

SALVAGE RECORDING OF A
ROMANO-BRITISH ENCLOSURE AT
HOARSTONE FARM,
KIDDERMINSTER FOREIGN

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Report 198

HWCM 15300

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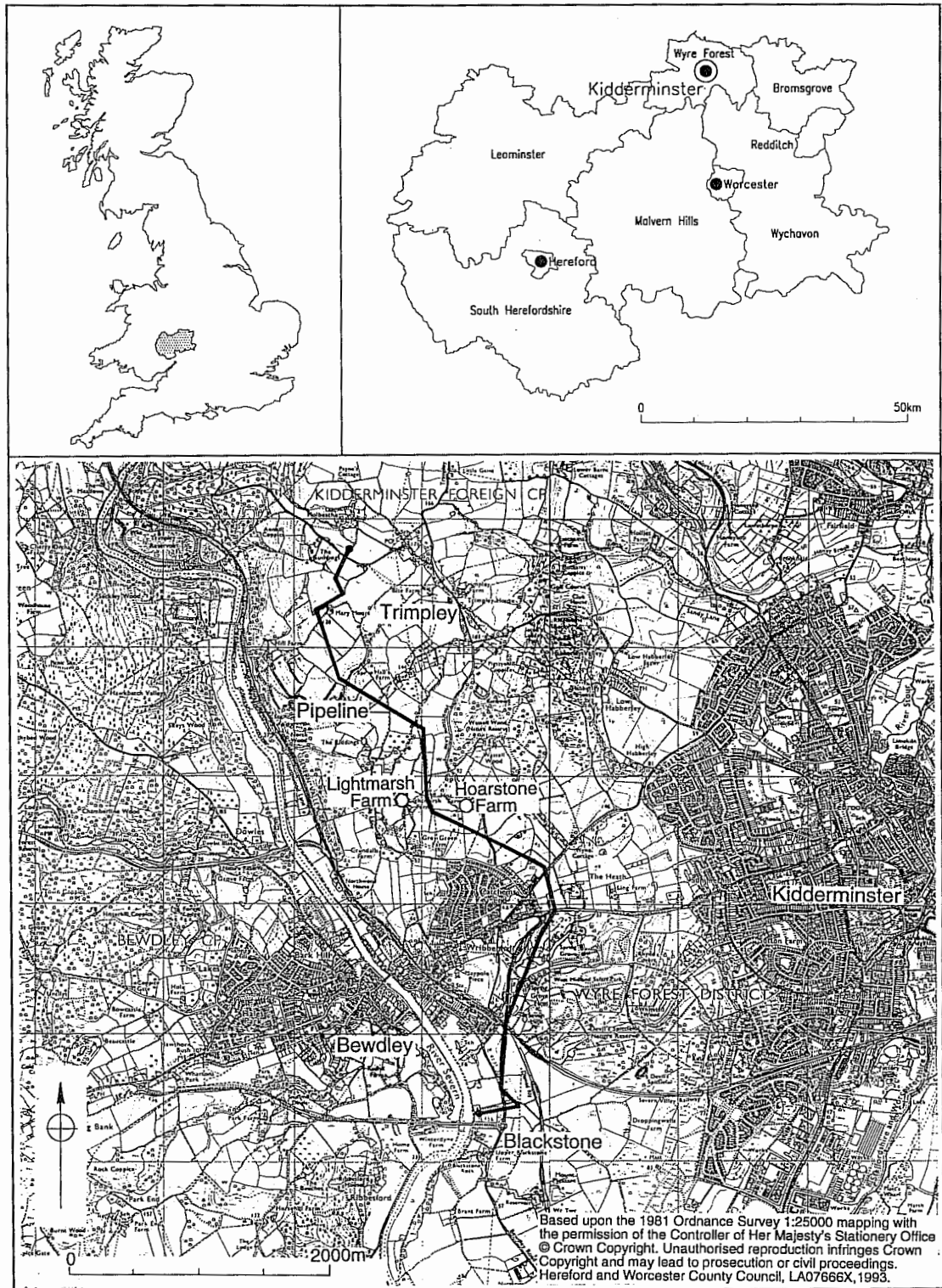
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Figure 1



Location of pipeline and Hoarstone Farm Romano-British enclosure (HWCM 15300)

Salvage recording of a Romano-British enclosure at Hoarstone Farm, Kidderminster Foreign (HWCM 15300)

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Clare de Rouffignac with illustrations by
Carolyn Hunt and Laura Templeton

1 Summary

A watching brief and salvage recording were undertaken on the site of a Romano-British farmstead enclosure. The site was revealed during construction of a new water main on behalf of Severn Trent Water, running from Trimpley to Blackstone in the north of the County. A ditch punctuated by a narrow entrance formed the south side of an enclosure of which parts of the east and west sides were also recorded. Within the enclosure, close to the ditch and to the east of the entrance, two ovens were excavated. Although domestic and agricultural buildings were not identified within the area recorded, it is probable that such buildings would have lain somewhere within the enclosure.

The ovens appear to have had a dual role, functioning as both bread baking and grain drying ovens. There was evidence for both spelt and barley which were probably locally grown. A significant group of pottery was associated with these deposits which suggested that the site dated to the later 3rd or early 4th century. The narrow date range of the site and the absence of complex deposits indicates that occupation was probably short-lived.

The site, looked at in conjunction with others in this part of the Severn Valley, suggests that the area had a complex pattern of rural settlement based around small farmstead enclosures. The agricultural economy probably relied on both arable and pastoral practice with perhaps a greater emphasis on the former in the area around Hoarstone Farm, but on the latter, around Astley to the south. One particular trend which can be discerned, from these sites, is the apparent expansion of rural settlement in the 3rd and 4th centuries, a pattern which has been observed elsewhere in the Roman period.

The combination of structural, artefactual and ecofactual remains from this site provided a rare opportunity to study a Roman site without the usual problems of truncation of deposits and residuality caused by later activity. This highlights the potential significance of rural sites for developing an understanding of the region during the Roman period.

2 Introduction

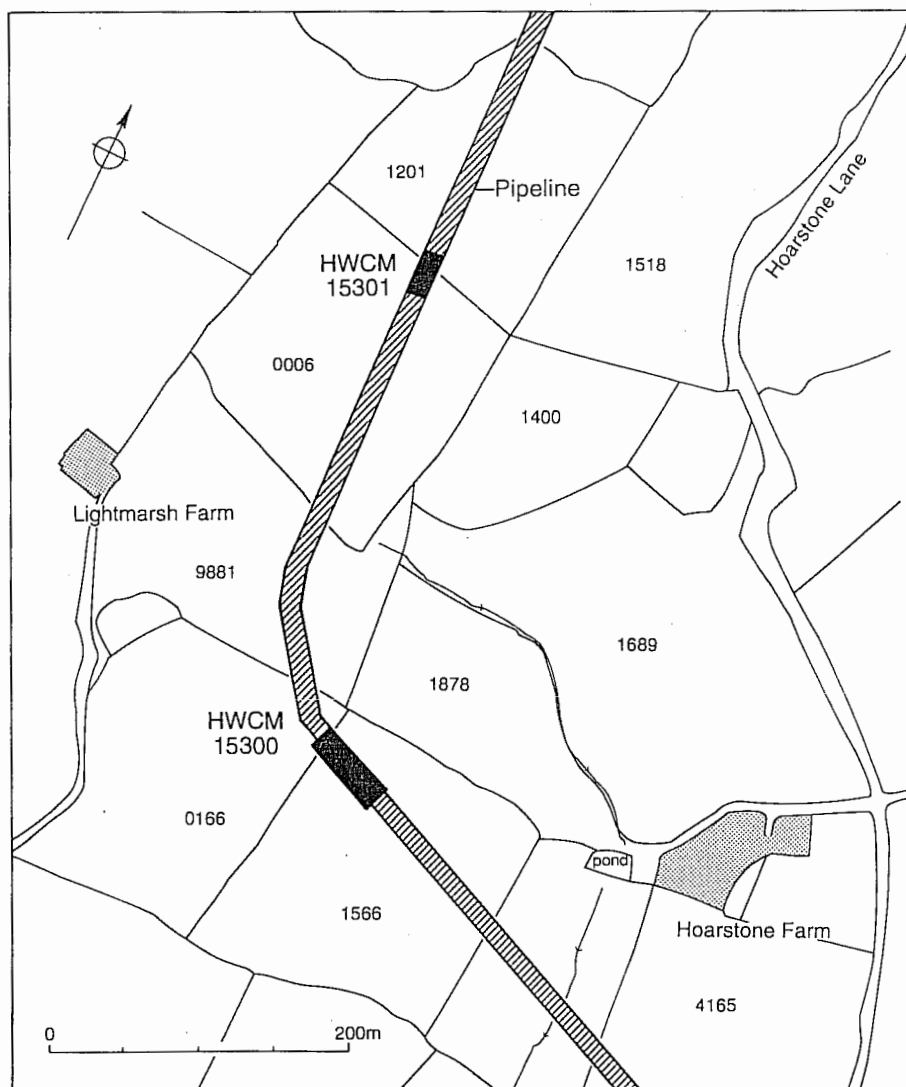
2.1 Background

Salvage recording was undertaken on a Romano-British ditched enclosure and associated deposits in July 1992. The site was revealed during the construction of a new water main running from Trimpley to Blackstone in the north part of the County. The project was one of a series of similar projects undertaken by the County Archaeological Service of Hereford and Worcester County Council on behalf of Severn Trent Water as part of a major programme of works to improve water supplies throughout the region. Methodology was based upon

practice established during previous projects which formed part of this programme (Dinn and Hemingway 1992; Dalwood 1992; Jackson 1993). A watching brief was maintained during the stripping of topsoil from an easement 12m wide along the whole of the pipeline (Fig 1), and also during parts of the subsequent pipe-trenching. In addition to this a contingency team was available to facilitate more detailed recording of any significant deposits revealed which could not be undertaken through the watching brief.

Archaeological deposits were recorded at a number of sites along the pipeline and artefacts recovered from the majority of the fields which were examined. The overall results of the project are reported elsewhere (Jackson 1994a), this report details the results of investigations at one site Hoarstone Farm (HWCM 15300, OS 1566; NGR SO 792 767; Fig 2).

Figure 2



Site location showing pipeline route and Ordnance Survey parcel numbers

The site was initially brought to our attention by the Clerk of Works, Mr Howard Garbett who observed pottery and charcoal rich deposits of soil in the

Key to Figure 3



= Settlement



= Use unknown



= Meadow



= Marginal land



= Common land



= Open fields (arable)



= Boundaries of open fields



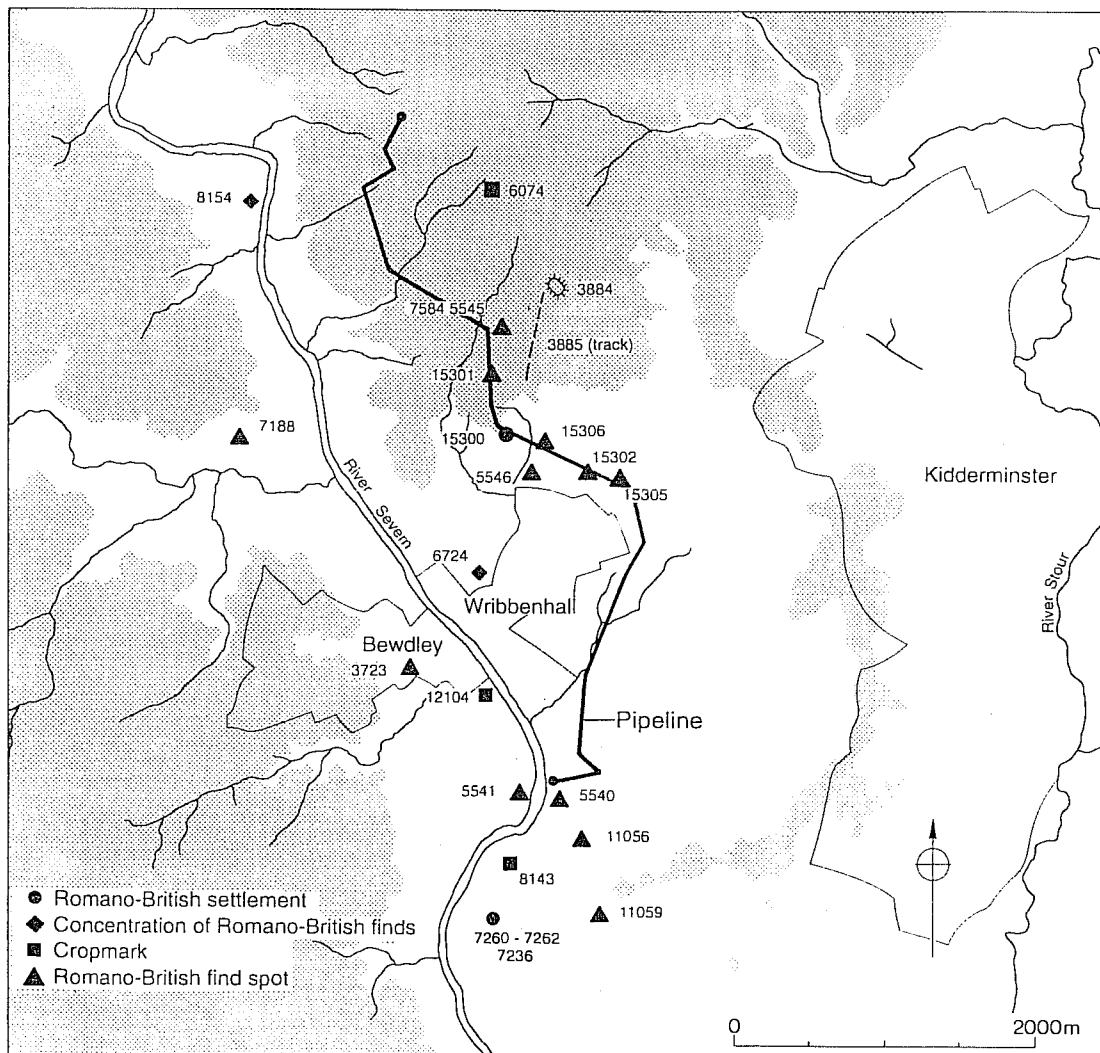
= Quantity of medieval pottery from field

north corner of one of the fields crossed by the pipeline. These had been revealed by heavy overnight rain on an area stripped the previous day. Preliminary investigation of the area indicated that significant deposits existed within the area of the easement, concentrating along the south side of the stripped area. Following negotiation with Severn Trent Water's Resident Engineer, Lynton Bradley, a short programme of salvage recording was agreed using the contingency team.

2.2 Geology and topography

The site was situated towards the south end of a shoulder of land at about the 70m contour. The ground falls away on three sides of the site, the south, east and west, to streams draining into the River Severn (Fig 3). To the north the ground rises gently along a ridge to the east of a small stream. Beyond this to the west and north the ground rises steadily to over 170m around Wassell Wood and Trimpley. This high point dominates the surrounding area and from it, streams, in narrow steep sided valleys, drain into the River Severn, to the west, and, to the east, into the River Stour, itself a tributary of the Severn. The surrounding landscape is generally undulating with increasingly steeply sloping hill and valley sides to the north.

Figure 3



Roman sites in the vicinity

The soils in the fields crossed by the pipeline fall into three groups. The Hoarstone Farm site lies on soils of the Middleton Association, which are reddish fine silty and fine to coarse loamy soils overlying Bunter Sandstone (Ragg *et al* 1984). These are subject to seasonal waterlogging and consequently, although they are readily cultivatable, landuse is restricted to grasslands and occasional cereals, both of which have a high yield. To the north, towards Trimpley soils are of the Bromyard association, well drained reddish fine silty soils over Keele Beds and Old Red Sandstone. These are occasionally affected by waterlogging but can be used as mixed farming land, supporting cereals and grass, though use is restricted to pasture on the steeper slopes. Finally to the south-east soils of the Hodnet association occur also overlying Bunter Sandstone. These are similar to the Middleton Association soils but tend to deeper and better drained. Consequently these can support a wide range of crops and are particularly suited to root crops and winter cereals.

2.3 Archaeological background

A broad based discussion of the archaeological background is included in the overall report on the pipeline (Jackson *et al* 1994a), consequently only sites relevant to discussion of the Hoarstone Farm Romano-British deposits are considered here. A number of Roman sites are known in the area and are recorded on the County Sites and Monuments Record (SMR). The majority of these are only locations of limited finds spots such as coins and small quantities of pottery (HWCM 3723, HWCM 5540, HWCM 5541, HWCM 5545, HWCM 5446, HWCM 7188, HWCM 7584, HWCM 11056, HWCM 11059, HWCM 15302, HWCM 15305 and HWCM 15306; Fig 3). Many of these result from the work on the rest of this pipeline and on a similar project to the south (Dinn and Hemingway 1992). Apart from these, a number of possible Romano-British settlement sites exist in the area, known from more extensive finds scatters (HWCM 6724 and HWCM 8154; Fig 3) or from as yet undated cropmark enclosures (HWCM 6074, HWCM 8143 and HWCM 12104; Fig 3) which are likely to be either Iron Age or Roman in date.

Only one probable Romano-British settlement has been identified nearby and tested through excavation (HWCM 7260; Fig 3). To the south of Blackstone, overlying an earlier Iron Age defended enclosure (HWCM 236), a Romano-British pottery assemblage was recovered during salvage excavations. This dated to the 2nd and 4th centuries and indicated two phases of Roman occupation at the site. Although this clearly attests to Roman settlement near to, or on the site no structures were located. The nature of the occupation and degree of continuity are uncertain and the finds are regarded as resulting from manuring of fields in the immediate vicinity of a settlement (Alan Hunt pers comm).

Further to the south a number of settlement sites are known on the west side of the River Severn (HWCM 1136, HWCM 8070 and HWCM 8072; Fig 3). At the first of these, at Areley Kings, activity seems to have been long lived and primarily agricultural (Dinn and Hemingway 1992). No domestic buildings were identified, however an aisled barn, a Roman ploughsoil, a probable enclosure ditch containing an assemblage of 3rd to 4th century domestic pottery, and a number of pits were recorded. Nearby, at Larford excavations in the late 1950s revealed an Iron Age pit and Romano-British enclosures (HWCM 8072; Walker 1958 and 1959). Four irregular ditched enclosures

were recorded, the ditches varying in width between 0.70m and 3m, and in depth from 0.40m to approximately 1.50m. Two of the enclosure ditch sides had entrances approximately 4m wide. In association with these was a circular turf-built hut, traces of a second similar hut, two sub-circular hearths, comprising pebble and sandstone slabs set into sand, and a well. The earliest Roman deposits were 1st or 2nd century in date but occupation appears to have been most intense in the 3rd and 4th century. East of this a number of intercutting ditched enclosures (HWCM 8070) were associated with pottery suggesting similar activity of a 3rd to 4th century date. Together these sites suggest that there was a pattern of scattered Romano-British farmsteads in the area south and west of Stourport (Dinn and Hemingway 1992).

During the course of the Trimpley to Blackstone pipeline Roman deposits were identified at two locations near the Hoarstone Farm site. To the north two ditches were identified during the course of salvage recording of a Mesolithic flint scatter (HWCM 15301; Figs 2 and 3; Jackson *et al* 1994b). These were on north to south and east to west alignments and probably represented field boundaries. To the east a pit containing a single sherd of Roman pottery was recorded adjacent to an adult cremation dating to the post-Roman period (HWCM 15302; Fig 3; Jackson *et al* 1994a). The two features are considered to be contemporary and the pottery residual, probably deriving from the soil into which these features were excavated.

Two other sites are worthy of mention in the area. To the north of Hoarstone Farm, within Wassell Wood, earthworks probably representing an Iron Age hillfort survive (HWCM 3884; Fig 2) and to the west of this, running north to south, towards the Hoarstone Farm site, is a holloway which can be dated through documents to the Saxon period (Leslie King pers comm), but is probably earlier (HWCM 3885; Fig 2).

3

Methodology

The site was identified following overnight rain falling onto part of the easement stripped the day before. This revealed a number of sherds of Roman pottery associated with areas of charcoal flecked fills surviving below the modern ploughsoil. Investigation of the area through a combination of shovel and trowel cleaning revealed a linear feature and several apparently amorphous areas of charcoal rich fill, in association with considerable quantities of Romano-British pottery and fired clay fragments. Excavation of limited areas of these indicated that potentially significant Roman deposits survived over a considerable area of the easement, apparently concentrating on its south side. The contingency team was deployed to undertake salvage recording of these deposits.

The south side of the easement was fenced off for approximately 60m leaving machine access to the north. When deposits to the south had been investigated a brief investigation was undertaken on the north side. Elements of the fenced areas were trowel and shovel cleaned to reveal features and sample excavation of all features was undertaken. Ditches were sampled by the excavation of a number of approximately equally spaced cross sections from which finds were initially kept separate. Most other features were half sectioned. Two ovens were more extensively investigated, however total excavation was not possible due to time constraints. Excavated deposits were recorded following standard Service practice (County Archaeological Service Recording System 1988, as

amended).

This report summarises the results of the salvage recording of the Hoarstone Farm site. Although including integrated discussion of the results, the report has for the sake of clarity, separate analytical and discursive sections for structural, artefactual and environmental remains. To facilitate future management of the site, particularly of the area lying outside the pipeline corridor, an assessment of its significance has been made (Appendix 2) using the *Secretary of State's criteria for the scheduling of ancient monuments* (DoE 1990, Annex 4; Appendix 3).

4 **Structural evidence**

Records were checked and cross-referenced and a stratigraphic matrix was produced for the site showing all contexts recorded. Using structural information in conjunction with artefactually derived dates the evidence from the site could be divided into four phases, natural, prehistoric, Roman and post-Roman. Structurally the site was not complex and associated contexts were readily grouped for analysis and discussion.

4.1 **Phase 1 Natural deposits**

Natural deposits comprised a compacted reddish clay with irregular patches of brown sandy clay, yellowish clay and bands of siltstone and decayed red and greenish sandstone. In places this was observed to overlay red sandstone. All archaeological deposits were cut into this. Around the Phase 2 ovens (see below) the natural deposits had been scorched.

4.2 **Phase 2 Prehistoric**

No deposits of prehistoric date were identified however flint was recovered from a number of Phase 3 and 4 deposits.

4.3 **Phase 3 Roman (3rd to 4th century)**

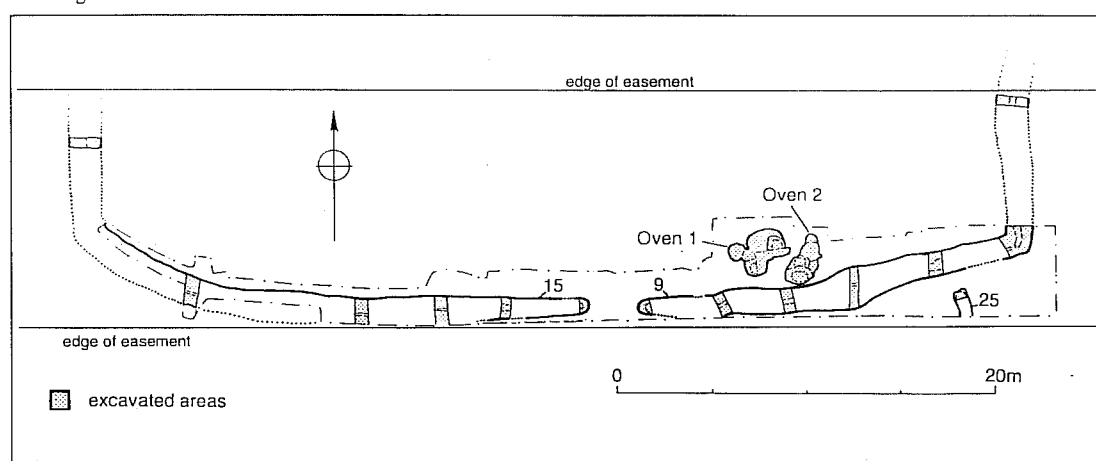
Part of an enclosure ditch, two ovens and part of a cut feature of indeterminate nature were identified and are dated to this phase.

The enclosure ditch (contexts 7, 8, 9, 14 and 15)

The south side and parts of the east and west sides of a probably rectilinear ditched enclosure were recorded (Fig 4). To the west (9) this curved through 90 degrees, the west side extending as far as the north limit of the excavation. To the east (15) the corner angle was sharper, being almost a right angle. The east side ditch was also limited to the north by the extents of the excavation. The south side measured 51m in total and was interrupted, slightly to the east of centre, by an entrance, 2.50m wide. Thirteen sections were excavated across the ditch revealing an irregular profile, V-shaped in places with evidence of a cleaning slot in the base, but elsewhere having a shallow U-shaped profile. The ditch varied in width from 0.80-2.30m, with the greatest variation to the east of the entrance. Depth ranged from 0.35-0.70m. There was no evidence of a bank derived from the upcast of the ditch, however the proximity of internal features to the ditch suggests that if a bank, or any further enclosure element such as a hedge, was present they must have been external.

The fill of the ditch was generally similar throughout, being a brown fine sandy loam, flecked with charcoal and burnt clay (7 and 14). Within this there were bands of pebbles and sandier material, especially to the sides and base of the ditch. Some moderately sized fragments of sandstone were also present. This, along with the banded nature of the fill suggested that the ditch was allowed to silt up probably as a result of weathering of the sides. In the area to the east of the entrance, in the vicinity of the two ovens (Fig 4), there was an upper dark grey brown fill (8), heavily flecked with charcoal and fragments of fired clay. This generally only filled the upper 0.10-0.20m of the ditch, but in the section closest to the ovens this was 0.40m deep. This deposit probably partly represents dumped debris from the cleaning out of the ovens during use, but, since it also included fragments of fired clay, probably also represents dumped debris resulting from the demolition or collapse of the ovens. As this formed an upper element to the fill of the ditch it indicates that the ditch had already partly silted up by the time the oven waste was being deposited into the ditch.

Figure 4



Roman features

Oven 1 (contexts 10, 11, 16, 17, 18, 26, 27, 28, 29, 30, 33, 34 and 36)

To the east of the entrance and within the enclosure was one of two ovens identified on the site. This was a fairly complex structure with a number of identifiable components (Figs 4 and 5). To the west side of the structure was a sub-circular vertical sided depression (30), its base lined with flat sandstone slabs set within clay (29) and bedded onto a deposit of pale brown loamy sand. This clearly represents the oven chamber. The fired clay formed a slightly raised ridge around the edges of the depression and this ridge probably represents part of the fired clay domed superstructure of the oven within which the stone slabs functioned as heat retainers. East of this oven chamber was an irregular shaped depression (11) with two pits (17 and 34) and a probable posthole (27) in its base. The depression probably represents an area used for the raking out of spent fuel (ash and charcoal) from the oven chamber with the pits functioning as waste pits for the raked out material. The posthole probably represents an associated structural element of indeterminate purpose.

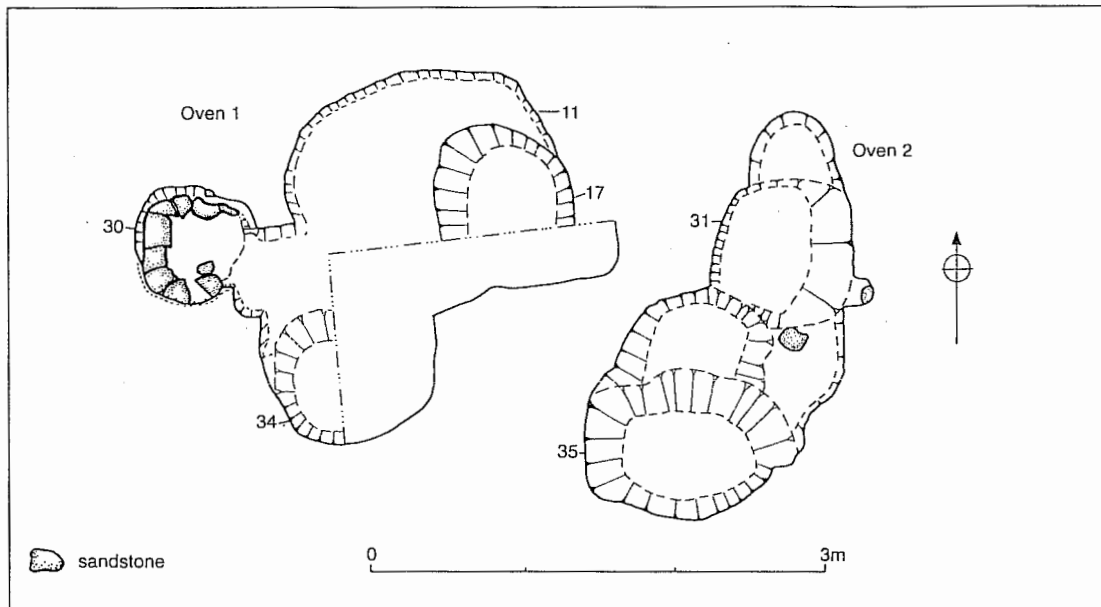
The oven area was filled with a series of deposits which were generally similar and characterised by charcoal flecking and fragments of fired clay which were particularly concentrated in the fill (16) one of the pits (17), but were not so common in the fill (33) of the pit (34), the fill (28) overlying the sandstone slab floor of the west area or in the more generalised fills (10 and 18)

occupying the whole of the upper area of the structure. The presence of the charcoal and other charred material suggests that the oven was not cleaned out following its final use. The fired clay fragments within the fills probably result from the collapse or deliberated demolition of the domed superstructure. The fill (26) of the posthole (27), although lightly charcoal flecked, was noticeably paler and more sterile.

Oven 2 (contexts 12, 13, 31, 32 and 35)

The second oven (13) lay to the east of the other oven and was also within the enclosure. This was a simpler structure, with only two defined areas within an irregular depression (Figs 4 and 5). To the north side was a shallow (0.10m) depression lined at the base with heavily fired clay (31) which also in places formed a lip around the sides of the depression. This lip was most pronounced in the narrow central area of the structure between this depression and a deeper pit element to the south (35). Here a block of sandstone was set within the clay to the east side of the ridge. A second similar stone was observed to the west of this area in a modern ploughfurrow and had probably been disturbed from the oven. The pit to the south was sub-circular with an irregular base, stepping down to the south to a maximum depth of 0.40m. Here the fired clay area represents the oven chamber, which again probably had a domed superstructure, while the pit to its south probably represents a raking out area. The lip of clay and associated sandstone block between the pit and the oven chamber probably represent the remains of a fairly well constructed flue or stokehole.

Figure 5



The ovens

Both parts of this oven were filled with a heavily charcoal flecked sandy loam (12 and 32), which, in the area above the fired clay lining (31), also included many fragments of fired clay. Again these suggest that the oven was not cleaned out after its final use and that demolition or collapse of the domed superstructure occurred following disuse.

Cut feature (contexts 24 and 25)

One feature was identified outside the enclosure ditch, lying immediately to

the south of it (Fig 4). This extended beyond the limits of excavation and consequently only the northern part of the feature could be investigated. The observed element had a square butt-end, a flat base, near vertical sides and straight parallel edges. It is not clear from this part how much of the feature was represented. The parallel edges and square butt-end suggested that the feature may have been linear but the vertical sides were more consistent with those of pit. Consequently the nature and function of this feature remain uncertain.

4.4 **Phase 4 Post-Roman**

This phase was represented by a ploughsoil, a number of shallow parallel linear cuts, clearly representing ploughfurrows and an irregular clay filled hollow.

Clay filled hollow (contexts 22 and 23)

An irregular hollow filled with clay truncated the Roman feature (25) lying outside the enclosure. The fill of this was pinkish red brown fine clay and had no inclusions of any kind.

Ploughsoil and ploughfurrows (contexts 20, 21 and 37)

Overlying the whole site was a homogeneous, dark reddish brown sandy loam ploughsoil which varied in thickness from 0.15-0.25m. This also occupied numerous, shallow furrows which were largely south-west to north-east aligned. One of these was recorded in detail (20 and 21). Where these furrows crossed earlier features some disturbance of the upper parts of their fills was observed.

5 **Artefactual evidence**

5.1 **Introduction**

Hoarstone Farm (HWCM 15300) was one of two sites along the Trimpley to Blackstone Aqueduct that produced stratified finds. The finds were mainly of Roman date, and were mainly associated with the two ovens and the enclosure ditch. Few other finds of Roman date occurred along the rest of the pipeline.

5.2 **Aims**

The main aims of the identification and analysis of artefactual material were to:

- provide dating for site phases;
- characterise site activity;
- identify socio-economic trends and trade contacts;
- assess the significance of the finds.

5.3 **Method**

Pottery

Pottery fabrics were identified macroscopically, and with occasional use of a low powered microscope. Fabrics are referred to by common names, and

referenced to a published fabric series with detailed descriptions (Hurst and Rees 1992). Quantification of the pottery is by sherd number, unless otherwise stated.

Flint

The methodology employed was exactly the same as that used for the remainder of the pipeline, including the site at Lightmarsh Farm, involving the use of a hand lens with X10 magnification (Jackson *et al* 1994a and b).

5.4 **Results and analysis** (for quantification of principal fabric types see Table 1)

There was a range of finds represented on the site, and pottery was the most common finds type. The pottery assemblage contained a total of 344 sherds weighing 6.59kg, 343 sherds being of Roman date.

Phase 2: Prehistoric

This phase was represented only by residual flints. The small assemblage, comprising fourteen items in total, consists of a backed blade (34 x 7 x 4mm), several flakes of derived pebble flint including a primary flake (with cortical survival) and two burnt flakes. The flint used, which ranges from light to medium grey, cream, yellow and beige, is similar to the flint used to produce the large assemblage at Lightmarsh Farm ((Jackson *et al* 1994b). The Lightmarsh Farm flint assemblage was the largest from any of the Trimpeley to Blackstone Aqueduct sites and the site has been interpreted as a Mesolithic hunting camp.

Phase 3: Roman (3rd to 4th century)

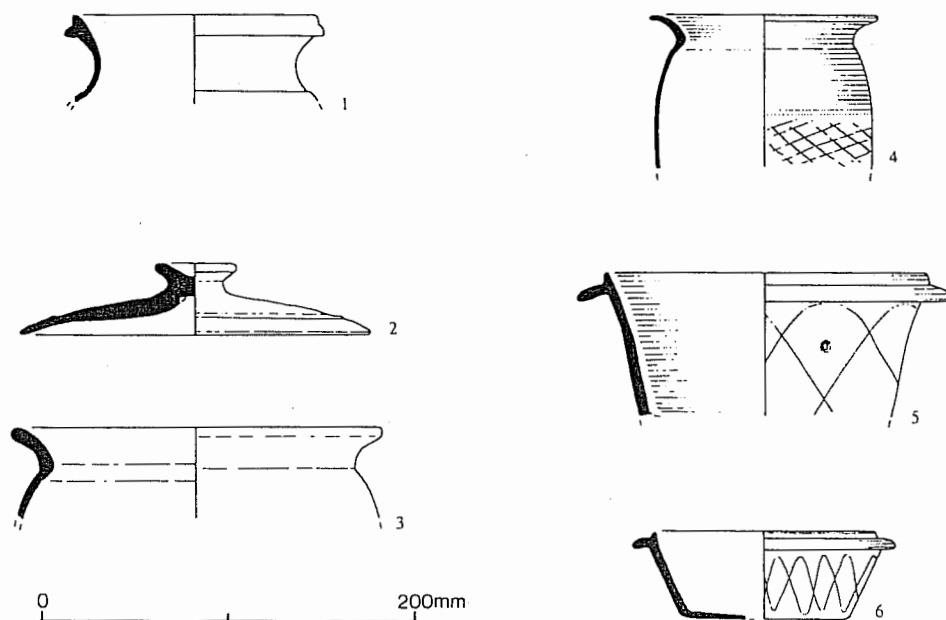
Pottery

The pottery assemblage from this phase was largely (75%) composed of Severn Valley ware (fabric 12) in a range of forms: wide-mouthed jars (Webster 1976, 25-8), storage jars (Webster 1976, 23-5), and tankards (Webster 1976, 30-1). Other fabrics were Black Burnished ware (BB1; fabric 22), Malvernian (fabrics 3 and 19), and grey wares (fabric 14), together with a small amount of Oxfordshire ware. Kitchen wares (ie for cooking and food preparation) accounted for 23% of the assemblage, including BB1 jars, dishes, and bowls; Malvernian jars; and Mancetter/Hartshill *mortaria* (fabric 32). Fine tableware from Oxfordshire comprised 2.6% of the phase assemblage. The assemblage was, therefore, domestic in character.

Dating

This phase was broadly datable to the 3rd to 4th century and both the ditch and the ovens contained pottery of this date. Though in the case of both the enclosure ditch and one of the ovens (oven 1), this date related to their disuse. However, there were few possible indications of earlier Roman pottery on the site, and the absence of Samian ware, in particular, confirmed that the Roman activity probably commenced after the mid 3rd century. Some of the BB1 forms were indicative of a late 3rd to early 4th century date. Unfortunately the Oxfordshire wares were too fragmentary to provide any further refining of the Roman date range. The available evidence, together with the absence of any pottery datable to the second half of the 4th century, suggested that some activity in this phase dated to the later 3rd to early 4th century.

Figure 6



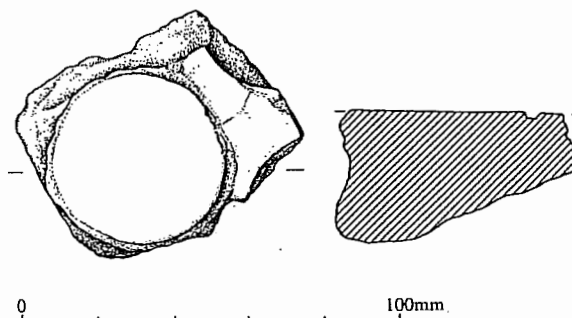
Roman pottery (from Phase 3 enclosure ditch). Scale 1:4

1 Severn Valley ware (fabric 12) jar; context 7/8: 2 Malvernian ware (fabric 3) handmade lid; context 14: 3 Malvernian ware (fabric 19) jar; context 14: 4 BBI (fabric 22) cooking pot (cf Gillam 1976, 65, no 10); context 14: 5 BBI (fabric 22) bowl with rivet hole (cf Gillam 1976, 71, no 46); context 7: 6 BBI (fabric 22) bowl; context 7

Other finds

Other finds included a small amount of ceramic roof tile (*tegula*). The quantity was too small to be highly significant, but it did suggest evidence for a substantial Roman building in the vicinity. There were also finds of hobnails, iron slag, fired clay (Fig 7), charcoal (oak, Clare de Rouffignac pers comm), and flaggy sandstone. The fired clay was unusual as it was decorated with impressed circles.

Figure 7



Fired clay with impressed pattern (from context 8). Scale 1:2

Phase 4: Post-Roman

There was a small amount of post-medieval pottery, and clay pipe.

6 Environmental evidence

6.1 Introduction

All environmental samples taken were dated to the Phase 3 Romano-British farmstead. There are only a few rural Roman settlement sites in the county which have produced charred plant remains. In the south of the county, both *Triticum dicoccum* (emmer) and *Triticum spelta* (spelt) have been recovered from residual fills of Romano-British ditches at Beckford (HWCM 359; Colledge undated). Near to Beckford a site at Ashton-under-Hill (HWCM 5503) produced evidence of cereal processing during the Romano-British occupation of the area (de Rouffignac 1991a).

In the north of the county, samples from prehistoric and Roman deposits excavated at Church farm Quarry, Holt (HWCM 4511) were found to contain charred botanical remains (de Rouffignac 1991b). These included considerable quantities of *T spelta* seeds and chaff. A Roman farmstead site at Areley Kings (HWCM 1136; Dinn and Hemingway 1992, 45) produced a small number of charred plant remains, including *T spelta*, *T turgidum* (turgid wheat), *Hordeum vulgare* (barley) and *Avena* sp (oats).

At Hoarstone Farm, environmental samples were collected from the remains of two ovens (ovens 1 and 2), from the oven chambers and associated ash pits or rakeholes. There are many Roman sites in Britain with structural remains of bread ovens or corn driers for parching cereal crops. However, the evidence from charred plant remains recovered from such structures from the immediate post-Roman period suggests that there may have been multiple use for drying, parching and cooking; it is likely that Roman corndriers and ovens were similarly used (Monk 1981).

6.2 Aims

It was anticipated that examination of soil samples from the ovens would produce environmental remains in sufficient quantities to:

- determine the use of the ovens for either parching of crops, drying processed grain or baking bread;

- examine the possible use of cereal remains for fuel;

- examine the economic importance of the cereal crops from the ovens.

6.3 Method

The samples were all approximately 5 litres in volume. The mesh sizes used for sieving of the samples were 1mm for the residues and 500 μ m for the flots. The flots from all the samples were examined using an EMT-1 low power microscope to enable recovery of all charred and uncharred plant remains.

The seeds were identified as far as possible using the County Archaeological Service comparative collection, a seed identification manual (Berggren 1981) and an illustrated site report (Griffin 1988). Comparative descriptions of charred cereal seeds and chaff were obtained from Jacomet (1987). Habitat descriptions and common names of plants were obtained from Blamey *et al*

(1987) and Clapham *et al* (1989). The authorities for the species names are given in the table, but are not repeated in the text for reasons of brevity.

6.4 Results and analysis

Table 2 lists the plant remains recovered from the samples; these include both the charred and uncharred seeds. The uncharred seeds are species which still commonly grow around the site today, including *Stellaria media* (chickweed), *Chenopodium album* (fat hen) and two species of *Rumex* sp (docks). The habitats of the species recovered are noted in Table 3.

The quantity of charred seeds recovered was not large. Preservation was variable but some charred seeds were well preserved.

Oven 1

Samples were taken from the fills (16 and 33) of both of the ash and waste pits in this structure, and from the deposit (28) above the oven chamber floor. The charred plant remains from the fill of the pit lying to the east of the oven chamber (fill 16, pit 17) consisted of both cereal and weed seeds, including *H vulgare* (barley) and indeterminate cereal grains, and *S media*, *Galium aparine* (common cleavers), and *Vicia/Lathyrus* sp (vetch/bean). Charred remains from the fill of the other pit (fill 33, pit 34) included two awn fragments of *Triticum* sp (wheat) and *Avena* sp (oats), but few other charred remains were noted.

Few charred seeds were recovered from the deposit (28) overlying the floor of the oven chamber, apart from indeterminate cereal seeds and several weed seeds.

Oven 2

Samples were taken from the fills of both the main oven chamber (fill 12) and from the associated firing and raking out pit (fill 32, pit 35). The fill overlying the oven chamber produced the smallest flot, but contained 60 indeterminate charred cereal seeds, together with a *T spelta* glume base, a *Triticum* sp rachis, and two indeterminate weed seeds. The flot from the fill of the associated pit was the largest of those examined, but only a few charred indeterminate cereal seeds, a possible *Hordeum* sp grain and culm fragments were of interest from the sample.

7 Discussion

7.1 Phase 1 Natural deposits

Natural deposits were broadly consistent with those recorded (Ragg *et al* 1984), although a clayey quality was noted. This may result from the weathering and decay of the upper parts of the deposits which are noted as soft and consequently would be subject to leaching and root action. Bands of siltstone were recorded and to the base of features and within the pipetrench sandstone was observed, representing Bunter mottled lower sandstone.

7.2 Phase 2 Prehistoric

Prehistoric activity on the site was restricted to a small number of flints occurring as residual material in later deposits. The residuality of the small

group precludes the identification of a definite "site" but the presence of a backed blade, and the nature of the flint utilised suggests some form of Mesolithic activity in the area, perhaps connected with Lightmarsh Farm (Fig 2, HWCM 15301; Jackson *et al* 1994b). This is supported by the presence of a retouched piece, possibly a scraper fragment, made of cream-coloured flint, from the same field as the enclosure but away from the excavated area (HWCM 15308, Jackson *et al* 1994a). This was steeply worked along one edge in exactly the same way as the microliths from Lightmarsh Farm. Past finds in the area include a core, a microlith and a microburin from Hoarstone Farm (SO 790 760; Wymer 1977, 347).

The Lightmarsh Farm flint assemblage has been related to the later Mesolithic period both on a regional and local level although a date associated with the assemblage is very early for such an assemblage (OxA-4327 = 8800±80 BP; Bevan 1993 and Jackson *et al* 1994b). Flint finds from other pipeline sites, including Hoarstone Farm, are generally regarded as contemporary and may relate to satellite activities connected with the camp in the form of off-site knapping episodes or to the existence of other areas of activity in a settlement system covering a wider area.

7.3 Phase 3 Roman (3rd to 4th century)

Structural evidence

The enclosure ditch and the two ovens may all be considered to be broadly contemporary. Although the ditch had clearly partly silted up by the time oven debris was dumped into it, it would have been a clearly visible boundary, up to 0.40m of oven debris having accumulated in it close to the ovens. In the rather sandy soils of the area silting of a ditch would be rapid and no great time needs to have elapsed between the construction of the ditch and the dumping of oven debris into it. The other feature (24/25), although not as closely datable ceramically as the ditch and ovens, was almost certainly contemporary, although this cannot be proven from the excavated evidence.

Although no domestic structures or buildings of any type were identified the site can be interpreted due to the form of the enclosure and the nature of the pottery assemblage as a Romano-British farmstead. The ditches observed at Lightmarsh Farm, immediately to the north, probably represent part of the field system surrounding this farm.

The enclosure ditch is unlikely to have been constructed as a defensive feature since it is not of sufficient width. It probably was to facilitate stock control, ensuring that cattle and sheep, or wild animals, did not get into the enclosure. Although no bank was identified, the location of one of the ovens close to the internal side of the ditch indicates that any bank resulting from ditch upcast was probably external. Such a feature externally located would be consistent with stock control measures aimed at excluding animals from an area.

Both ovens at Hoarstone had been demolished or collapsed following their final use. Neither appears to have been cleaned out between final use and collapse or demolition which suggest that both ovens were deliberately abandoned. Elements of the fired clay superstructure of one or both of the ovens were dumped into the nearby enclosure ditch which also must have fallen into disuse by this time since no attempt to maintain it appears to have been made. The disuse of the ovens and the ditch, together with dating

evidence, suggest that desertion of the site was deliberate and occurred in the late 3rd or 4th century. The causes for the desertion in common with most sites cannot be established. Since deposits were not complex, with no evidence of recuts of the ditch or rebuilds of either of the ovens, it seems probably that occupation of the site was not of any great duration. Ceramic evidence supported this (see below).

Locally the site is probably most comparable in structure with that at Larford (Walker 1958 and 1959). The variable widths of the enclosure ditches and the size of the entranceway compare with the enclosures at that site, while the construction of one of the ovens (oven 1) was comparable to an oven at Larford (Walker 1958). At Larford two circular huts were identified and it is probable that similar structures, either of turf wall or timber construction, would have been present within the enclosure at Hoarstone. Since ovens were usually located at the edge of a site and away from buildings, due to the associated fire hazard, it is likely that at Hoarstone Farm any domestic and agricultural buildings would be located on the north side of the enclosure beyond the excavated area.

Artefactual evidence

The Hoarstone Farm group of Roman pottery was of significance, as it was associated with a potentially short-lived period of site occupation, and so problems with residuality were minimised. Though the group was not large it exhibited a good range of vessel forms and fabric types. It is possible that this group, therefore, provides a representative collection of pottery in use in the middle Severn Valley in the middle to later Roman period.

Typically the main type of Roman pottery was Severn Valley ware, which as usual accounted for the bulk of the general tableware. Kitchen wares present a greater range of variability in the region, as the local source was a smaller scale producer, and was in competition with a major national industry (BB1). At Hoarstone Farm BB1 was nearly four times more common than Malvernian products. This contrasted with a site at Norton near Worcester, dating to the 2nd-4th century, where Malvernian products occurred in greater quantity than BB1. It could be suggested from this evidence that BB1 increased its market share in the 3rd to 4th century.

The overall distribution of Roman pottery along the Trimpley to Blackstone Aqueduct was variable. There was a very thin scatter to the east of Hoarstone Farm (HWCM 15302 and 15305-6; Fig 3), and, other than HWCM 15301 (Fig 3), none to the north. The latter was associated with low level occupation while a single sherd from the other (HWCM 15302) is considered residual in a later feature and probably derived from the soil into which that feature had been excavated (Jackson *et al* 1994a and b). The remaining finds of Roman pottery were from topsoil, as might typically result from the practice of manuring with domestic debris. There was, therefore a tentative suggestion that an area of Roman arable cultivation may have stretched to the east of the Hoarstone Farm enclosure rather than to the north.

Other finds were too few to draw general conclusions, though the range of material was compatible with that to be expected from a middle to late Roman settlement site in this area. Apart from the few flint artefacts there were no signs of pre-Roman occupation.

Comparison with finds from other local Roman sites

Few Roman sites in the region have been located, and even fewer have been investigated in detail. In the vicinity of Hoarstone Farm other Roman sites have been identified from chance finds eg HWCM 5446 (coins), and HWCM 5545 (*fibula*). At the excavated site at Blackstone 4km south of Hoarstone Farm, a small Roman ceramic assemblage was deposited during a period of cultivation (HWCM 236; Fig 3; Elaine Morris pers comm). The site further to the south, on the opposite bank of the River Severn at Areley Kings (Hemingway and Buteux 1992, Dinn and Hemingway 1992) produced a ceramic assemblage, which was similar, both in date and range of types, to that at Hoarstone Farm.

In contrast, a site further down river at Larford (Walker 1958) showed signs of continuous occupation from the Iron Age into the late Roman period, with a sequence of several enclosures being identified. Here the pottery assemblage contained sherds that represented the whole of the Roman period (Walker 1958, 41-57). It included material that covered the same chronological, functional and fabric range as was evidenced in the Hoarstone Farm assemblage, and so it likely that this site was in contemporary use. Further detailed comparison was hindered by the lack of quantification of the pottery at Larford.

Environmental evidence

Charring of plant remains comes about as a result of exposure to fire. This may happen accidentally when a crop is being dried or parched during processing, or deliberately to dispose of domestic refuse and crop processing waste (Green 1982, 40 and 43). The preservation of charred remains is biased to species of plants whose seeds are likely to be exposed to fire during processing, such as cereals and related weed seeds. The seeds of soft fruits and vegetables are not usually found unless disposed of using fire.

Function of the ovens

Charcoal was the most common element of the samples examined. The charcoal probably represents the remains of wood used for fuel, or possibly wood used as part of the superstructure of the ovens. There was no evidence of chaff being used as fuel for the ovens. This suggests that the features were used as ovens rather than corndriers, as the fully processed crop would not have any chaff remaining with it.

The possibility of the features being used as corndriers cannot be ruled out due to the sparseness of the charred remains. Corndriers were used for parching non-free-threshing wheats such as spelt to free the grains from the husks before threshing. "T-shaped" corndriers built of stone were commonly used for parching cereal crops during the Roman period (Hillman 1982). It is likely that if the ovens at Hoarstone Farm had been regularly used as corndriers, there would have been considerable quantities of chaff and grains still in the husks in both the main oven chambers and rakeholes. However if the ovens had been cleaned there would be few charred plant remains left behind.

As Monk (1981, 219) points out for post-Roman corndriers,

if kiln cleaning was regularly practised, one might expect to find accumulations of mixed deposits in areas well away from the kiln itself, although perhaps in the general vicinity.

Excavation of the area around the ovens did not produce any deposits because of truncation of the stratigraphy. There was some demolition debris from the ovens in the enclosure ditch, but this did not appear to contain any substantial quantities of charred plant remains.

The low quantities of charred cereal remains from the ovens was somewhat unexpected. Roman ovens and corndriers excavated at sites including Catsgore (Hillman 1982) and Tiddington (Moffett 1986), produced large quantities of charred cereal remains. Moffett (1986, 13) suggested that one of the corndriers examined at Tiddington had been raked out after use, with a smaller accumulation of charred remains present than if the material had been left to collect after use. However, at Bromfield, Shropshire, the ovens excavated at the Roman marching camp produced little charred chaff or grain; bread fragments were recovered, suggesting a primary function for the ovens of bread baking rather than drying or parching (de Rouffignac 1993). This could be the reason for the lack of charred remains from the ovens at Hoarstone Farm.

No bread fragments were recovered from either of the ovens at Hoarstone Farm, but this does not preclude their use for baking bread. The size of the ovens suggests that any cereal processing or bread baking would have been on a small scale rather than on the large scale often encountered on military sites such as South Shields Roman fort (van der Veen 1992, 47).

The number of charred cereal seeds from the deposit (12) overlying the clay base in one of the ovens (oven 2) suggests that as well as probably being used for baking bread, a further likely use for the ovens was for drying small amounts of grain prior to milling for flour. Damp cereal grains do not mill well, and drying would enable far more efficient flour production.

The layer of cereal grains may alternatively represent the remains of an attempt to prevent the dough sticking to the base of the oven. Experiments with the reconstruction of a Saxon oven from Stafford suggest that a single layer of uncharred cereal grains spread over the clay base acts as a "non-stick" surface (Lisa Moffett pers comm).

A further explanation for the relatively small volume of charred material could be that the ovens were well built and extremely efficient in their operation, and there were no accidents where the contents of the ovens were burnt! Little is known about the practices employed for the use of ovens and corn-driers, as experimentation has often proved inconclusive (Reynolds 1979).

Crop regimes

The lack of charred plant remains from the ovens meant that little information could be gained on the economic importance of the crops used at the site. The presence of single chaff fragments of *T spelta*, *Hordeum vulgare* and *Avena sp* suggest the presence of spelt, barley and oats, but the economic importance of these crops cannot be determined. It is also possible that the awn of *Avena sp* actually represents the remains of wild oats which was merely incorporated into the main crop rather than being deliberately cultivated. The same cereals, together with *T turgidum*, were identified from the Roman farmstead site at Areley Kings, where crop processing appeared to be taking place in the vicinity of an aisled building (Dinn and Hemingway 1992, 109).

The charred weed seeds from Hoarstone Farm were of no help in determining the type of soils in which the cereals were grown. Many new weeds were introduced to Britain during the Roman period. This was as a result of an improved transport system, increased movement of provisions, and more highly developed agricultural systems (Willcox 1977, 280). No exotic species were noted from the oven assemblages; the weed seeds which were recovered were all from plants which could have been growing locally. Apart from *Galium aparine* (common cleavers), the weed seeds were all very small, suggesting that they were just left in with the processed cereal grains rather than being painstakingly extracted.

The presence of a seed of *G aparine* in the fill of the ash pit of one of the ovens (oven 1; context 16) is interesting as it is a widespread weed of autumn sown crops (James Greig pers comm). *Triticum spelta* was commonly an autumn sown crop and can tolerate a wide range of soil conditions and pests (van der Veen 1992, 146). It is possible that there was an autumn sowing of *T spelta* and a spring sowing of the less hardy *H vulgare* to allow an early and a late harvest.

The seeds of *Vicia/Lathyrus* spp from the ovens were not identifiable to species. This is because of the lack of distinguishing features due to swelling of the seeds during charring. The characteristic features include the presence of the hilum and seed coat (Williams 1979, 90). However these characteristics could not be found on any specimens. Small seeds of leguminous plants are often found as weeds of crops, and would have been charred as a result of being incorporated into the processed crop (Dennell 1972, 151).

Overview

The Hoarstone Farm enclosure appears to be consistent with Richard Hingley's recent national synthetic study of Romano-British rural settlement which observes that the majority of rural settlements in the north and west of Britain appear to consist of only a single ditched or walled enclosure surrounding one or more circular buildings, presumably the homes of single families (Hingley 1989, 23-4 and figs 26, 27 and 28). At such sites both domestic and agricultural buildings and structures have been observed, and local items can be observed to dominate and non-local items are typically scarce (Hingley 1989, 24). Although no buildings were identified at Hoarstone, the two ovens, enclosure ditch and the associated ecofactual and artefactual evidence demonstrate both domestic occupation and agricultural activity while locally produced wares dominated the ceramic assemblage.

These farmsteads derive from the typical Iron Age ditched farm enclosures (Cunliffe 1978, 161-3) and their abundance can be seen as the result of the more intensive exploitation of the countryside necessitated by the conditions prevalent in Roman Britain. During this time the population rose to an estimated 4-6 million, a level not achieved again until the 14th century (Hingley 1989, 4). Apart from the obvious increase necessary to feed this population, agricultural output needed to rise to satisfy the demands and opportunities of the Roman economy which was considerably more complex than the Iron Age economy (Hingley 1989, 10-11). In addition surplus had to be produced to be sold in order that land taxes and other impositions could be met (Esmonde Cleary 1989, 115). The occurrence of both local and regional pottery from further afield, on the site, demonstrates that this settlement was affected by the Roman economic system, albeit at a relatively low level.

The predominantly 3rd to 4th century date of the settlement also reflects patterns of settlement observed elsewhere in England. The later Roman period is characterised by an apparent peak of population indicated by a proliferation of rural settlement sites of that date (Esmonde Cleary 1989, 105). The increasing demands upon the land meant that marginal lands were exploited at this time as well as the more fertile areas traditionally occupied. In agricultural terms the Hoarstone Farm site occupies farmland which is not suited to large-scale crop production, but which can readily be used for mixed farming with soils suited to both pasture and cereal cropping in the area. The presence of Iron Age activity at Blackstone (HWCM 7260) and in Wassell Wood (HWCM 3884) indicate that the area had a recent history of settlement, prior to the Roman invasion, thus suggesting that this farmstead probably arose not as a result of expansion into marginal lands but intensification of use and settlement of existing farmland.

The patterns of Roman landscape and settlement observed in regions where extensive surveys have been undertaken are complex (Miles 1989) and only further research is likely to enable an understanding of regional and local settlement patterns to be developed. It is however possible to draw some general conclusions. Single ditched enclosures occur both in isolation and in clusters where some of them may simply represent stock enclosures. Additionally smaller enclosures or compounds occur together, forming villages (Hingley 1989, 23). Such settlements are often spread out along a holloway. In the south and east these farmstead sites are common but are usually clustered around villa sites. In areas away from those where villas are common broad landscapes are defined by the occurrence of a wide and varied range of non-villa settlements. No villas are known in the area around Hoarstone Farm, the known sites all apparently being single farmsteads or loosely associated enclosures. The Hoarstone Farm site probably represents a single farmstead rather than forming part of a more complex settlement, although since only part of the enclosure was observed within the fairly narrow confines of a pipeline easement, further associated enclosures should not be ruled out.

The intensification of settlement in the later part of the Roman period is reflected by Hoarstone Farm and the sites discussed in the introduction to this report. At Blackstone, although the settlement was not located, pottery indicated occupation in the immediate vicinity with a probable 4th century phase of reoccupation following earlier Iron Age and 2nd century Roman periods of occupation. At Areley Kings the main phase of domestic activity was dated to the 3rd and 4th centuries as was the most intensive occupation at Larford (HWCM 807-1). Although one of the sites at Larford and the site at Blackstone had Iron Age activity, only later Roman occupation was present at all four sites noted. This indicates that the pattern of scattered farmsteads suggested to the south and west of Stourport (Dinn and Hemingway 1992) probably continues northwards along the valley of the River Severn, with the most intense occupation during the 3rd and 4th centuries, but with a generally complex range of patterns of landuse and settlement type, featuring occupation, desertion and possibly in some cases re-occupation of sites.

These sites also raise some interesting questions regarding agricultural practices in the area in the Roman period. To the south around the site at Areley Kings the relative paucity of Roman artefacts in the fields around the settlement suggested that manuring with domestic refuse was not regularly practised. This indicates that, despite evidence for processing of cereals, agricultural practice may have been largely pastoral (Dinn and Hemingway

1992). At Larford the presence of an oven, of apparently very similar form to one of the ovens at Hoarstone Farm (Oven structure 1), suggests that cereals were being grown, although it may simply have been a bread oven. The soils in this area are not particularly suited to arable farming and generally the balance of agricultural activity was probably in favour of pastoralism. To the north around Hoarstone Farm the soils are more mixed with fertile soils suitable to a wide variety of crops as well as some which are unfavourable for cereals being better suited to pasture. The distribution of Roman pottery, possibly resulting from manuring, supports this idea since although only limited quantities were recovered they appear to lie to the east of the site where the more fertile soils occur. The ovens and associated environmental remains indicate that cereals were grown with perhaps two seasons of sowing and consequently of cropping. Thus here it seems that the agricultural regime is likely to have been mixed, with perhaps a bias in favour of arable farming.

Unfortunately soil conditions in the area are not favourable for the preservation of animal bones and so evidence for animal husbandry is likely to remain limited and largely circumstantial. Only at Larford within a 4th century well have animal bones been recovered in any significant quantity (Westley 1959). Here the assemblage was distinctly domestic with ox, sheep, horse and pig recovered and there was evidence for killing of most animals at a young age leading to a tentative suggestion that annual slaughtering occurred due to an inability to feed many animals through the winter. Deer bones along with evidence for several species of dog suggest that hunting was used to supplement the diet, however not to any great extent since the wild animal bones were proportionally small in number.

7.4

Phase 4: Post-Roman

Only an irregular hollow and a ploughsoil with associated plough furrows were identified in this phase. The hollow probably results from the uprooting of a tree. The ploughsoil and furrows were clearly modern in origin.

The scoring of the archaeological deposits with ploughsoil filled furrows indicated that gradual erosion of the site through ploughing has been occurring. However, this damage may be only a recent occurrence since elements of oven structures, which are generally shallow features, survived. Additionally the absence of medieval pottery from the site and its relative paucity along the whole of the pipeline (Jackson *et al* 1994a) suggest that the land was not in arable use during the medieval period, since arable fields were regularly manured at that time with domestic refuse including pottery.

It was notable that prehistoric and Roman finds were better represented along the pipeline than medieval finds. This could be explained in various ways, but it could suggest more extensive arable, or wider occupation of the area in earlier periods than medieval times (Jackson *et al* 1994a).

8

Conclusions

The work at Hoarstone Farm produced evidence of prehistoric, later Roman and post-Roman activity. With the exception of later Roman settlement this activity was generally at a low level indicating little more than occupation in the area. The main interest in the site lay in the later Roman period.

The site clearly represents a Romano-British farmstead enclosure which dates to the later part of the Roman period. Occupation seems to have been fairly short-lived. In form it appears to be a typical farmstead of the period, and although domestic and agricultural buildings were not represented within the excavated area it can be fairly safely assumed that such buildings would have been present in the north part of the enclosure. Agricultural and domestic activities were represented by two ovens, probably fulfilling a dual function for baking and drying. A range of artefactual and ecofactual remains were recovered, which together with the structural remains, provide important information regarding Romano-British rural settlement and economy in this part of the Severn Valley.

The artefactual assemblage included a significant group of Roman pottery which potentially had a narrow date range of later 3rd to early 4th century. The pottery indicated that the occupation of this site was probably short-lived, and so this site was a rare opportunity to identify the range of wares and other artefacts from a Roman site in use for a limited period of time without the usual problems of residuality, and disturbance by later activity. This site, therefore, demonstrates the high potential of rural sites for the accumulation of high quality artefactual data of this type.

Despite the small size of the assemblage of charred plant remains, there were at least two types of cereal present, namely spelt and barley. The economic importance of the cereals could not be determined, but the weed assemblage suggests a local source for the cereal crops. There is the possibility of a spring and autumn sowing regime being employed for the barley and spelt respectively.

The ovens appear to have been fuelled mainly by charcoal, but as the charred remains are fairly scarce it is difficult to determine whether or not chaff was also used for fuelling the ovens. There was no direct evidence of bread baking from the ovens, but the size of the structures and the charred remains which were recovered indicate that they were probably used on a small scale for bread baking and grain drying.

Together with information from previous work in the area, and along the remainder of this pipeline, the results of the salvage recording at Hoarstone Farm have contributed significantly to the development of an understanding of rural settlement and economy in a poorly understood area of the county in the Roman period.

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The report was produced by Robin Jackson in conjunction with Derek Hurst (finds), Lynne Bevan (flint), and Clare de Rouffignac (environment). The report illustrations were produced by Laura Templeton and Carolyn Hunt PIFA MAIIS (Illustrators)

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Abbreviations

Numbers prefixed with "HWCM" are the primary reference numbers used by Hereford and Worcester County Sites and Monuments Record.

HWCC - Hereford and Worcester County Council

Table 1 **Quantification by sherd count of Roman pottery (principal fabrics only)**

| Ware type | Sherd Number | % of total Sherd Number | Sherd Weight (kg) | % of total weight |
|----------------------------------|-----------------|----------------------------|----------------------|----------------------|
| Severn Valley | 243 | (75%) | 5.204 | (80%) |
| BB1 | 66 | (17%) | 0.925 | (14%) |
| Oxfordshire | 10 | (3%) | 0.107 | (2%) |
| Malvernian (fabrics 3 and 19) | 15 | (4%) | 0.265 | (4%) |

Table 2 **Plant remains from samples**

| Context number | 12 | 16 | 28 | 32 | 33 |
|-------------------------------------|------|------|------|-----|------|
| Cereals | | | | | |
| <i>Triticum spelta</i> L glume base | 1 | - | - | - | - |
| <i>Triticum spelta</i> awn | - | - | - | - | 1 |
| <i>Triticum</i> sp rachis | 1 | - | - | - | - |
| <i>Triticum</i> sp glume fragment | - | 1 | - | - | - |
| <i>Hordeum vulgare</i> L | - | 3 | - | - | - |
| cf <i>Hordeum</i> sp | - | - | - | 1 | - |
| <i>Avena</i> sp awn | - | - | - | - | 1 |
| Cereal indet | 60 | 15 | 3 | 2 | 1 |
| Culm fragments | - | - | - | 2 | - |
| Caryophyllaceae | | | | | |
| <i>Stellaria media</i> L | (4) | 2 | (3) | (8) | (3) |
| Chenopodiaceae | | | | | |
| <i>Chenopodium album</i> L | (14) | (10) | (15) | (5) | (12) |
| Cruciferae | | | | | |
| <i>Brassica</i> sp | - | - | - | - | (1) |
| Fumariaceae | | | | | |
| <i>Fumaria</i> sp | (2) | - | (1) | - | - |
| Leguminosae | | | | | |
| <i>Vicia/Lathyrus</i> sp | - | 1 | - | 1 | - |
| <i>Trifolium/Medicago</i> sp | - | - | - | (6) | 1 |
| Leguminosae | - | - | 1 | - | - |
| Polygonaceae | | | | | |
| <i>Rumex acetosella</i> L | - | (2) | (3) | - | - |
| <i>Rumex</i> sp | (2) | - | 1 | (1) | - |
| Polygonaceae | - | - | 1 | - | - |
| Ranunculaceae | | | | | |
| <i>Ranunculus</i> sp | - | - | (2) | - | - |
| Rubiaceae | | | | | |
| <i>Galium aparine</i> L | - | 1 | - | - | - |
| Solanaceae | | | | | |
| <i>Solanum nigrum</i> L | (1) | (1) | - | - | - |
| Indet seeds | 2 | 4 | 1 | 3 | 10 |

Uncharred seeds are noted in brackets

Table 3 **Habitats of plants** (after Clapham *et al* 1989)**Cereals**

Triticum spelta - spelt wheat - important cultivated crop of the Romano-British period; grows well on heavy soils and can be autumn sown

Hordeum vulgare - barley - crop plant, cultivated widely

Avena sp - oats - plant specifically cultivated as a crop (cultivated oats), or a wild plant which occurs as a weed of other cereal crops (wild oats)

Caryophyllaceae

Stellaria media - chickweed - common native weed of cultivated ground and waste places

Chenopodiaceae

Chenopodium album - fat hen - nitrophilous weed of disturbed and cultivated ground and waste places

Cruciferae

Brassica sp - taxonomically difficult group, with many closely related species such as wild cabbage, wild turnip and black mustard

Fumariaceae

Fumaria sp - fumitory - endemic native plant found on cultivated and waste ground

Leguminosae

Vicia/Lathyrus sp - vetch/bean - nitrophilous plants commonly found as weeds of cereal crops

Trifolium/Medicago sp - clover/medick type - nitrophilous plants, commonly found as weeds of cereal crops

Polygonaceae

Rumex acetosella - sheep's sorrel - widespread common native, on heaths, grassland and cultivated soils

Rumex sp - dock/sorrel type - usually found on cultivated soils and grasslands; common

Ranunculaceae

Ranunculus sp - buttercup - native plants, commonly found on damp arable ground and in woodlands

Rubiaceae

Galium aparine - common cleavers - native plant of hedges and waste places, also arable fields

Solanaceae

Solanum nigrum - black - nightshade - native weed of waste places and a weed of cultivation

Appendix 1 **The archive**

The archive consists of:

Primary records

- 30 Context records AS1
- 6 Photographic records AS3
- 1 Drawing catalogue AS4
- 2 Context number catalogue sheets AS5
- 32 Context finds records AS8
- 23 Pottery records AS10
- 7 Finds catalogue
- 1 Harris matrix
- 9 Scale drawings
- 1 Box of finds
- 2 Colour slide films (71 shots)
- 3 Black and white print films (86 shots)

Post-excavation analysis records

- 1 Abbreviated context description
- 1 Annotated matrix

All primary records and finds are kept at:

County Archaeological Service
Hereford and Worcester County Council
Tetbury Drive
Warndon
Worcester WR4 9LS

Tel Worcester (0905) 58608

A security copy of the archive has been placed at;

Hereford and Worcester County Museum
Hartlebury Castle
Hartlebury
Near Kidderminster
Worcestershire DY11 7XZ

Tel Hartlebury (0299) 250416

Appendix 2 **Assessment of significance**

The significance of the deposits revealed through salvage recording at Hoarstone Farm can be assessed using the *Secretary of State's criteria for the scheduling of ancient monuments* (DoE 1990, Annex 4; Appendix 3). This information can be used to facilitate future management of the site beyond the area within the easement removed through pipe trenching and salvage excavation.

Period

The site represents a typical Romano-British farmstead. The absence of complex deposits and short duration of occupation mean that a clear understanding of the nature of this type of site at this date can potentially be developed, without the usual complications caused by residuality and disturbance. The pottery assemblage is probably representative of this area at this date.

Rarity

Nationally Romano-British farmstead enclosures are a relatively common site type and so nationally the site should not be regarded as having any great rarity value. However, in regional terms great variations have been observed where studies have been undertaken (Miles 1989). It represents one of only a few such sites positively identified to date in the north of the county and consequently is of significance to the development of an understanding of this type of settlement in the region. Of the estimated potential total of 400 Romano-British rural sites within the County, only 118 have been identified and of these only 10 have had even limited archaeological excavation on them (figures based upon recent Monument Protection Programme assessment for the County and associated documentation - English Heritage 1989). It is therefore the case that in the County it is not known at present what the common Romano-British rural site types are and consequently what the rarity value of this site is.

Sites with a single short period of occupation such as this are rare. The associated artefactual and ecofactual evidence enhance the rarity of the site which has great potential for contributing to the development of an understanding of settlement types at this period.

Documentation

The site is documented through this report. This site is one of only a few Romano-British rural settlements to have been investigated in this County in recent years and to have a full site archive and report, consequently documentation of the site is good.

Group value

The importance of the site is enhanced by its probable association with Roman dated field boundaries identified less than 0.5km to the north (HWCM 15301). Together these suggest that elements of the surrounding landscape and areas of activity associated with the settlement survive. This is enhanced by the presence of a thin pottery scatter which suggests that evidence for patterns of manuring with domestic refuse survives around the site.

This group value is further enhanced by association with a number of other rural sites of comparable date which have been investigated in this part of the Severn Valley. Group value of the site is therefore medium to high.

Survival/Condition

Survival of deposits was good. Although no deeply stratified deposits were recorded this was due to the nature of the site rather than truncation of deposits. Although a degree of plough damage was recorded the survival of the bases of two ovens, which are shallow features, indicates that preservation of deposits is good. Preservation of pottery was generally good. Preservation of charred seeds, although quantities were limited and preservation was variable, included well preserved material capable of providing information relation to function of structures and crop regimes. Waterlogged remains were not encountered due to ground conditions and no bones were preserved, probably due to local soil conditions.

The combination of fairly well preserved deposits in association with a well preserved and significant artefactual assemblage and an important ecofactual assemblage makes the site of great significance.

Although the deposits within the width of the pipetrench itself no longer survive and those within the wider stripped area of the pipeline easement have been affected by the construction of the pipeline, deposits beyond this area have not been affected by this work.

Fragility/Vulnerability

Archaeological deposits were revealed at a depth of between 0.15-0.25m below the modern ground surface. The presence of Roman pottery within the ploughsoil, and the scoring of the upper parts of Roman deposits with plough-furrows indicate that regular ploughing will gradually continue to erode the site. This erosion is likely to be exacerbated by the slight slope to the south and the sandy nature of the ploughsoil. Any activity affecting the ground to a greater depth than the current ploughsoil will, depending upon the depth of that activity, cause either considerable damage or complete destruction of archaeological deposits.

Potential

The area of the site investigated was limited to the southern part of the enclosure and the site extends to the north. Potentially deposits survive within the rest of the enclosure which are similarly well preserved. It is likely that such deposits would include elements relating to domestic and agricultural buildings and other activities within the enclosure. These, along with associated artefactual and ecofactual remains would be of great importance to our understanding of the site.

Diversity

Although only a few features were present within the excavated area, they were associated with good quality environmental and ecofactual remains. The diversity of the excavated remains although not high is moderate and within the remainder of the enclosure there is potential for further characteristic elements which if present would represent high diversity.

In conclusion, although sites of this type are relatively common nationally, this site is of considerable significance particularly within a local context where sites of this period and type are poorly understood. Its importance lies in the good survival and condition of deposits along with associated artefacts and charred plant remains. The importance of these is enhanced due to the absence of complex deposits and the accompanying problems of residuality within the artefactual and ecofactual assemblages. The survival of elements of field systems and evidence relating to manuring practices in the form of artefact scatters in the surrounding fields increases the importance of the site since they indicate that there is survival of evidence relating to the wider landscape within which the settlement was located.

Appendix 3 **Secretary of State's criteria for scheduling Ancient Monuments - Extract from *Archaeology and Planning* DoE Planning policy guidance 16, November 1990**

The following criteria (which are not in any order of ranking), are used for assessing the national importance of an ancient monument and considering whether scheduling is appropriate. The criteria should not however be regarded as definitive; rather they are indicators which contribute to a wider judgement based on the individual circumstances of a case.

i *Period*: all types of monuments that characterise a category or period should be considered for preservation.

ii *Rarity*: there are some monument categories which in certain periods are so scarce that all surviving examples which still retain some archaeological potential should be preserved. In general, however, a selection must be made which portrays the typical and commonplace as well as the rare. This process should take account of all aspects of the distribution of a particular class of monument, both in a national and a regional context.

iii *Documentation*: the significance of a monument may be enhanced by the existence of records of previous investigation or, in the case of more recent monuments, by the supporting evidence of contemporary written records.

iv *Group value*: the value of a single monument (such as a field system) may be greatly enhanced by its association with related contemporary monuments (such as a settlement and cemetery) or with monuments of different periods. In some cases, it is preferable to protect the complete group of monuments, including associated and adjacent land, rather than to protect isolated monuments within the group.

v *Survival/Condition*: the survival of a monument's archaeological potential both above and below ground is a particularly important consideration and should be assessed in relation to its present condition and surviving features.

vi *Fragility/Vulnerability*: highly important archaeological evidence from some field monuments can be destroyed by a single ploughing or unsympathetic treatment; vulnerable monuments of this nature would particularly benefit from the statutory protection which scheduling confers. There are also existing standing structures of particular form or complexity whose value can again be severely reduced by neglect or careless treatment and which are similarly well suited by scheduled monument protection, even if these structures are already listed buildings.

vii *Diversity*: some monuments may be selected for scheduling because they possess a combination of high quality features, others because of a single important attribute.

viii *Potential*: on occasion, the nature of the evidence cannot be specified precisely but it may still be possible to document reasons anticipating its existence and importance and so to demonstrate the justification for scheduling. This is usually confined to sites rather than upstanding monuments.
