

Post-medieval wares account for just 3 per cent of the overall assemblage by weight and mainly comprise wares dating to the 18th to 19th centuries. No detailed work on the wares has taken place. They include glazed refined white earthenwares, a

fine red micaceous earthenware, glazed red earthenwares, stone wares including one piece of Raeren stoneware, and flowerpot.

#### MOLLUSCAN REMAINS by Jessica Winder

A substantial deposit of 81 oyster shells (*Ostrea edulis* L.) was recovered from pit F503 in Area A. These comprised 44 right valves and 37 left valves, giving a minimum number of 44 individual oysters. Although an estimation of age was not attempted from the right valves, it is evident that most of the oysters were of some age — certainly greater than four years, which is the age of maturity and the phase at which most common flat oysters are fished for consumption.

The evidence, as it stands, points to the exploitation of a natural bed of oysters. For at least part of their life the oysters rested in warmer, shallow waters on the south coast, as shown by the presence of damage caused by *Polydora hoplura* and *Cliona celata*. Notches which were tentatively identified at various positions on the margins of 19 per cent of the valves, are thought to result from the opening procedure. The brownish iridescence recorded for the internal surfaces of 19 per cent of the shells is thought to indicate that the oyster shells were burnt or heated.

The nearest likely source for oysters is Shoreham-by-Sea, a distance of 12 miles to the south of Crawley. Although there do not appear to be any surviving records relating to oyster fishing in Shoreham from the medieval period, the industry is well-documented for the 19th century, by which time it provided employment for a large number of men and was a main contributor to the prosperity of the town (Cheal 1909,

111–15). The deep sea natural oyster beds being fished were situated midway between the English and French coast and were about 20 miles in length and seven or eight in breadth. The oysters were bought by merchants who laid them down in beds near to the town. At the end of the 19th century the Board of Trade mapped the beds in the River Adur and also storage pits on the foreshore to the west of the wharves in the harbour at Southwick (Local Government Board 1896). The oysters were then sent to inland markets as far north as Newcastle. In London the Shoreham oysters were known as 'scuttle-mouths'. Philpots (1890, 247) tells us that 'In 1848 very large-shelled oysters, the animals being very small, were brought in from the Sussex coast, and had an enormous sale in Thames-Street and near the Borough-Market'.

The evidence from the Crawley shells is consistent with these descriptions of the Shoreham-by-Sea oyster shells themselves and the way in which they were harvested and fattened by relaying inshore.

## CONCLUSIONS

From the assemblage of pottery recovered from all five areas excavated along the route of the relief road it would seem that most of the activity to the west of the High Street dates from the mid- to late 13th century through to the 15th century. There is a good range of material and the high proportion of decorated jugs shows that the establishments whose refuse is represented were moderately well-to-do. This is further evidenced by the large quantity of oyster shells, possibly brought from Shoreham-by-Sea. Virtually all the areas examined display evidence for at least one stage of the iron production process having taken place in the near vicinity, and, while no features can be directly attributed to *in situ* iron-working, it is certain that the results of the archaeological investigations further verify the status of Crawley during the 13th to 15th centuries as a town whose economy was, to a considerable extent, reliant on its position in the local Wealden iron industry. It is probable that much of this industry was of a quasi-domestic nature during this period, although an increasing body of evidence is now being uncovered by recent excavations to suggest industrial-scale production. Tax returns for the majority of Sussex made in 1296, 1327 and 1332 (Sussex Record Society vol. 10) refer constantly to people whose names reflect the occupation in which they were engaged i.e. Smith, Blower (or bellowsman). In the 1379 poll tax returns for Crawley there are references to iron-makers, smiths and farriers showing the continued prosperity of the iron industry (Gwynne 1990, 51).

By the end of the 15th century, however, the blast furnace had been introduced to Sussex and this required a large amount of capital for the building of ponds, water-wheels and the necessary buildings (Gwynne 1990, 71). The need for plentiful supplies of ore and wood for charcoal, as well as the necessity of having several separate ponds, often meant that the furnace and forge were far removed from one another. All of this could well have resulted in a decline in the small-scale type of industry that had supported Crawley's economy for so many years. There is not enough evidence to put forward the theory that the apparent decline in the bloomeries of Crawley was wholly consequent upon the ravages of the Black Death; there is more to suggest that industrial progress and innovation resulted in the demise of this once prosperous 'cottage' industry as

furnaces became concentrated in those areas outside the town where raw materials were ready at hand. This is witnessed by the paucity of archaeological evidence, from all five areas excavated, for the period following the 15th century. This is not to say that the Wealden iron industry declined generally; it did not, for many of the furnaces continued in operation in West Sussex throughout the 16th and 17th centuries, particularly prospering from the 1490s onwards as evidenced by the migration of French ironworkers to the Weald (Crossley 1990, 156).

The evidence from these excavations is helpful in examining the topography of the town and its changes through time. The late medieval house at 16 High Street and recent excavations carried out on the opposite side of the High Street (L. Barber pers. comm.) indicate occupation at the southern end of the High Street, and medieval deposits adjacent to Spencers Road (Areas A & D) point to another focus of settlement. Area C, at the northern end of the High Street, is particularly informative as it clearly shows settlement here in the 12th to 14th centuries. It is possible that this, and the occupation on Areas A and D, represent outlying settlements associated with the iron-working industry, but, equally, Area C may reflect expansion of the urban area from an earlier core located further to the south. If Area C does indicate expansion, then abandonment of this area in the 14th century provides an important indicator of the economic fortunes of the town, perhaps due to the changes in the nature of iron production discussed above or as a consequence of the Black Death (Postan 1972).

Crawley, like many small towns, came into the historical record during the later 12th/13th century with the granting of a royal charter to hold a market. Little work has been addressed to the examination of the origins and development of the small towns and rural markets in the south-east apart from limited investigations in places like Steyning, Lewes, and Winchelsea (English Heritage 1991). However, comparisons can be drawn with similar-sized towns in other counties. The shape of the High Street, funnel-like, with its burgage plots regularly aligned, resembles many others such as Bletchingley, Reigate, and Haslemere, all in Surrey (O'Connell 1977). In the case of Crawley these appear to have been set out initially on either side of the southern part of the High Street (Gwynne 1990, 34) with later expansion northwards to include Area C (as discussed above). Evidence of some degree of

economic decline during the late 14th century has come from both Reigate and Bletchingley (O'Connell 1977) and also from Great Bedwyn in Wiltshire (Haslam 1976). Like Crawley, this decline is reflected in the gradual failure of its status as a market town, and it has been suggested (O'Connell 1977, 45) that in some cases the economic decline of a town might be attributed to an absentee landlord, as in the case of Reigate. It is possible that the death in 1429 of the last member of the Poynings family, lords of the manor of Crawley, may have had a similar effect.

The site code is CHRR 95 and the finds and site archive have been deposited with Crawley Museum

**Author:** M. John Saunders, Thames Valley Archaeological Services, 47–49 De Beauvoir Road, Reading RG1 5NR.

## REFERENCES

- Anon.** 1998. *Crawley Leisure Park, London Road, Crawley, West Sussex, Archaeological Evaluation and Excavation, Initial Summary Report*. Wessex Archaeology.
- Barton, K. J. 1979. *Medieval Sussex Pottery*. Chichester: Phillimore.
- BGS.** 1981. *British Geological Survey*. Sheet 302, 1:63360. Keyworth.
- Cartwright, C.** 1992. The excavation of a Romano-British iron-working site at Broadfield, Crawley, West Sussex, *Sussex Archaeological Collection* (hereafter SAC) **130**, 22–59.
- Cheal, H.** 1909. *The Ships and Mariners of Shoreham*. Shoreham-by-Sea: King, Thorne & Stace (Litho).
- Crossley, D.** 1990. *Post Medieval Archaeology in Britain*. Leicester: Leicester University Press.
- Davis, S. J. M.** 1987. *The Archaeology of Animals*. London: Batsford.
- English Heritage.** 1991. *Exploring Our Past*. London: English Heritage.
- Ford, S.** 1995a. *Crawley High Street Relief Road, West Sussex: Archaeological Evaluation*. Thames Valley Archaeological Services report **95/27**. Reading.
- 1995b. *Crawley High Street Relief Road, West Sussex: Archaeological Evaluation, Trench 18*. Thames Valley Archaeological Services report **95/27b**. Reading.
- 1995c. *Crawley High Street, West Sussex: Evaluation of Additional Area Adjacent to Driving School Car Park*. Thames Valley Archaeological Services report **95/27c**. Reading.
- Gardiner, M. F.** 1989. A medieval anthropomorphic jug from Crawley, SAC **127**, 247–9.
- Grant, A.** 1975. 'The animal bones', in B. Cunliffe (ed.), *Excavations at Portchester Castle, 1: Roman*. *Reports of the Research Committee. Society of Antiquaries of London* **32**, 378–408.
- Gwynne, P.** 1990. *A History of Crawley*. Chichester: Phillimore.
- Harris, A.** 1995. *Description and Analysis of Buildings Formerly at 16 High Street, Crawley, Sussex*. London: Lawson Price Environmental.
- Haslam, J.** 1976. *Wiltshire Towns: the Archaeological Potential*. Devizes: Wiltshire Archaeological and Natural History Society.
- Local Government Board.** 1896. *On Oyster Culture in Relation to Disease, Supplement in Continuation of the Report of the Medical Officer 1894–95*. 24th Annual Report **73–74**, map 22. London: HMSO.
- O'Connell, M.** 1977. Historic towns in Surrey. *Research Volume of the Surrey Archaeol. Soc.* **5**.
- Pearce, J. & Vince, A.** 1988. *A Dated Type-series of London Medieval Pottery, part 4: Surrey Whitewares*. LAMAS Special Paper **10**.
- Philpots, J.** 1890. *Oysters and All About Them*, part 1. John Richardson and Co.
- Postan, M.** 1972. *The Medieval Economy and Society*. Harmondsworth: Penguin.
- PPG16.** 1990. *Archaeology and Planning*. London: HMSO. Department of the Environment Planning Policy Guideline **16**.
- Stevens, S.** 1997. Excavations at the Old Post Office site, 15–17 High Street, Crawley, West Sussex, SAC **135**, 193–208.
- Turner, D. J.** 1974. Medieval pottery kiln at Bushfield Shaw, Earlswood: interim report, *Surrey Archaeol. Collect.* **70**, 47–55.
- Vince, A. & Jenner, A.** 1991. The Saxon and early medieval pottery of London, in A. Vince (ed.), *Aspects of Saxo-Norman London, 11: Finds and Environmental Evidence*. LAMAS Special paper **12**, 19–119.
- von den Driesch, A.** 1976. *A Guide to the Measurement of Animal Bones from Archaeological Sites*. Cambridge (MA): Harvard University Press. *Peabody Museum Bulletin* **1**.
- Wealden Iron.** 1973. *Bulletin of the Wealden Iron Research Group* **6**.
- 1988. *Bulletin of the Wealden Iron Research Group*, 2nd ser., **8**.
- 1989. *Bulletin of the Wealden Iron Research Group*, 2nd ser., **9**, 2.
- 1990. *Bulletin of the Wealden Iron Research Group*, 2nd ser., **10**, 2–3.
- 1995. *Bulletin of the Wealden Iron Research Group*, 2nd ser., **15**, 2.
- 1996. *Bulletin of the Wealden Iron Research Group*, 2nd ser., **16**, 2–3.
- Winder, J. M.** 1992. *A Study of the Variation in Oyster Shells from Archaeological Sites and a Discussion of Oyster Exploitation*. Unpublished Ph.D. Thesis, University of Southampton, 222–54.