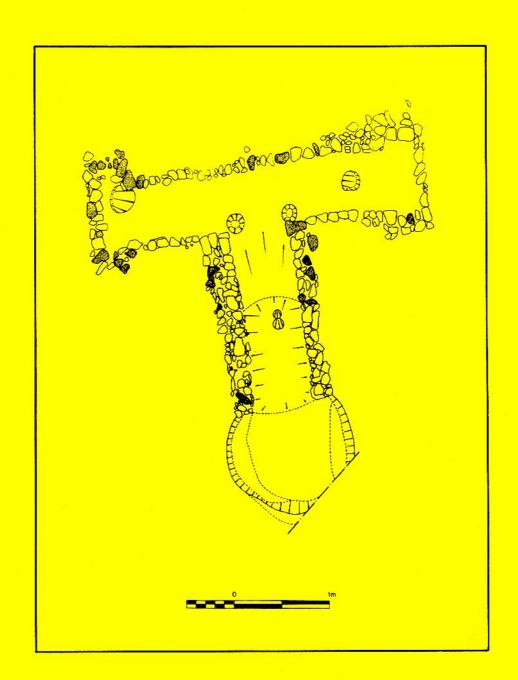


North Hertfordshire District Council

The Little Wymondley Bypass, Hertfordshire.

Archaeological Excavations 1991 Assessment Report



The Little Wymondley Bypass Hertfordshire Archaeological Excavations 1991 Assessment Report

by
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Commissioned by English Heritage and Hertfordshire County Council

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North Hertfordshire District Council Museums

Field Archaeology Section

Department of Engineering and Leisure Services

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Little Wymondley Bypass, Hertfordshire.

NHDC Museums site references: WBP-1 (TL 217 268)

WBP-2 (TL 223 269)

WBP-3 (TL 2095 2715)

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Cover illustration: A plan from field drawings of a late third or fourth century 'T'-shaped kiln, constructed of chalk blocks. This was excavated in area J approximately one hundred metres to the north-east of the main farmstead buildings.

The main body of the text was written by David Went, who also supervised the fieldwork, as well as the initial post-excavation processing and preparation of this report. Gil Burleigh had overall managerial responsibility for the project, edited this report and wrote the recommendations (Section 6). The illustrations were drawn by Faith Pewtress, and George Luke collated the initial finds catalogues. The specialist report assessing the environmental samples (Appendix ii) was written by Peter Murphy, Department of East Anglian Studies, University of East Anglia. Mark Stevenson, whose hidden hand has been present in the production of many of the Section's reports, was once again responsible for assisting the final production of this report.

NB The views expressed in this report are those of the authors and they take full responsibility for them. They are not necessarily the views of the North Hertfordshire District Council.

Acknowledgements

A project of this nature requires the cooperation, assistance and forbearance of many organisations and individuals. Our thanks must go first to English Heritage for agreeing to fund the bulk of the work, and for patiently awaiting this report. Our thanks go also to the Hertfordshire County Council, whose additional funding enabled the rescue excavation of the British Gas pipeline corridor. We owe a further debt of gratitude to Hertfordshire County Council for grant aiding, through the good offices of the North Hertfordshire Archaeological Society, the geophysical survey of the road corridor by Geophysical Surveys of Bradford, and for financing, again through the N.H.A.S., the later watching brief and salvage work. Thanks are also due to members and senior officers of the Hertfordshire County Council and the North Hertfordshire District Council, and to representatives of British Gas and their contractors, for the successful negotiation of a window of time for the excavation on the gas pipe corridor, as well as the reduction in the required working area, in addition to the discussions leading to alterations in the road schedule allowing more complete archaeological work. Thanks should also go to Lee Valley Water Plc. and to British Gas, and their contractors, R E Docwra and Maclaughlin Ltd., for their co-operation in the recording of new finds in their areas; to the main bypass contractors, Budge, and the groundworks contractors, C J Pryor Ltd., for continued assistance once our main excavations were complete.

Our gratitude must also be expressed to the landowners of the field on either side of the road corridor, Mr. and Mrs. J. Watts, and to their agent, Mr. C. Bayles, who each showed commendable tolerance and understanding; first in allowing the trial trenching in the autumn of 1990; and secondly, during the main excavations in 1991, in accepting the minimal topsoil stripping of the gas pipeline easement, and subsequently foregoing the sub-soil busting of

the area in order not to damage the surviving archaeological remains to the north of the bypass.

Of the individuals who gave their time voluntarily particular mention must be made of the Stevenage Archaeology Group and members of the North Hertfordshire Archaeological Society, whose added manpower and experience was much appreciated.

We would also like to express our thanks to Deborah Priddy of English Heritage; to Nöel Farris for sharing his knowledge of the history of Wymondley Bury and the surrounding fields; to Peter Barker for successfully attempting the microlight survey in far from perfect conditions; to the County Council's archaeologists, Mike Daniells and Stuart Bryant, for much pre-construction planning over many years and for on-site consultations; to Adrian Havercroft and Jonathan Hunn of the Hertfordshire Archaeological Trust for discussing the site in relation to Chells Manor and for allowing three of their field team to assist the excavation in May 1991; to the local metal detectorists for demonstrating the responsible use of their equipment, especially the members of the Hitchin Club; to the driver of the Hymac-type mechanical excavator from Whitmore Plant Ltd. for his careful removal of the vast bulk of the topsoil from the main excavation area without damage to the underlying archaeology; to Dave Brown for his skilful handling of the JCB excavator; and lastly to our team of archaeologists: Christine Colley, Adam Garwood, Jon Hall, Graham Langford, John Lawson, Paula McCarroll, Helen Mikolaiczyk, Tony Offord, Faith Pewtress, Chris Pickard, and Andy Richmond, for the consistently high quality of their work in conditions which were often trying and unpleasant. As may be appreciated from this interim report, a remarkable amount of archaeology was uncovered and recorded by a remarkably small team of archaeologists.

1 Introduction

- 1.1 The village of Little Wymondley, Hertfordshire, lies on the A602, the main road between Hitchin and Stevenage. The present appearance of the village reflects a pattern of linear development along this road, with the Medieval manor house, the church and the modern housing estates set back from the frontage indicating both past contraction and recent expansion.
- 1.2 The A602 converges with the A1(M) less than a kilometre to the east of the railway line which acts as the village boundary. Over recent years, with the increase of traffic commuting to London, the village has suffered rising and unacceptable levels of congestion. After lengthy debate a bypass route was finalised in 1990, which would skirt around the south of the village from junction 8 on the A1(M) and rejoin the A602 a little over two kilometres to the west (see Figure 1).
- 1.3 This report is an assessment of the results of archaeological investigations along this route which revealed both a Romano-British farmstead and a small Iron Age occupation site.

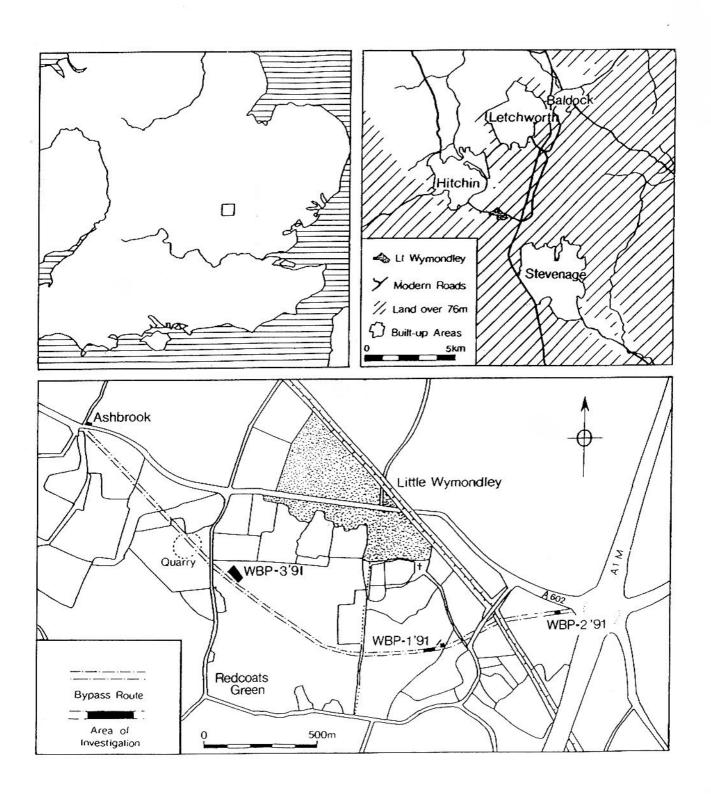
Geology

- 1.4 The landscape in this part of Hertfordshire is one of broad undulations resulting from glacial and peri-glacial erosion of the underlying chalk. The subsoil morphology varies markedly at short intervals from boulder clays and gravels to sandy silts, pure sands and loess. These rapid variations caused some problems both for the excavator and the geophysical surveyors (see also Section 2.15).
- 1.5 To the north of the dry valley through which the A602 passes the topsoil is a typical calcareous pelosol. This is an isolated deposit of a soil type found more commonly to the east around Braughing and Haverhill; and separated by the chalk ridges of the eastern Chilterns

from similar deposits which extend to the edge of the Bedford Levels. In the area of the bypass route to the south of the A602, there is a sharp division to the most northerly region of stagnogleyic, paleo-argillic brown earths. These soils continue to the south and east forming a broad mantle some twenty kilometres wide to the south of the Icknield Way.

The archaeological background

- The area around Little Wymondley has considerable archaeological potential. Several late Iron Age and Romano-British sites are known within the Hitchin Gap, of which Chells Manor, the Boxfield Farm farmstead, along with the Welwyn settlement and the Lockleys and Dicket Mead villas, are perhaps the best known examples. These and perhaps many other settlements may owe their existence at least in part to the major routes which passed through the district. The line of the old A1 bears a close resemblance to the Roman road which led northwards from St.Albans to Godmanchester and Lincoln. At the small Romano-British town of Baldock, scarcely seven kilometres to the north of Little Wymondley, this road intersected with both the Icknield Way and a further route leading south-eastwards to Braughing and Colchester.
- 1.7 Given the proximity of these trading routes and market towns one might expect there to have been thorough utilization of the available agricultural land. Romanised settlement is certainly known within a mile to the north of Little Wymondley at Great Wymondley, and to the west at Ninesprings Villa on the River Purwell; and a small Romano-British cremation cemetery containing 'many' plain vases or urns was discovered in Little Wymondley itself during the excavations of the railway cutting in 1847 (Hertfordshire Sites and Monuments Record, SMR, number 0474 TL.211 279).



Little Wymondley Bypass Location Map

fig 1

From the present evidence it is possible to speculate that remaining voids in the landscape refer more to the limitations of fieldwork than any other cause. High status villas are well accounted for in the county with nine examples excavated under various conditions over the last hundred years: Boxmoor, Dicket Mead, Gadebridge, Gorhambury, Kings Langley, Lockleys, Northchurch, Park Street and Ninesprings. By comparison only two lower status Romano-British farmsteads have been examined to any significant extent: Foxholes Farm, Hertford, and Chells, Stevenage. This disparity in the Romano-British settlement pattern is certainly artificial, and research designed to correct this imbalance must be a priority.

The Little Wymondley area appears to have been favoured for settlement from the Neolithic period onwards. Twenty one sites are known or suspected within a 1.5 kilometre corridor of the bypass route, including nine ring ditches and two cropmark complexes. It was considered probable that further unrecorded sites would be discovered during the bypass construction. Furthermore Wymondley Bury, situated only two hundred metres to the north of the route (see Figure 2), stands on the foundations of a medieval manor house founded by the early fourteenth century and owned by the influential Argentein family. The lands to the south, traversed by the bypass, were once part of a formalised deer park belonging to the manor.

Previous archaeological work on the bypass route

1.9 The archaeological impact of the bypass can hardly be said to have been investigated thoroughly prior to planning permission being granted. Fieldwork conducted in 1983 by J Hunn for the Hertfordshire County Council as a response to the proposals for an earlier route proved inconclusive, since most of the route was then under stubble or rough pasture. The

main site with which this report is primarily concerned, areas A-F, G, H and J (see Figure 2), was discovered by G.R.Burleigh in 1975 whilst monitoring the laying of a water main across the fields directly to the south of Wymondley Bury. Although the site could not be interpreted adequately from such a limited sample, several features were recorded from the trench section including two pits, building stones and an occupation surface, or buried soil, which could be traced for approximately one hundred and sixty metres (Burleigh 1975 and Burleigh and Went 1990). Fragments of pottery from these contexts indicated prolonged Romano-British activity.

1.10 In 1983 the proposed route ran to the south of this site, and the archaeological appraisal concluded that the effect would probably be only marginal. Aerial photographs taken in the 1970's were of no value to the appraisal since they did not reveal the existence let alone the extent of the settlement.

1.11 The finalised route in 1990 did not follow the earlier outline and was in fact moved further to the north within the area of the 1975 discoveries. All subsequent archaeological work was conducted after the route was determined.

The 1990 evaluation

1.12 In October 1990, after discussions between North Hertfordshire District Council Museums and the Hertfordshire County Council, English Heritage agreed to commission a further more detailed investigation of the site. A small team from the North Hertfordshire Archaeology Unit performed the survey, deploying a series of regularly spaced trial trenches across the width of the carriageway to either side of the water and gas pipelines.

1.13 The results demonstrated the presence of a substantial Romano-British farmstead within the path of construction. Flint walls were recorded in the trenches to the south of pylon 70 (see Figure 2), and both ditches and cobbled surfaces were revealed in the trenches to the east and west. A rapid fieldwalking survey indicated that the settlement extended primarily to the north of the bypass, with little evidence of continuation to the south. From the results of this evaluation the settlement was estimated to cover nearly three hectares. A main farm building, constructed with tessellated floors and a tiled roof, surrounded by metalled yards and outbuildings, possibly formed the nucleus of the site which was seen to be lying directly within the road corridor.

1.14 The dating evidence supported only the broadest outline, since the features were cleaned and recorded but not excavated. Pottery fabrics indicated occupation between the late first and third century AD. Some earlier activity was demonstrated by a few late Iron Age coarseware sherds; by occasional fragments of flint debitage, and also a single, abraded example of late Neolithic Peterborough-type ware.

1.15 It was the consensus of archaeological opinion expressed in the evaluation report (Burleigh and Went 1990), that this site was better preserved than any other comparable

settlement in Hertfordshire which had become available for fuller investigation in recent times. It was recommended therefore, that as much information should be retrieved as possible prior to construction commencing. Furthermore, it was stated that sound archaeological policy required provision to be made to monitor the remaining route as the groundworks advanced.

1.16 Accordingly, funding was agreed with English Heritage, and the Unit returned to the main site, WBP-1, in February 1991. A deadline in May was set for the work. However it transpired that the bypass construction was delayed until June. This allowed the team of ten archaeologists much needed extra time in which to deal with the complexities of the main site and other areas which arose during ancillary work on the pipelines affected by the road scheme.

1.17 Following the conclusion of the main site as the road advanced, the team switched to a policy of monitoring, recording and small-scale salvage excavation. A second, earlier occupation site, WBP-2, was discovered adjacent to the A1(M) roundabout, and several features related to the main site, including a well, were investigated later.

Narrative and excavation strategy

- 2.1 The investigation along the Little Wymondley bypass took two very different forms, dictated as they were by non-archaeological criteria. Areas of particular interest were determined prior to construction, cleared of topsoil under full archaeological supervision and examined carefully to the extent which time would allow. Further opportunities were afforded later by the construction groundworks for which a variety of responses were employed including salvage excavation, monitoring and recording.
- 2.2 The 1990 evaluation had concluded that the area of greatest activity lay between trial trenches 2 and 4 (Burleigh and Went 1990), with an outlying ditch seen in trench 5 (see Figure 2). Accordingly, on the 14th February 1991, after a heavy snowfall, members of the Unit returned to the site and established the perimeter of the proposed excavation, areas A-F. This extended for ninety metres from the easement of the 1970 gas pipe to a point between trial trenches 4 and 5.
- 2.3 In total 3,450 square metres were stripped of topsoil in five days using a Caterpillar 235 excavator. The spoil was banked along the southern edge of the site, allowing a five metre strip for access and safety. Beneath the ploughsoil lay a shallow horizon of fine sandy silt. This was also removed by machine in order to reveal the most recent archaeological strata.
- 2.4 From the outset it was clear that this was primarily a rescue project, and that insufficient time would be available for complete or even substantial excavation. Consequently the excavation programme required large-scale cleaning, accurate recording in plan and a problem orientated sampling strategy. The latter was aimed to solve particular stratigraphic relationships and acquire material evidence for the date and function of the settlement.
- 2.1.5 It soon became clear that even these

- limited goals would be impossible to achieve given the density and extent of occupation evidence across the whole site, and the small number of project staff. The delay in the construction deadline from May to June and additional funding to cover this period was therefore greeted with considerable relief. Even so, there was no question of a manual area excavation, and as a last resort to understand the earlier phases of the settlement before the entire site was destroyed, it was necessary to use a JCB to remove sections of the later Roman deposits and structures.
- 2.6 In early April a JCB was used to excavate several small areas and trenches to the west of the main site, area H, in order to provide further evidence for the orientation and date of ditches extending in this direction, trench 5, 1990.
- 2.7 At the same time the excavators received advanced warning of alterations to the water main which crossed the bypass route to the the east of areas A-F. Both this pipeline and the high pressure gas main which ran along the eastern edge of the excavation required modification to route the supplies deeper, beneath the reach of construction work and later traffic vibration from the bypass.
- 2.8 From the records of the original 1975 pipetrench and the results of trench 2 in 1990, it was clear that the new work would impinge on a further area of archaeological interest. It was decided therefore, that a second, smaller area would be machine stripped and examined at the point where the pipe alterations would intersect with the roadway. This area, area G, was hand cleaned revealing numerous features relating to the settlement, and accorded the same excavation techniques as the main site. The work on this 460 square metre area was completed with the help of volunteers in eight days in order to meet the contractor's deadline; which like other deadlines throughout the

project failed to materialize.

- 2.9 A watching brief was maintained on the new water pipe trench and easement which ran parallel to the eastern side of the original line, and was joined to the old pipe some distance to the north and south of the carriageway (see Figure 2).
- 2.10 Alterations to the high pressure British Gas main later in June were considerably more alarming. In the first instance the Unit was informed that this pipeline was to be diverted and buried deeper to the east of its previous location, within the area disturbed by the earlier water pipeline and away from the nucleus of the settlement. It later transpired that the original gas pipeline was to be removed and a new section inserted at a greater depth on the same alignment. The 1970 gas pipe trench had not been examined archaeologically, but it seemed certain that this route would have been disturbed so thoroughly that further work could do no more damage to the site.
- 2.11 However the excavators were not informed until the work was imminent, that the scale of operations required an enormous working area. This would incorporate over eight thousand square metres, including 90 per cent of the main excavation area, which was not yet completed, and an expanse of land to the north of the bypass. Our hypothesis of the northerly extent of the settlement based on the 1990 fieldwalking survey had by now been confirmed by new aerial photographs. A single inurned cremation had also been found near the northern edge of the excavation, which was suspected to be an outlining burial belonging to a larger cemetery skirting the settlement road to the north, an area which was previously believed not to be threatened.
- 2.12 Emergency meetings were held with representatives of the Highway Authority, British Gas, their contractors, English Heritage, the landowners and their agent, and following consultation a compromise was reached. Our priority was to restrict damage to the site beyond the northern limits of the bypass. To

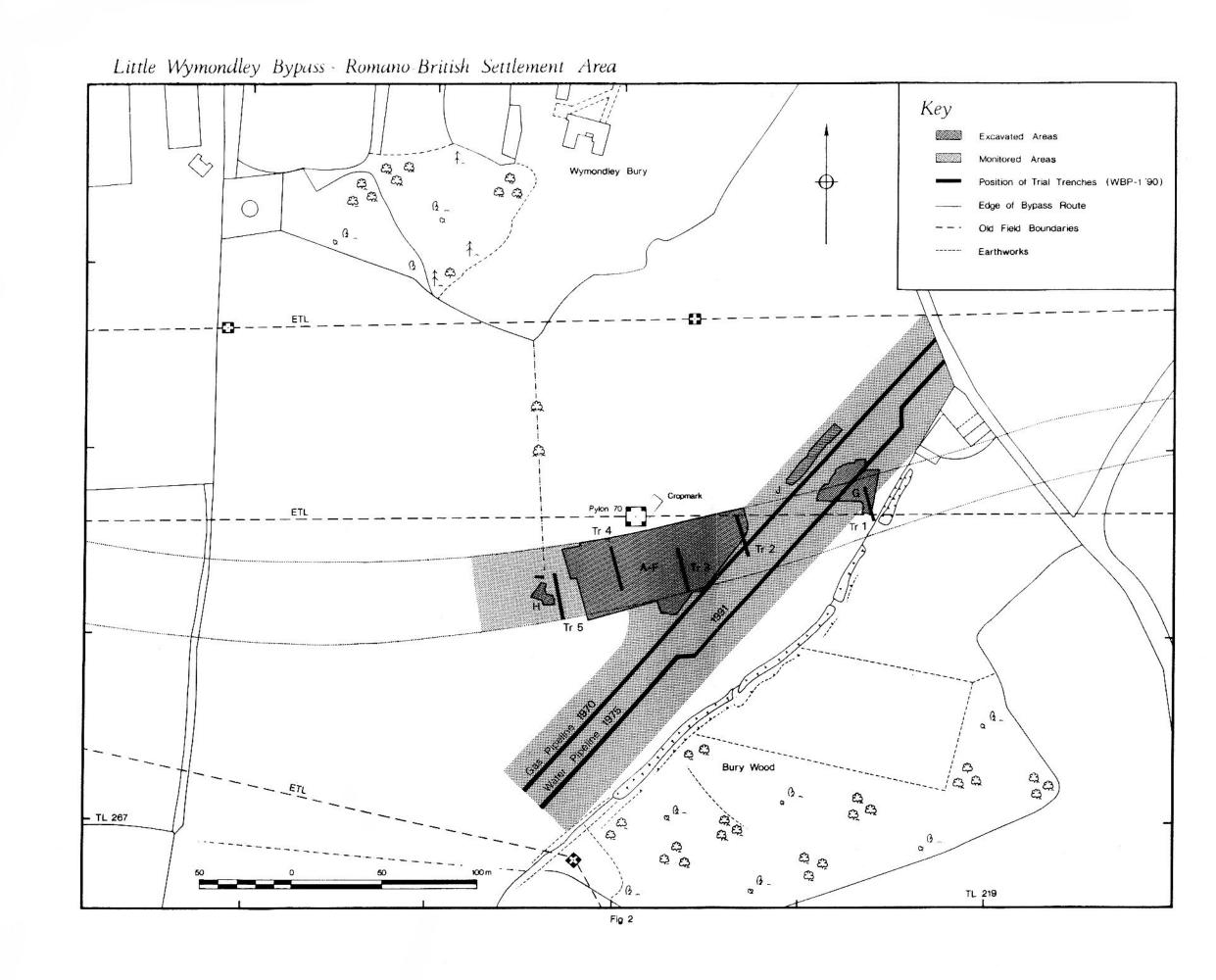
this end British Gas and their contractors agreed that the working area could be reduced if part of the main excavation could be used when complete. The landowners also kindly allowed the contractors to run machinery on the field surface without first removing the topsoil. This latter consideration is discussed further in the recommendations (see Section 6).

2.13 The 1990 survey had indicated that the settlement did not extend far beyond the southern limit of the bypass, consequently the proposals for a wide working easement in this area were left unaltered. To the north of the bypass the contractors limited the stripped easement to the minimum width required by the pipe-laying equipment, approximately metres, and provision was made for archaeological work, funded by Hertfordshire County Council. The resulting discoveries vindicated our concern for the potential archaeology now preserved further to the west by the measures outlined above.

Monitoring and recording

2.14 Formal excavation of the gas pipe easement and bypass corridor was discontinued on the 19th. June, when the major construction commenced. Whilst the majority of the field team began new excavations in Baldock, a less structured programme involving only a few staff was instigated at Little Wymondley to monitor the bypass groundworks. Watching briefs and salvage excavation had already been conducted on the pipeline trenches and working easements, and in the fields to the east of Wymondley Bury where a low voltage cable was buried to replace an overhead line affected by the new road, area I.

The north-west corner of areas A-F was extended during the main excavation in search of cremations belonging to the cemetery. It was agreed with contractors that a further fifty metre extension warranted our supervision to ensure the recovery of further burials belonging to this cemetery, as well as any other outlying elements of the settlement. Despite the lack of



archaeological control, the grading of the entire route offered even wider possibilities.

Geophysical Surveys

2.15 As part of the overall assessment of the bypass, and specifically to assist in the later monitoring of the route, a magnetometer survey was commissioned from Geophysical Surveys of Bradford. The survey, which was conducted in April 1991, financed by Hertfordshire County Council, scanned the entire length of the bypass where surface conditions permitted, with the exception of those areas which were currently under excavation, and the area of the former gravel workings to the west of the Blakemore Hotel. The fact that these measures were not taken during the 1990 evaluation or prior to final planning permission being granted need not be considered here. Although had this been the case it is doubtful from the rather inconclusive results that the project would have been substantially altered. Poor definition of the results was largely attributed to a lack of magnetic response from the fills of negative features, this was tested against excavated examples, and the frequent variations in subsoil (Geophysical Surveys Report 1991).

2.16 Seven short sections of the route were chosen for closer examination, of which three were considered archaeologically viable. Anomalies recorded in area 1 suggested linear features and pits adjacent to the western boundary of the field containing the main site. This area was investigated during the construction work, but with no result. The readings from area 2, which lay within the angle of the Wymondley Bury access road to the east of the main site, implied the existence of a single, large pit. This area proved to be a broad solution hollow overlying deep deposits of peat

carr. Dr. P L Gibbard of Cambridge University, who removed a sample column from these deposits, considered that the sequence of deposition took place during the Hoxnian interglacial period - c.250,000 yrs. BP. An academic paper is currently being prepared which will detail the environmental profile afforded by these samples.

2.17 The section of raised land where the bypass would join the A1 was considered from its topographical location to have a high potential for habitation. The magnetometer survey of this area, area 4, was distorted by the base of a nearby electricity pylon, but nevertheless suggested the presence of several pits and ditches. The prevalent conditions during the groundworkings were far from ideal. However, due to the particular attention focused on this site, two features: a hearth and a pit dating from the middle to late Iron Age, were located and examined (see Section 4.3.5).

2.18 Watching briefs continued throughout the primary stages of bypass construction as the topsoil was removed and the carriageway levels reduced. Extensive use of grading machines tended to hamper our operations, as surfaces were rarely 'cleaned' to a standard which would permit features to be identified. By the end of October the monitoring programme had ceased. It was therefore something of a surprise to learn in late November that workmen had discovered a well while grading the north verge of the carriageway within areas A-F. Although this section of the carriageway had already been lowered by over two metres when the Unit was notified, and the workmen had been using the well as a sump to drain the surrounding area; a full investigation of most of the fills was possible, and was only abandoned when the structure proved unsafe.

3. Methodology

- 3.1 A five metre grid was established over the main site, areas A-F, oriented to grid north. This was later extended to encompass area G and the excavations within the new gas pipeline easement, area J. Wherever possible the grid was projected to locate other features found during watching briefs and salvage work. Elsewhere along the road corridor find locations were made with reference to the chainage markers and various landscape features.
- 3.2 The original aim of the excavation agreed with English Heritage was to recover as complete a ground plan as possible of the Romano-British farmstead. However, as the excavation progressed it became clear that preservation was better than expected from the evaluation, and that the remains were of several phases rather than the one anticipated. In consequence, in May 1991 English Heritage provided additional funding to allow more sampling of key features and relationships.
- 3.3 Areas A-F and G were completely hand cleaned and planned at a scale of 1:20. Metalled and cobbled surfaces were drawn stone for stone, whilst sections and small features were accurately recorded at a larger scale, usually 1:10. Cleaning and planning in area J and the separate Iron Age site, WBP-2, was restricted to the areas where features were apparent.
- 3.4 As previously mentioned a problem solving excavation strategy was employed rather than an overall sampling procedure. Discreet features were either completely excavated, sectioned or sampled depending on their size. Obviously in the limited time allowed all features could not be thoroughly examined. The more complex feature areas such as the junctions of walls and ditches were given precedence and samples excavated to prove their stratigraphic relationships.
- 3.5 All features whether cuts, fills or layers either excavated or only recorded in plan were

- given context numbers and described on proforma record cards. These numbers were cross referenced to the plans and sections, and used to register the provenance of finds. Special finds were allocated catalogue numbers and three dimensional co-ordinates. Nails from the vicinity of the 'cottage' structure in areas A-F were given two dimensional co-ordinates, hopefully to allow further study of the demolition process. A full photographic record of colour slides and monochrome prints was maintained throughout.
- 3.6 Environmental sampling was directed to answer specific questions following advice from Mr P Murphy, Department of East Anglian Studies, University of East Anglia. General environmental conditions obtainable from the erosion deposits of certain features were not given particular emphasis. This aspect has been the object of greater study during excavations of nearby Baldock (Burleigh G. et al. forthcoming), and at present does not require corroboration. By comparison, organic deposits from the hearths, the 'T'-shaped kilns, the well and other features reflecting the settlement's activities were sampled thoroughly (Appendix ii). Sub-samples were sent to the University of East Anglia for an assessment of their potential value. The results of their studies have been included in appendix ii.

Aerial and elevated photography

3.7 The Unit has been conducting occasional aerial photography surveys over recent years with the help of local microlight pilots. It was therefore possible to arrange a flight in April, when even the early crops surrounding the main excavation were showing growth variations due to the continuing dry weather. A large linear feature, perhaps a trackway, was seen extending to the north-west of Area A-F together with numerous less well defined features within the field to the north of the site. One feature however was particularly distinct: a

large rectangular structure, approximately 15x6 metres, oriented to the north-east, adjacent to pylon 70 (see Figure 2). The wall lines were represented by parchmarks, from which one may infer surviving masonry. The building was photographed again at closer quarters by a linesman perched on the top of pylon 70. From this picture it has been possible to transcribe an accurate plan.

- 3.8 It was this information together with the possibility of a cemetery which was instrumental in persuading British Gas to limit their working area (see above).
- 3.9 Local metal detector enthusiasts were co-ordinated carefully throughout the project,

and allowed to scan the machine and hand dug spoil. In the final days several detectorists worked with the field team, investigating readings from un-dug deposits. Surprisingly few significant items were found in this way, and in general the incidence of metal finds was poor. The implications of this aspect of the settlement are discussed further in section 5.15.

3.10 The project records were checked during and after the fieldwork, and now form a permanent archive together with the finds at the Museums Resource Centre, Hitchin. A preliminary examination of the archive was undertaken for the purposes of this assessment report.

The Romano-British settlement site (WBP-1)

(see Figures 3 and 4)

- 4.1 In total an area of 4,900 square metres was hand cleaned and subsequently planned. A further 16,000 square metres were monitored closely, and within this latter area two major pipe trenches were examined for features revealed in section. Nine hundred and thirtynine separate contexts were recorded and described, and three hundred and thirty plans together with one hundred and ten sections were drawn, plus numerous sketches.
- 4.2 Specific excavation was limited by the pressure of time and the project design determined with English Heritage. Consequently, although a large section of the settlement was revealed, the excavated sample amounted to less than 5 per cent of the total area uncovered within the road corridor.
- 4.3 The hand cleaned surfaces, especially in areas A-F, displayed an inevitable montage of features from a range of phases. Concentrated attempts were made to determine the sequence of events. However, since the only method available with which to examine the earlier underlying evidence was to machine areas and strips across the site, considerable limitations are imposed on our results.
- 4.4 For the purposes of this report no attempt has been made to describe every feature. Rather the aim is to produce a broadly phased outline of the site's development. A large quantity of pottery was recovered from the investigation areas (see Appendix iii), over half of which derived from cleaned surfaces; and is therefore provenanced but of little use for specific dating purposes. On the other hand, the limited excavation sample has resulted in a situation

- where specialist pottery reports are vital to enable a more detailed picture of the settlement's development.
- 4.5 At the time of writing, the pottery and other artifacts have received only a preliminary examination sufficient to support the most elementary phased outline. Further work will certainly involve considerable revision of the hypotheses described below.
- 4.6 Areas G and J contained relatively few features and were small enough to allow a representative post-excavation plan to be included in this report (Figure 4). Areas A-F, which was both larger and more complex, has been simplified for the purposes of illustration in this assessment. In consequence, Figure 3 only shows major features, and is interpretative rather than representative.

The earliest evidence

4.7 There were no features on the main site which could be identified as earlier than the late Iron Age, however there were residual finds from previous periods. It has become increasingly clear from the work of the Unit that many Iron Age and Romano-British settlement sites in North Hertfordshire produce traces of earlier activity. This presumably reflects continued utilization of favourable locations for habitation. Ninety-four items of worked flint and debitage, and two sherds of coarse, flint-tempered pottery were recovered from the settlement area (Appendix iii); indicating activity if not occupation during the late Neolithic period or early Bronze Age - c.2,300-1,800 BC. This corresponds to the results of the 1990 survey which included amongst the finds a fragment of Peterborough-type pottery (Burleigh and Went 1990).

Little Wymondley Bypass - Location of Principal Features Areas A-F & H Pylon 70 A - F Key Fig 3

The Development of the Settlement.

A Preliminary View.

(see Figures 3, 4 and 5)

Phase I: The late Pre-Roman Iron Age

- 4.8 Large quantities of late Pre-Roman Iron Age pottery, particularly fragments of grog-tempered 'grain jar' vessels occurred commonly as residual finds across area A-F, especially in the north-west quadrant of the site. However this volume of material was not matched by the number of features identified as belonging to this period. Doubtless the enforced nature of the method of excavation is primarily responsible for this imbalance; there can be little doubt that more features existed than were revealed by the limited nature of excavation.
- 4.9 Five ditches can be assigned to this phase. A large ditch, 2.1m wide and 0.75m deep, containing early first century AD pottery [538], skirted the south-west corner of the site, area H. A smaller ditch [906], containing contemporary pottery sherds branched to the north at an approximate right angle to ditch [538], suggesting land divisions or property boundaries.
- 4.10 Two shallow ditches, [694] and [382], were sealed by later first or early second century yard surfaces closer to the centre of the main site. Both were oriented roughly northwest to south-east, and were sufficiently close together to imply separate phases of the same boundary. However, neither ditch was revealed to its full extent, and the relationship remains obscure. Both ditches yielded early first century pottery sherds, and ditch [694] contained three vessels with high necks and cordoned shoulders of the same period. It may be significant that the alignment of both ditches is mirrored in the later development of the settlement, and that the southern ditch [382], was recut in the later first century as part of the yard boundary.
- 4.11 Ditch [530] appears to form the eastern boundary of the early settlement in much the

same way as ditches [906] and [538], may contain the site to the west and south. This ditch was 0.7 metres wide and survived to a depth of 0.35 metres. It extended across the entire width of areas A-F, and was also recut in the late first or early second century, providing further evidence for continuity of the settlement.

4.12 Only two features depicted occupation rather than merely the boundaries belonging to a settlement or field system. One was a small area of metalled surface [446], revealed in a trial trench through the chalk layer [65]. At present the chalk floor [65], and underlying clay matrix which sealed this earlier cobbling are ascribed to Phase II. The full extent of this cobbled surface is not known. Later machine work in this area did not reveal more of the same context, however one may speculate that sections of the wider yard surfaces to the north and east may have originated in the late Iron Age and been subsumed, reused and repaired in subsequent periods. The second feature indicating habitation was a single cremation [859], buried within an early first century grain jar found in the north-west corner of areas A-F. This area continued to be used as a cremation cemetery in later phases.

Phase II: Mid first to mid second century AD

- 4.13 This phase depicts the initial construction of the Romanised farmstead. The range of developments which are described here within a broad period may be considerably refined through further post-excavation study and pottery research.
- 4.14 Excavation in area G revealed a road surface of small cobbles and flint gravel [365], flanked by ditches to the north and south [323] and [317]. At this point the ancient roadway appeared with a certain irony to mirror the new bypass route. However, although the road may have merged into the yard surfaces in the north-east corner of the site, it was considered to veer northwards beneath the present electri-

city pylon. A section was excavated through a second band of fine flint metalling and flanking ditch [401] and [203], which ran east from the northern edge of areas A-F. This was interpreted as a tributary of the main road leading into and merging with the yard surfaces in the centre of the settlement. In the east of areas A-F, the late Iron Age ditch 530 was recut but stopped short of the northern edge of excavation presumably to respect the southern margin of the road. This recut [513], appears to form the eastern boundary of the settlement nucleus during this phase, as does the broad ditch 856 to the west.

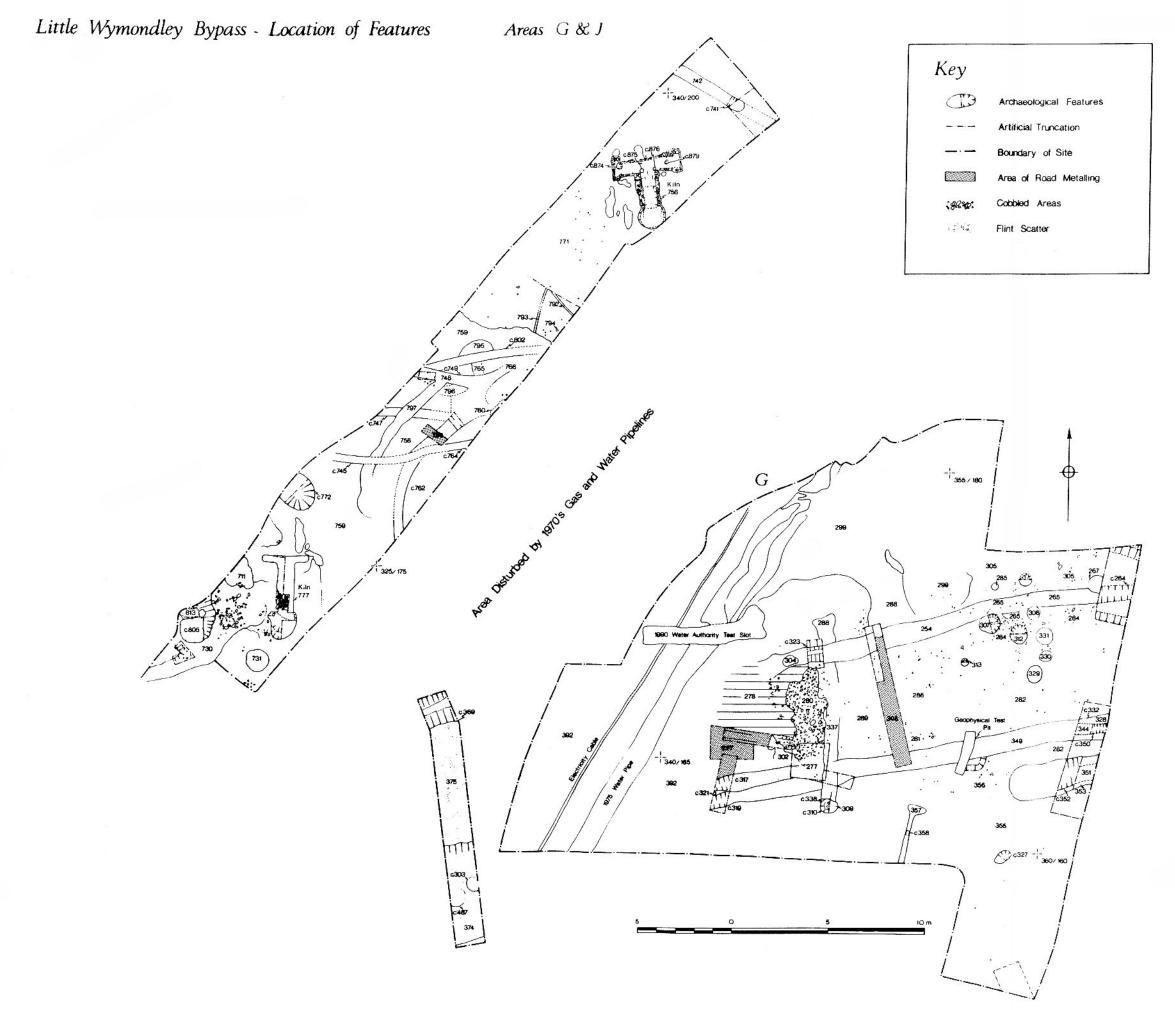
4.15 Construction of the large multiple unit building, perhaps the most readily identifiable feature on the site, is provisionally dated to the early second century. The foundations describe a structure with a rectangular outer wall, 14.5 x 6.7 metres, containing a single subdivision which separated the interior into two unequal parts. The larger room incorporated a separate compartment formed by an 'L' shaped wall which enclosed the northern corner of the building. The wall foundations were generally between 0.5 and 0.6m wide, composed of large, closely packed flints in a sandy yellow mortar, and survived to an average depth of 0.4m within a square cut trench. The building layout resembles similar structures excavated elsewhere, including the early versions of both Lockleys and Park Street villas. Collingwood refers to this form of structure as a 'cottage house' (Collingwood and Richmond 1969), and implies that these were modest constructions with dwarf walls supporting timber and panelled superstructures; unlikely to exceed a single storey. However there seems little reason to suppose that the Little Wymondley house was limited in this way;the thickness and solidity of the walls being no less than those used for buildings with several floors in later periods. According to Morris (1979), rectangular buildings of this type: displaying further subdivisions within the main rooms, form a distinct category, type B. Both Collingwood's and Morris's terminology will be used here for the

sake of convenience, although some of the implications of these titles may not be appropriate to the present example.

4.16 The large amount of roof tile, both tegula and imbrex, concentrated in the vicinity of the cottage-house clearly implies a tiled roof. Furthermore, the distribution of tessaræ, initially seen in trench 4, in 1990, and subsequently plotted during the area planning, provides a tenable argument for tessellated flooring within the structure. Three types of tessaræ were recovered: tile, chalk and dark grey stone, implying a degree of elaboration. Two small fragments of mosaic, still attached to their mortar bases, were recovered from the demolition material associated with the southern room of the house, as well as two pieces of painted wall plaster implying further Romanised sophistication. The pattern of nails scattered around the building was recorded and may repay further investigation.

4.17 The cottage house was enclosed to the north and east by yard surfaces of closely packed flint and pebbles. Plough damage was much in evidence, and their were some areas where the surfaces merged with patches of natural flint and gravels. However the yard surfaces attributed to this phase extended over a wide area, about 700 sq.m, bounded by ditch [639] to the south, a recut of the previous late Iron Age ditch [382], and the presence of building remains to the east. The yard area extended to the northern boundary of the excavation and almost certainly beyond. Sections of the exposed yard metalling may well have been maintained from the early first century and subsequently repaired and extended. Unfortunately, the limited objectives set for this project did not allow for a systematic investigation of the sequence of development.

4.18 Beyond the eastern edge of the yard surface a large, sub-rectangular area, approximately 84 sq.m, of redeposited clay [402], was interpreted as a floor. There were no traces remaining of walls associated with this context, although it might be reasonable to suggest that



sill-beam foundations would not have survived the effects of ploughing. The floor was perforated by forty-seven small stake holes arranged in five north-south oriented rows. Perpendicular to these lines, a curious ladder-shaped series of narrow grooves flanked the northern edge of the feature. There were also five linear marks interspersed with the stake hole rows. Assuming that most of these marks are contemporary, they appear to be the imprints of a series of partitions or racks. Although the purpose of such a structure cannot be proven, drying frames or a loom shed are two interpretations.

4.19 To the north of the clay floor, part of a rubble wall surrounded by demolition debris indicated the only surviving section of a further building belonging to this phase. The flint rubble foundations [618], were approximately 1.5m wide and formed in the shape of an 'L' with an additional wall adjoining the eastern side perhaps as an internal subdivision. Sample excavation yielded first and early second century pottery fragments incorporated in the walls which rested on the cleaned surface of the subsoil rather than in foundation trenches. The yard surfaces butted onto the western side of the wall indicating that the building was either earlier or contemporary with their construction. Demolition of this building was thorough, with the exception of this corner the walls had been completely removed.

There is some evidence for further 4.20 buildings overlying the yard surfaces, depicting further developments between the cottage house and the buildings to the east. Two beam slots, [210] and [233], may be the remains of one such structure, and numerous post holes may attest to others although patterns were not discernable. A conspicuous, roughly rectangular void to the north of building [618], may indicate that the yard surface was laid around the base of an existing timber structure; and it is the authors suspicion that numerous other structural elements might have been determined by a more prolonged and thorough investigation.

4.21 A large irregular chalk surface to the west of the type B building appears to have been constructed during this phase. Neither layer [65], nor the separate chalk layer [157], had any stratigraphic relationship to the cottage house although two vestigial wall lines did appear to link the two features. Surface 65 was between 0.15 and 0.18m deep and rested on a shallow layer of clay. A small area, approximately 1 sq.m, of relatively intact tessellated floor was excavated against the northern edge of this layer, and numerous tessaræ were found in the immediate vicinity often with chalk adhering to one side. The surface therefore is assumed to have supported a tessellated floor, and to have been enclosed within a structure which was respected by the length and orientation of the cottage house; although the evidence for walls is absent. Again we are forced to the assumption that sill beam construction was employed, of which the traces have been removed by later occupation and ploughing. A line of post-holes to the south of layer [65], may be associated with this structure. However the pottery from these features is somewhat later in date, and the line if projected to the west includes one post-hole [c149], cut through the second chalk surface [157], which at present is assumed to form part of the same layer as [65]. An alternative explanation is that the chalk surface [65], was related to the cottage house, possibly as an extension, and the flint packed holes contained the supporting posts for a veranda along the southern side. The later pottery may have been incorporated in the fill as the posts were withdrawn, rather than as part of the construction fill. In this case the smaller chalk floor [157], might be a separate structure belonging to an earlier phase. Unfortunately, these features were neither complete, closely dateable nor as fully investigated as might be desired. The construction and demolition of a well [918], in later phases appeared to be the main cause of the depletion of the chalk floots.

4.22 A single cremation [872], within a late first to early second century sandy ware urn

was situated to the north-east of the chalk-floored building, indicating continuity of use within the cemetery area established during the early first century. A ditch to the south of the yard area [706], was also in use during this phase, perhaps as a division of fields or paddocks to the south of the settlement core.

Phase III: mid second to mid third century AD

4.23 The third phase appears to have been a period of considerable alteration to the layout of the existing settlement.

4.24 Whilst building [618] may still have been in use, the structure containing the clay floor [402], and suggested by the beam slots in the yard surface [210/233], were superseded by a large rectangular wall [421], which extended for thirty-four metres to the east of the cottage house. Although the wall was later robbed for most of its length, the square profile of the cut was still generally visible. Where robbing had not taken place, nearer to the cottage house, the foundation matrix of flint rubble and sandy mortar was still evident, and bore close comparison to the house foundations. This enclosure projected from the northern and southern walls of the cottage house and retained this separation, fifteen metres, for its entire length.

4.25 The interpretation of this development is problematic. It may be feasible that the walls could have been those of a single structure without internal roof supports, for none were seen, or at least no evidence survives. The author considers that two interpretations are possible at present. A farmyard or perhaps courtyard might be suggested given the low level of internal elaboration within the enclosed area. However, later machine clearance of the demolition debris from the northern part of the cottage house revealed two further wall foundations, [215] and [940], forming a room in the north-west corner of the enclosure. Part of the north-east wall of the original building had also been removed presumably to allow access to the main house from this room. Whether this extension to the primary building was added prior to construction, or built within, the perimeter wall could not be determined, although the latter interpretation is preferred. The thickness of wall [421], 0.5m on average, is similar to that of the cottage house walls, and might equally have supported a free-standing building. Other sub-divisions, less substantial than walls [215] and [940], may have existed within this building, which would appear to have been a logical progression from the cottage house; respecting its alignment and dimensions.

4.26 The areas of yard surface isolated within the perimeter wall appeared to have been subjected to greater wear than those outside. More concentrated erosion may imply an entrance to the building on the northern side. A large ditch [701], perhaps the robbing trench of a wall which subdivided the enclosure area, appears to date within this period. The only other contemporary feature within the structure was a small hearth [403], situated in the south-east corner.

4.27 The short spur of roadway which entered the site from the north-west [401], was still in use during this phase, although badly worn and rutted, and presumably continued to link the settlement core with the putative road running to the north of the site.

4.28 In area G, the southern roadside ditch was re-dug [319], on the same alignment as its predecessor, and the road surface was enhanced by a further layer of small angular flints and pebbles [308]. The road repairs spread over the area of the northern roadside ditch which had been deliberately backfilled and levelled. The reason for this development may lie in the increased utilisation of the area to the north of the road. Excavations in the gas pipe easement revealed the corner of a structure containing a chalk floor [813], and two 'T' shaped kilns [756] and [777]. A further kiln [930], possibly of the same design, was recorded in the re-opened trench of the 1970 gas pipe, located

approximately four metres to the south of kiln [756] (not illustrated).

The dates of the kilns will not be established firmly until further specialist pottery research has been conducted, particularly as neither of the excavated examples bore any stratigraphic relationship to other dateable features. The southern kiln [777], was composed of a single 'T' shaped cut in to the subsoil. The main flue, of which the southern section formed the firebox, was 2.6m long and survived to a depth of 0.36m. The firebox floor was completely covered by nineteen irregular millstone grit flagstones representing four different rotary quernstones, none complete. The sides of the firebox were constructed of fired clay, and fragments of collapsed material overlying the base indicated that clay supported by a wicker frame had formed the roof of the chamber. An irregular, sub-circular stokehole, 1.3m wide and 0.35m deep, to the south of the firebox contained dark, carbon-rich layers from which samples were taken for analysis. The branching flues which formed the symmetrical head of the "T", were 2.4m long and survived ploughing to a depth of 0.35m. These were quite narrow, with a maximum width of only 0.35m. Further collapsed structural material suggested that the flues were also covered by a baked clay superstructure. The firebox and stokehole were completely excavated, but the flues could only be half sectioned in the time available.

4.30 The second kiln [756], was of more substantial construction, and in view of its extremely good state of preservation, it was decided to undertake full excavation (see cover illustration). The general design and orientation were similar to [777], based on a 'T' shaped cut in the yellowish clay subsoil, however the construction was executed in a far more elaborate manner. The walls of the main flue, the cross flues and the fire chamber were constructed primarily of chalk blocks, 90 per cent, average size: 170x148x100mm, with occasional large angular and sub-angular flints, 10 per cent, average size: 228x135x100mm. The main flue walls consisted of a maximum of

five courses of chalk blocks, between 0.42 and 0.47m deep, and were between two and three courses thick, approximately 0.25m, enclosing a 0.62m wide chamber. The main flue, including the firebox was 1.9m long, and led to a roughly circular stokehole, 1.3m wide and 0.37m deep, at the southern end. The northern end opened into a symmetrical cross flue which was constructed in the same fashion although the walls were somewhat narrower, generally only one block thick, 0.1m, and three courses deep, 0.28m. The top surfaces of all the walls formed a single plane which sloped gently to the north, suggesting that no further courses had existed, and the oven superstructure was similar to that of [777]. Certainly fragments of scorched clay and daub were recovered from the fill. The cross flue chamber was 0.59m wide and 3.34m long. Both east and west branches terminated in 'T' shaped ends which housed semi-cylindrical tiles within openings to the north, with a further opening in the south of the western end. Presumably these would have been used to regulate the temperature within the drier.

4.31 The kiln base was not clad with any particular material and showed distinct scorching of the subsoil. The internal walls of the firebox were also scorched to an intense reddish colour and to a lesser degree throughout the structure. The chalk blocks were bonded by a greyish brown clay rather than mortar, which was also partially fired in the area of greatest heat. Samples were taken of apparent carbonised seed deposits contained within the structure, the vents and the stoke pit. The pit showed evidence of having been cleaned out on numerous occasions as one might expect. The final fill contained fragments from a late second or early third century flagon. Both of the excavated examples are interpreted as malting kilns for the present. The detailed plans, elevations, sections and photographs from the excavation of kiln [756] in particular, together with the environmental samples should enable a credible reconstruction of its function and use. This is discussed further in the

summary (Section 5.7).

The third probable kiln [930], was 4.32 observed, cleaned and recorded during routine monitoring of the new gas pipe trench. We were informed by the contractors that Martin Smoothy, an archaeologist working for British Gas, had noted and photographed this discovery during the previous day. However at the time of writing we have not received any information from British Gas, nor any finds which might have been collected. The latter factor is particularly important since the feature appeared devoid of dateable evidence. This kiln was largely destroyed during construction of the original gas main in 1970, consequently the section in the re-dug trench revealed only disturbed remains. Nevertheless, blocks of chalk similar to those used for the walls of kiln [756], were recorded as well as a 0.25m deep pit containing carbonised material which was interpreted as the stoke hole. The orientation is uncertain as is the overall design, although a further 'T' shaped kiln is considered likely, perhaps with the main flue extending northwards from the stoke hole.

4.33 It has been suggested by Morris (1979), that so called 'corn drying' kilns were almost certainly enclosed within buildings since their operation would be impaired without protection from the elements. This may indeed have been the case at Little Wymondley: however, plough damage was particularly evident in this area of the site, and with the possible exception of the corner of one rubble structure [813], there was no building evidence associated with the kilns. Several shallow gullies were sampled and recorded between the two kilns [756] and [777]. These may have used to drain the area, but if structures were present we must again assume that they were of a relatively insubstantial nature and have consequently left no trace.

4.34 The rubble structure with chalk floor [813], yielded no dating evidence. It was seen however, that dark organic residues were present both within the building and within a pit [805], dug against the wall, leading us to

suspect activity and use contemporary with the that of the kilns.

4.35 The chalk floors to the west of the cottage house were abandoned by, or during the early part of this phase, and appear to have been superseded by a line of large flint packed post-holes, 0.6m diameter, 0.4m deep, [149], [170], [182], [183], [185], [186] and [703], which formed a westward projection of the southern enclosure and cottage house wall. As previously mentioned the sequence of development here is questionable, and liable to reinterpretation in the light of specialist reports.

4.36 The area to the north of chalk layer [157] and to the west of layer [65], was masked by widespread deposits of fine alluvial silt, not unlike several areas of natural seen within the excavation. Repeated machining through this layer to a depth of 0.7m below the original horizon failed to elucidate the problem of its origin, and the nature of this silt did not become apparent until the discovery of the well [918], during carriageway reduction work later in November. The highway workmen did not notice the well until an estimated 2.3m depth of subsoil had been removed from this area. Subsequent excavations revealed that the well shaft was supported by a solid sleeve of mortar, up to 0.7m thick, and an internal surface lined with well-laid courses of medium sub-angular flints, averaging 100x150x200mm. Since it was unlikely that the machine operator could have unknowingly removed such a consolidated structure, it was considered more probable that the well shaft had been previously demolished to a depth of between one and one and a half metres, and that the mechanical excavator had only truncated a small part of that which remained. This may account for the deep silted hollow seen during the initial investigation. The present water table in the vicinity of the well was estimated by the bypass engineers at approximately 6.5m below modern ground level. The excavators descended to 4.3m below the truncated rim of the shaft, 6.7m below ground level, without encountering the base or the

water table, at which point the excavation was discontinued due to the danger of structural collapse. A single dis-articulated human skeleton and a largely articulated canine were discovered in the clayish backfill, which also included demolition rubble and first to fourth century pottery sherds. The well was recorded in plan, elevation and section; with particular attention paid to three tiers of putt-log holes arranged in groups of four at regular intervals of around 1.14m, down the shaft wall. These were seen as evidence for frames or platforms used in the construction of the well.

4.37 The human remains appear to have been deposited in the well during the late third or fourth century, but may, since they were dis-articulated, have been disinterred from an earlier grave in the area. In the late second to mid third century the cemetery area in the north-west corner of areas A-F continued to expand with the addition of four inurned cremations [861], [869], [911] and [912]. Cremation [912] was contained in grey coarseware vessel with no other grave goods. A small patch of carbon staining and burnt bone was excavated as an unurned cremation, but reinterpreted as material from a nearby inurned cremation [911], which had been disturbed by ploughing. Assemblage [911] consisted of a coarseware storage jar reused as the cinerary urn together with a smaller jar and an Oxfordshire-type flagon. Cremation [864] was contained by a coarseware jar and accompanied by two smaller grey-ware vessels. The most elaborate burial [861], consisted of a cinerary urn, a mid second century storage jar, surrounded by three ancillary vessels: two samian bowls and an Oxfordshire ware beaker. The burial also contained a group of hobnails, the remains of a pair of shoes, and an iron lamp holder (small find A6126), which is similar to examples unearthed from burials in Walls Field, Baldock, during the 1920's.

4.38 A fifth cremation assemblage [483]: a samian dish, coarseware jar and grey-ware beaker, also dating from the late second century

was discovered near the northern edge of areas A-F towards the east of the excavation. The location of this burial, as perhaps the others, implies that the cemetery areas were respecting the the putative line of the road skirting to the north of the type B building and yard. It was with regard to this possibility that strenuous efforts were made to limit the extent of the gas pipeline easement. The redeposited inhumation in the well may also reflect a greater extent of cemeteries to the north of areas A-F, since no other inhumations were discovered during the excavations.

4.39 Two other features are ascribed currently to this phase. A large sub-circular depression was seen to the east of the enclosure wall [439], and interpreted, after sample excavations, as a shallow pond [493]; perhaps used as a watering place for livestock. The original excavation of this feature truncated the eastern edge of the clay floor [402], and the accumulated silt layers within provided dateable pottery from the late second century onwards.

Two roughly concentric rings of post holes with mean diameters of 4.3m and 6.1m were identifiable from the plough disturbance of the packing stones visible on the cleaned surface of areas A-F [366]. Vestiges of a hardened clay floor had resisted later erosion within the perimeter of the outer ring. A sample of the post holes revealed a surviving depth of around 0.2m with carbon flecks in the lower part of the fills. The circular building indicated by these features, may have either been rebuilt or required both a wall line and internal supports. A complete lack of dateable material from the post holes inevitably means that the period of use is uncertain. However, two of the post holes were cut into the fill of ditch [706], allowing an approximate terminus post quem of the mid to late second century. Round Houses, although often considered to be early features within the Roman period, may continue into the third or even fourth centuries as at Baldock (Stead and Rigby 1986).

Phase IV: later third and fourth centuries AD

4.41 This phase is at present the most problematic regarding rates of change and specific dates. The settlement form was dramatically revised within this period, and many of the existing structures were demolished or abandoned. Inevitably the demolition sequence resulted in a redeposited blend of artifacts from all the previous phases, which will require further clarification.

4.42 Very few pieces of late fourth or fifth century material were recovered; and at the time of writing the majority of these have only been identified from unstratified or contaminated surface locations. This fourth phase is therefore presented as a period of change and reconstruction which appears to account for the demolition of earlier structures, although the robbing of walls and removal of reusable debris may have continued for an as yet unspecified period.

4.43 The yard surfaces to north of the cottage enclosure, or extended building, may have still been utilized, although the structure itself appears to have fallen into disuse and been robbed of foundation material for most of its length. The robbing trenches for the southern and eastern walls displayed an element of care, generally respecting the dimensions of the original footings. On the northern side however, the robbing trench could only be distinguished from an ordinary ditch by particles of mortar and the quantity of flint re-interred with the fill.

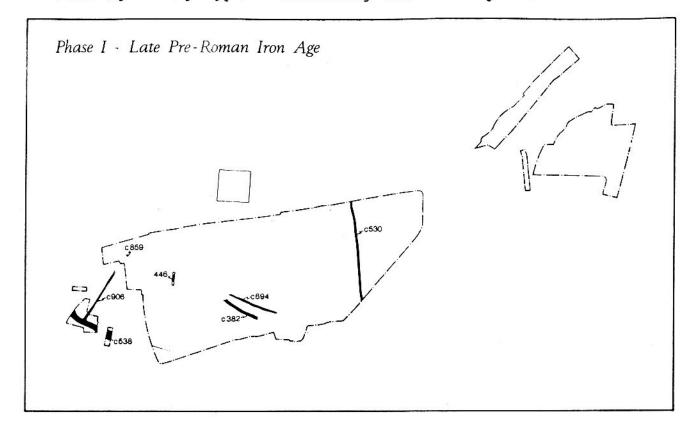
4.44 Curiously, the foundations of the original cottage house were not removed. Whether this implies continued use of this building, or abandonment without complete demolition, remains open to question. A preliminary examination of the pottery from the cottage house area suggests that occupation ceased in the late third century. This interpretation may be revised. Both the pond [493], and the well [918], seem to have been backfilled in the early fourth

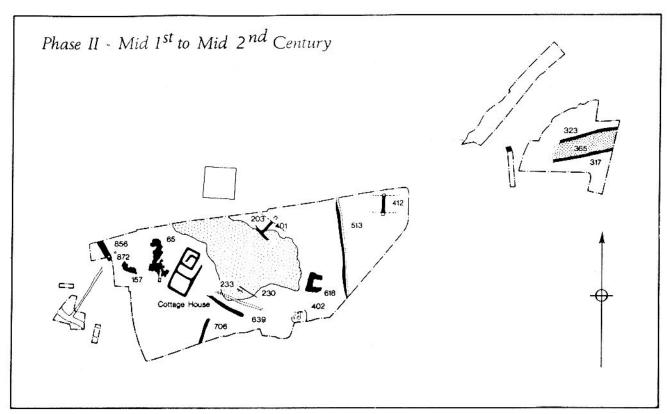
century. The well contained only the debris from its own structure, whereas the pond contained a high proportion of large flints, quite possibly from the destruction of the rubble building immediately to the north [618].

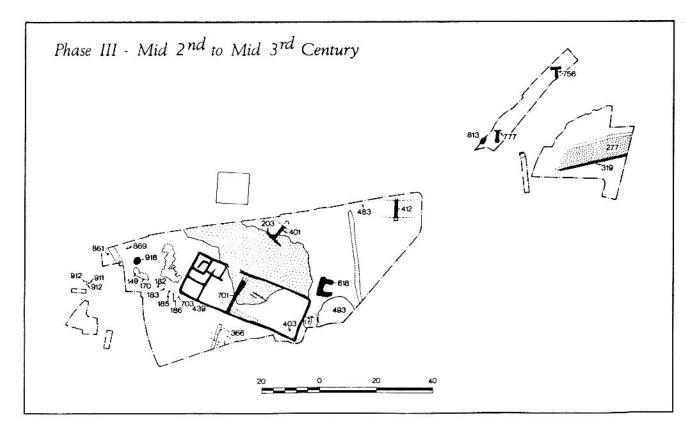
4.45 Massive flint rubble foundations [126]. were evident from the initial cleaning of areas A-F, running parallel to the northern wall of the type B building, separated by a distance of around 2.5m. Sections of the wall were cleared from beneath the tumble of large angular flints, and the foundations traced for 16m with an average width of 1m. A rectangular plinth of more closely packed flints [900], which overlay the foundations towards the western end of the wall was seen as a reinforcement or buttress. perhaps given the projection of the wall to the north, supporting a corner. A 1.6m wide gap in the foundations to the east of [900], contained a surface of rammed chalk [117], from which it is reasonable to infer an entrance way or threshold. Although the height of the wall cannot be estimated from the incomplete pattern of collapse, it is feasible to interpret the wall as part of a sizable building which extended beyond the northern limits of excavation. The wall fabric composed entirely of angular flints, c.100x150x200mm, contained pottery from earlier phases. The wall included sherds representing an almost complete early first century grain jar, possibly disturbed from the neighbouring cemetery, which can be dated to the late third century by associated fragments of colour-coated wares. It is interesting to note that the building lines seen near pylon 70 from the aerial photographs also extend in this direction, and represent a building of similar size.

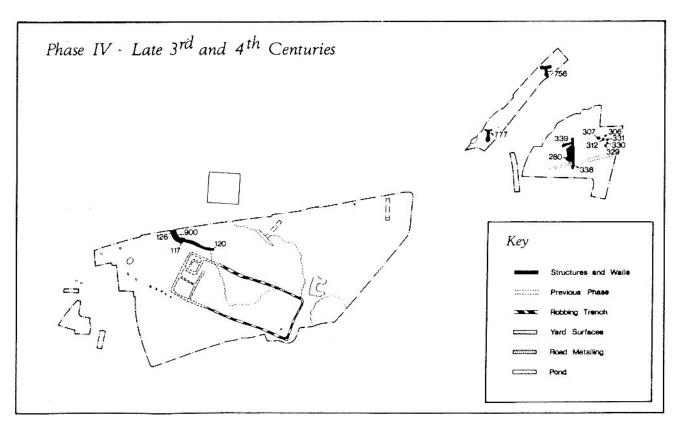
4.46 By the late third century the road serving the settlement seen in area G appears to have fallen into disuse. The metalled surfaces were virtually worn through, and the recut of the southern roadside ditch [319], had been choked by accumulated silts. This abandonment of the route was further emphasised by the emergence of a large dry-stone flint wall across its width. The foundation layers of this wall [280],

Little Wymondley Bypass - Preliminary Phase Development









survived to a height of about 0.2m, two to three loose courses of flint rubble, and rested on the metalled surface of the road. The length of the wall appeared to be determined by the 5 metre width of metalling, and varied in thickness from 0.8m to 1m where the overburden of collapsed flints was removed.

4.47 A scatter of flint rubble recorded in the 1975 water pipe trench (Burleigh 1975), suggests that a further wall may have existed approximately 6m to the west of [280]. It is possible therefore that wall [280], represents the gable end of a rectangular structure of which the companion wall was completely destroyed by the earlier pipe trench. There was no evidence for side walls. However, a thick layer of dark silt, in places up to 0.2m deep [278], which extended from the eastern edge of the 1975 easement and was contained by the western edge of the wall may have respected the interior of the building. In which case timber or panelled walls might have been employed. A shallow north/south oriented ditch [338], flanked the eastern side of wall [280], and excavation revealed that a short length of the northern roadside ditch had been recut [339], extending westwards from the wall terminal. These ditches may have served as drainage channels associated with the building.

4.48 Although a few fragments of burnt tile were recovered from the carbon-stained layer [278], this context does not appear to be a destruction deposit, as it was clearly contained by the structure and did not extend beyond. The final interpretation of this building will depend on the results of environmental samples taken from this layer. It may be that this material resulted from prolonged activity relating to agricultural or industrial processes. Iron waste and slag fragments were recovered from area G, but not in direct association with this structure. Samples were also taken from carbon-rich deposits in the northern ditch recut [339], and from one of the circular pits [312], which were cut through the road surface during this phase.

4.49 If the activities here reflect cereal processing, which at present seems the most likely explanation since preliminary samples from layer [278] have been shown to contain 'abundant cereal chaff' (Appendix ii, Sample 2116); speculation on the continued use of the kilns mentioned in Phase III may also be justified. As previously stated, the dating evidence for these structures is still uncertain, and therefore cannot be used to rule out their continued use into the fourth century. Superficially similar deposits of dark grey, carbonstained silt were widespread in the area between the two kilns. Comparison of the environmental evidence may prove enlightening.

4.50 Although certain sections appear to have been demolished or abandoned during the fourth century, this does not indicate the general collapse of the settlement. The structures and yards exposed within the bypass route may have formed the nucleus of the farmstead until the late third century; but it is considered possible from the position of the large flint wall [126], and indeed the structure to the north of pylon 70, that the centre of the settlement may have shifted to the north during the final phase.

4.51 There is as yet no secure dating for the final abandonment of the site. Inevitably, robbing of walls and quarrying the site for reusable material may have continued for a considerable period. A large circular pit [201], and a shallow, irregular ditch [253], truncated the demolition scatter from the northern building [126], and may reflect later deterioration of the site, perhaps in the later fourth century.

4.52 The Medieval manor of Wymondley Bury, subsumed the settlement area within a formalised deer park. This factor may have a bearing on the relative survival of the site, limiting the frequency of ridge and furrow cultivation in this area (Burleigh and Went 1990). Nevertheless, should the opportunity arise, it would be interesting to examine the foundations of the first manor building for

traces of reused Romano-British building materials.

WBP-2: The Iron Age Settlement

(see Figure 1)

- 4.53 Geophysical survey results from the raised plateau at the eastern end of the bypass, TL 223 269, supported our suspicion that such topographical locations have a high potential for ancient habitation. Several anomalies tentatively identified as pits and ditches were recorded (Geophysical Surveys 1990, Area 4). However the field surface produced no dateable material, and without such complimentary evidence neither English Heritage nor the Hertfordshire County Council were prepared to countenance excavation in advance of construction.
- 4.54 Attempts to monitor this section of the route were hindered by a lack of communication from the bypass Highway engineers and contractors; consequently, only two features were excavated, and then under salvage conditions during major reduction of the ground level at this point.
- 4.55 The first feature [02], excavated in July, was a shallow oval pit, 1.95 x 1.46 x 0.24m deep, containing two sandy silt fills, the uppermost stained by organic and carbonised inclusions. A small hand-made, globular jar with perforated lug handles was situated at the interface of these two layers. The vessel was made of a poorly fired, sandy fabric, and is provisionally dated to the period 300-200 BC.
- 4.56 A second feature, a hearth [08], was excavated in October 1991, barely five metres to the south-east of pit [02]. This feature was comprised of concentric rings of carbon stained, partially fired and scorched clay; which

contained pottery sherds comparable to those recovered from pit [02]. Two quadrants were excavated revealing that the containing pit had survived to a depth of 0.15m, despite approximately 0.2m truncation of the surface by the grading machines. Samples of carbonised seeds were retained for future analysis.

4.57 These two features provide a poor sample from what may have been a larger and more complex Iron Age site overlooking the fertile slopes to the south. The geophysical survey results were validated to some extent, although it is not possible to extrapolate further features from the vague patterns of anomalies. Modern land drains noted during the excavation may account for some of the readings.

WBP-3: An early Iron Age find

(see Figure 1)

4.58 A large area to the south of the Blakemore Hotel was stripped of topsoil to accommodate excess topsoil from the bypass construction. This area was monitored with little success, since the grading machines deployed for the task rendered the surface virtually unintelligible. A single sherd of vegetable-tempered pottery, hand-made with quartz inclusions, was discovered in the wake of the machines, although no features were identified. The location of this find, TL 2095 2715, was barely 250m to the east of Stutley's Gravel Pit where a small quantity of early Iron Age pottery was recovered in 1963 (Hertfordshire SMR number 0464). The sherd recovered during the recent work is of a similar date, and may indicate the further extent of this occupation site, situated on the western edge of the broad plateau which also supported the later Romano-British settlement, WBP-1, approximately a kilometre to the east.

The Romano-British Settlement

5.1 Residual artifacts from the late Neolithic period and early Bronze Age were a relatively frequent occurrence in the area of the main site. This 'background noise' of prehistoric occupation is quite common in North Hertfordshire and doubtless indicates the widespread use of both the light calcareous soils and heavier brown earths to either side of the Icknield Belt. The level of occupation is exemplified by numerous burial barrows, particularly in the north-east of the district, however, specific occupation sites are still a rarity, and the Little Wymondley bypass had no further light to shed on the matter. Doubtless much of this apparent rarity of habitation sites is due to later erosion of the landscape, especially by ploughing.

5.2 In the late Pre-Roman Iron Age a series of ditches were employed, probably to define the limits of a small settlement, on a broad ridge of high ground which slopes gently towards wide dry valleys to the south and east. Part of a cobbled surface and a single inurned cremation attest to the location of the occupation area. There is at present insufficient evidence to prove direct continuity or otherwise between this period and the major development of the settlement in the late first and early second centuries AD. However it seems likely that there was continuity as suggested by the positions of ditches [513] and [639] in the early Roman period, and by the continuing burial of cremations in the NW corner of area A-F. Such continuity on rural sites in Hertfordshire between the late Iron Age and Roman periods is not unusual. Certainly the changes were dramatic, however. A metalled road was constructed, projecting westwards from an unknown point, but probably from a north-south road on the line of the present A6141, formally the A1, the 'Great North Road', towards a Romanised cottage house surrounded by yards and further agricultural buildings. Continued development

in the second and early third centuries, led to the abandonment of a chalk floored extension to the west of the house in favour of an elaborate well; and the introduction of a large rectangular walled enclosure, perhaps a larger building, extending to the east including some restructuring of the cottage house itself. A large pond was dug to the east of this wall, truncating the clay floor of an earlier building, which was perhaps used for watering livestock. However, the minimal quantity of animal bone from the site (see Appendix iii), imply either that stock was not generally slaughtered within the settlement, or that cereal production was the main concern. By the mid to late third century a sector of the farm, approximately one hundred metres to the north-east of the farmyard appears to have developed as a cereal processing area, utilising at least two or three 'T' shaped kilns. Activity in this area appears to have continued into the fourth century, whereas the nucleus of the settlement was manifestly altered. The yard wall was removed and the cottage house either partially or wholly abandoned. The upper flint courses within the well were robbed and the shaft backfilled incorporating a disturbed inhumation probably from the cemetery nearby. The road-way was blocked by construction of a flint walled building, layers from the interior of which suggest further industrial or agricultural activity. A considerably larger flint walled building was constructed to the north of the cottage house, in the vicinity of the earlier cremation cemetery, perhaps indicating that the core of the settlement moved northwards beyond the present limits of excavation. At present, the final abandonment of the site is judged to have taken place in the late fourth century.

5.3 It must be emphasised that the above is only a provisional outline. Although the current interpretation may prove broadly satisfactory, many aspects will be modified by further analysis.

- 5.4 The site, although plough-damaged, was sufficiently well preserved to have merited either much more extensive excavation or preservation as a scheduled ancient monument. Yet the evaluation was conducted at a stage when further alterations to the bypass route would not have been considered; and, as a consequence, the ensuing rescue excavation with its limited objectives and available time, could not hope to encompass the potential for detailed information from the site. Nevertheless, from the records and the material archive a great deal may yet be achieved.
- 5.5 The present development hypothesis reflects a common trend in rural settlement studies epitomised by Branigan's Model 2 (Miles 1982), which describes the reorganisation of the late Iron Age farm in the wake of the Roman invasion. However until further analysis of the pottery, we cannot properly address the question of continuity between these two phases. Since even Lockleys Villa, the classic development model chosen by A L F Rivet to demonstrate the succession from Iron Age farm to villa, has received serious criticism (Saunders 1987), this topic still remains fundamental to settlement studies of the period.
- 5.6 A particular question related to this sequence of change surrounded the dates of the chalk floors to the west of the cottage house. It has been suggested (Section 4.21), that the smaller chalk surface [157], may be separate from the larger layer [65], which relates to the cottage house, and belong to an earlier period. Chalk floors are certainly known from the late Iron Age; indeed a reassessment of Park Street villa, Hertford, places one such example in the pre-conquest period (ibid. Appendix III). Detailed examination of the pottery from this area may resolve this uncertainty.
- 5.7 The 'T' shaped furnaces in area J are of particular interest and certainly merit further work. There continues to be much debate concerning the function of these features, which generally fall under the generic term 'corn

- drier'. This suggestion of function derives initially from a statement by Gowland in the Hambleden Villa report (Cocks 1921); however, the reasoning behind this interpretation is obscure and avoids the problems of drying capacity and throughput. In 1979, Reynolds and Langley experimented with a reconstruction of a box furnace from Foxhole Farm, Hertfordshire (Reynolds and Langley 1979), and regarded this considerably larger structure as totally inadequate to reduce the moisture content of a large quantity of grain let alone an entire crop. Based on evidence of sprouted barley from Barton Court Farm, Oxfordshire, the experimenters also tried heating steeped grain to the temperatures required to halt germination. This achieved, it seemed probable that in some cases the driers might have been used efficiently in the malting process of making beer from barley; as long as the temperature could be effectively controlled. The position of vents in either end of the cross flue in the Little Wymondley kiln [756], might have enabled the temperature to have been regulated in this manner.
- 5.8 It was still implicit from this work that small quantities of grain could be dried for domestic consumption, rather than the wholesale processing of the crop. This would render the grain dry enough to mill without causing a paste, resulting in finer flour, and, as Pliny mentions regarding grain roasting in Etruria, a nett increase in yield (Natural Histories XVIII).
- 5.9 Kilns of this kind were not always used to dry cereals, and may have served a variety of purposes, for example an oven at Churchill Hospital, Oxon., was used to dry pottery to the leather-hard state (Young, cited in Black 1987). However, there is a notable amount of circumstantial evidence for the association of drying ovens with the preparation of grain. The presence of quernstones both nearby and reused within the structures is such a case. At West Blatchington, Sussex, nine quern fragments lined the firebox of the kiln, and this technique was also used in Little Wymondley kiln [777]. The same phenomenon has been

noted at Kingston Buci, Sussex, Hambleden, Bucks., and less certainly at Bishopstone, Essex. Broken quernstones were also recovered from area G on the Little Wymondley site, an area also suspected to demonstrate cereal processing (see Appendix ii, Sample 2116).

5.10 The chalk built, 'T' shaped kiln at Little Wymondley [756], was exceptionally well preserved, perhaps the most complete yet excavated in the county. The detailed records of the excavation together with the results of environmental samples taken from both kilns, must be published in full to enable these finds to be included in the academic debate.

5.11 The status of the Little Wymondley settlement requires some clarification. The term villa has been deliberately avoided for a number of reasons, principally because it infers connotations about the site which are not appropriate.

5.12 Some authors, including R G Collingwood and K Branigan prefer a broad interpretation of the term, indicating that any farmstead displaying a notable degree of Romanisation would fall within this category. Primary sources often seem less concerned with structures than the function of the farm. Varro clearly states that the production and sale of produce for profit is the only essential criteria (Res Rusticae IV 5-18). However in modern archaeological terminology, and for that matter in the public perception, there are greater distinctions.

5.13 The Little Wymondley settlement might fit the most basic requirements of a villa; certainly if the question of scale implied by Varro denotes status. Habitation evidence was traced for two hundred metres along the bypass route, and although the area to the south of the carriageway appeared blank, both the recent fieldwork and the 1990 survey suggest that the occupation area extended for at least sixty metres beyond the northern boundary of areas A-F. This would denote a total area of approximately two hectares, five acres, over which such remains could be preserved.

5.14 The settlement may even be acceptable under more stringent definitions. Black (1987), states that in order to qualify for villa status 'a house must possess at least three rooms conceived as a whole'. The Type B or 'cottage house' fulfils this stipulation, and is typical of a house form found widely across the south-east of England. Rivet (1958), considered this style to be derivative of prototypes found in early Romanised towns, and cited early examples at Lockleys and Park Street as evidence for the particular adoption of this form within the territory of the Catuvellauni. An alternative explanation was offered by S Applebaum, who considered these examples too early to have derived from urban models, and postulated that their development was born of an influx of ideals from Roman Gaul (Applebaum 1972). In either case this form of building has wide distribution, and although often the earliest building style and subsequently enlarged, it also occurs in the basic layout throughout the period of Roman provincial government.

5.15 Despite these similarities to the early phases of established villas, the central question of status remains, as far as can be determined from the material evidence. Black's definition (ibid. 1987), also exemplifies the use of stone foundations as an expression of wealth and permanence. Obviously, this must be qualified by the availability of local building materials. Stone construction is rare in Hertfordshire outside of the principal town of Verulamium. Lockleys, Dicket Mead (Rook 1987), and other 'true' villas in the county were constructed primarily using the same flint in lime mortar techniques as at Little Wymondley. The conspicuous display of wealth in layout and construction is perhaps the main gauge of status, reflecting the aspirations or prestige of the owner or manager of the villa estate. Tessaræ and fragments of mosaic and painted plaster from the Little Wymondley cottage house attest a degree of refinement, but the settlement did not develop the elaboration of more accepted villas. There were neither hypocaust systems nor baths within the excavated area, although a few possible hypocaust tiles were recovered which may be verified by an appropriate specialist. Furthermore, despite numerous metal detector surveys, there was a notable absence of 'valuable' metal objects within the settlement, whereas a relatively large quantity of functional iron objects were recovered.

- 5.16 The Little Wymondley settlement is perhaps more properly termed a Romano-British farmstead; a title which confers a more accurate description of its purpose. Although it certainly displays a degree of Romanised taste in the pattern and fabric of some of the buildings, there are at present no reasons to suppose that the structures had any functions other than those of a modest, business-like farm.
- 5.17 Such lower status sites must have been a predominant feature of the Romano-British countryside, literally numbering in hundreds across south-east England. It is in such locations, where until the nineteenth century the majority of people spent their lives, that the

nature of society must be sought. Yet very few such settlements have been studied in Hertfordshire, where until quite recently the higher status villa sites were the principal target for excavation. This imbalance has serious ramifications for our perception of the period, and must be modified. High status villas were mercurial, changing rapidly in accordance with the political fortunes of the province. The farmsteads, on the other hand, are likely to have been more conservative, and their measured development may reflect deeper economic and social trends.

5.18 Road schemes such as the Little Wymondley bypass allow a random pattern of settlements to be studied, rather than those chosen for any perceived significance. In this instance the opportunity arose which coincided with a research priority within the county. Further analysis and publication will be a significant contribution to regional studies of the Romano-British period.

6. Recommendations

- 6.1 The extensive and long-lived Romano-British settlement at Wymondley Bury must surely count as one of the most significant archaeological discoveries of its type in the region in recent years; the investigation of which will, when presented to a wider audience, do much to redress the imbalance in local settlement studies which hitherto have focused more often on higher status 'villa' sites. The excavation, whilst far from complete, has enabled a sizeable sample of the site, perhaps the nucleus, to be examined in some detail prior to its destruction. The small Middle Iron Age site located towards the eastern extreme of the bypass route is also notable given the relative scarcity of occupation evidence for this period in the district.
- 6.2 The results of this investigation should, after further consideration of the evidence, be published in full in a suitable journal, probably Hertfordshire Archaeology.
- 6.3 The text of this report is no more than archive level, based on only a preliminary examination of the material evidence, and will need to be re-written to publication standard. Contributions are now required from specialists in the fields of: human remains, faunal remains, metal objects and coins, building materials, environmental samples and most particularly pottery. These will allow for a far more accurate and informative text to be produced for the final publication.
- 6.4 Further illustrations will be required. The present phase diagrams will need revision and expansion in the light of the specialist reports, and in general greater detail will be necessary. In addition, finds illustrations, section drawings and detailed plans of certain features must be included, as well as maps placing the site in both its local and regional contexts; together with distribution maps depicting comparable settlement types.
- 6.5 Numerous small finds mentioned below

- (see Appendix iii) require conservation and study.
- 6.6 The final publishable report will require input from the site director, an illustrator, a number of specialists and probably a post-excavation assistant; the report will be edited by the Keeper of Field Archaeology. Once the specialist reports are available it should be possible to produce a final report in a period of about three months. A draft text covering much of the work and many of the required illustrations could be prepared pending receipt of specialist reports.
- 6.7 The preservation of the Romano-British site (WBP-1), although not remarkable, was good. It was evident from aerial photographs of the area, fieldwalking and the observation of features at the edges of the investigated areas, that the settlement extended far beyond the limits of the excavation, most notably to the north where several structures and a cemetery are known or suspected. At present, and for the foreseeable future, this area is destined to remain arable land. However, given the tendency for bypasses to re-define planning priorities, it is by no means inconceivable that either industrial or residential 'infilling' may take place between the bypass and the village, or along the edges of the new road. For the security of the remaining unexcavated part of this important settlement, which will be vital for greater understanding of the site in the future, and for its preservation as a good example of its type, it is essential that measures are taken now for the protection of this area, both from any constructional operations and from any deep ploughing or drainage activities, such as sub-soil busting.
- 6.8 The excavation of this site is a rare example in Hertfordshire of the investigation of a lower status Romano-British rural farmstead. The only comparable sites within the county which have been excavated in recent times are

Foxholes Farm, Hertford (Partridge 1989) and Chells Manor/Boxfield Farm, Stevenage (Hunn, forthcoming). The latter site affords the best comparison both in terms of the type of site and the scale of investigation. The scale of investigation at the Wymondley Bury farmstead and the resultant site plan are both at least as extensive as at Chells, whilst the preservation of the remains at Wymondley Bury was much better than at Chells. The Chells excavations are currently being prepared for full publica-

tion. It is essential that the Wymondley Bury excavations also receive further analysis and full publication in order that direct comparisons may be made between these two sites. Only when this work is completed will these two important investigations be able to take their place in the analysis, interpretation and understanding of Romano-British farmsteads and settlement types and patterns in the region and beyond.

Appendix i: Human remains

Cremation	18			
Context	Grid	Grave goods	Phase	Sample
483	264.5/	Samian dish	Ш	
	150.8	Coarse, sand-tempered jar*		2157
		Greyware beaker		
509	211.25/	Grog-tempered jar*	redeposited	2128
	124.05	Shelly-ware vessel	п	
859	196.75/	Grog-tempered storage jar*	I	
	137			
861	190/	Storage jar*	Ш	2150
	133.45	Two samain bowls		
		Oxfordshire-ware butt beaker		
		151 hobnails (A 6127)		
		Iron lamp holder (A 6126)		
864	190/	Disturbed part of 861		
	133			
869	196.25/	Large storage jar*	m	2148
	135.85	Greyware vessel		
		Greyware butt beaker		
872	194.2/	Coarse grained sandy-ware urn*	II	
	131.7			
903	200/	Un-urned cremation	III/IV	
	126	Two sherds of shelly-ware		
		One sherd of Black Burnished 2		
911	184.3/	Storage jar*	Ш	
	123.7	Pedestal jar		
	6	Oxfordshire-ware flagon		
		183 hobnails		
		Copper alloy object (coin?) in		
		an iron setting (A 6515).		
912	182.75/123.7	Greyware jar*	Ш	

913 183.75/ Plough damaged scatter from 911

123.5

Inhumation

924

Single adult inhumation re-deposited in well shaft 918. Comprises: skull, mandible, scapulae, left arm/hand, left femur, ribcage, vertebrae and pelvis/sacrum. Only the torso, left arm and left femur remained articulated. An iron blade, possibly a knife (A6509), was lodged vertically between the lumbar vertebrae. Coeval finds from the well fill indicate a late third century deposit, although the date of the original burial is uncertain.

Appendix	ii: Environ	mental sam	ples	
Sample	Context	Quantity	Description/source	Area
No.		(2 Kg bags)		
2112	266	8	Roadside ditch fill	G
2114*	283	2	Charcoal-rich pit fill	G
2115	324	2	Carbon stained fill of road-side ditch	G
2116*	278	2	Carbon rich' layer related to structure 280	G
2117	324	6	Carbon stained roadside ditch fill	G
2118	300/346	8	Carbon stained pit fill	G
2121	403	3	Hearth	F
2122	403	1	Hearth	F
2123*	404	1	Charcoal-stained fill of post-hole	
			cut into hearth 403	F
2124	405	1	Primary fill of post-hole cut into	
			hearth 404	F
2125*	415	1	Hearth waste	F
2126	419	1	Upper fill of pit 505, small amount of	
			charcoal present	F
2131	591	3	Ditch fill, charcoal residue	F
2132	665	4	Intermediate ditch fill, charcoal residue	В
2133	661	2	Ditch fill	C
2134*	732	4	Dark pit fill, possibly organic/cereal waste	J

^{*} denotes the cinerary urn

2136	712	4	Scorched clay and carbon staining from	
			the firebox of kiln 777	J
2137*	770	5	Ash-rich layer in gulley 775	J
2138	750	10	Fill of kiln 756	J
2139	778	3	Carbon-stained upper fill of	
			square-shaped pit 805	J
2140	755	3	Stoke-hole of kiln 756	J
2141	803	1	Burnt clay from kiln 777	J
2142	790	4	Fill from kiln 777	J
2143*	807	2	'Carbonised' seeds in kiln 756	J
2144	818	6	Dark, organic fill of un-excavated	
			pit near kilns	J
2145	817	6	Related to sample 2144	J
2146	824	3	Fill of kiln 756 near stoke-hole.	
			Related to sample 2154	J
2149	837	4	Compact carbon floor of kiln 756	J
2153*	845	1	Scorched clay in kiln 756 with	
			quantities of carbonised grain	J
2154*	824	1	Fill from open flue of kiln 756.	
			Seeds apparent. Relate to sample 2146	J
2155	806	1	Base fill of fire pit. Kiln 756	J
2156*	807	4	Seed deposits in kiln 756	J
2158	01	8	Pit fill with organic composition	WBP-1
2159*	06	3	As 2155	J
2160	920	8	Lower fill of well 918	Α
2164	920	1	Possible burnt residue in lower well fill	A
2165*	929	16	Lowest fill of well 918	
			(not fully excavated)	Α

^{*} denotes selection of sub-samples sent to the University of East Anglia for preliminary assessment.

Assessment of Environmental Samples by P. Murphy

Results

- Table 1: Macrofossils from sub-samples assessed.
- 2114: Abundant charcoal, fragments up to 20mm.
- 2116: Rare small charcoal fragments under 5mm; very abundant charred cereal chaff, mainly glume bases, rachis internodes etc. of Triticum spelta with Triticum and Avena awns; some cereal grain fragments including germinated Triticum grains; cereal 'sprouts'; occasional weed fruits including P.convolvulus and Gramineæ
- 2123: Rare small charcoal fragments under 5mm; fired clay fragments.
- 2125: Rare small charcoal fragments under 5mm; heat-shattered flint.
- 2134: Rare small charcoal fragments under 5mm; glume bases of T. Spelta, cereal grain fragments.
- 2137: Charcoal fragments up to 10mm; glume bases of T. spelta, cereal grain fragments.
- 2143: Very rare small charcoal fragments under 5mm; sub-spherical black iron-rich concretions; fired clay fragments.
- 2153: Reddened fired clay fragments up to 50mm with some carbon inclusions; impossible to disaggregate.
- 2154: Very rare small charcoal fragments under 5mm; one cereal grain fragment; helicid shell fragments; fired clay.
- 2156: Very rare small charcoal fragments under 5mm; sub-spherical black iron-rich concretions.
- 2159: Very rare small charcoal fragments under 5mm; sub-spherical black iron-rich concretions, fired clay fragments; heat shattered flint fragments.
- 2160: Very rare small charcoal fragments under 5mm; small mammal and amphibian bones; Carychium sp, Discus rotundatus, Trichia hispida-group, Vitrea sp.
- 2165: Very rare small charcoal fragments under 5mm; small mammal/amphibian bone.

Of the twelve samples collected from the 'T'shaped kilns, five were assessed. 2153 was of fired clay and would not be disaggregated. The other four, 2143, 2154, 2156 and 2159 produced virtually no cereal remains, apart from a single grain fragment and very little charcoal. They did however, include small black sub-spherical iron-rich concretions, understandably mistaken in the field for carbonised seeds.

Samples 2159 and 2160 from the well fills,

were moist clay deposits, but they include no macrofossils preserved by waterlogging and seem to represent clay back-fills into which some small vertebrate and mollusc remains became incorporated.

A pit fill (sample 2134) and a kiln stoke-hole (2137) produced cerial remains apparently associated with spelt processing, but the densest cereal deposit came from layer [278] (sample 2116) with very abundant chaff. Other examples produced only charcoal fragments.

Recommendations

Total

Further processing of the kiln samples 2138,2140 and 2142 to retrieve botanical material is likely to be worthwhile, also the iron-rich concretions should be examined from a technological viewpoint to see whether the function of the feature should be re-considered. Could one of the kilns have been related to iron-working?

The basal, presumably organic. well fills could not be excavated and the samples from the deepest layers excavated are of predominantly mineral back-fills. It is not thought that processing these would provide useful assemblages of biological materials

Samples 2116, 2134 and 2137 have been shown to contain cereals and these should be processed. The hearth sample 2121 is also likely to be worth processing. Most other environmental samples listed by the excavators seem, on contextual criteria, to have little potential

Appendix iii: Quantification of finds

WBP-2 Total Finds			
Pottery	840g		
Tile	40g		
Fired clay	535g		
Worked stone	340g		
Worked flint	2 items		
Animal bone	10g (of which burnt bone 5g)		
WBP-1			
Ceramics			
Pottery total (excluding cremation assemblages)	54.832 Kg		
Ceramic building materials			
Tegula	19.31 Kg		
Tessarae	30.29 Kg		
Floor tile	61.07 Kg		
Brick	20.07 Kg		
Wall (flue?) tile	6.38 Kg		
Kiln tile (vents)	1.23 Kg		
Unclassified tile	7.38 Kg		

146.73 Kg

Animal Bone

9.97 Kg

Stone

Worked flint

94 items

Worked building stone

Chalk

14 items

(including 12 blocks from Kiln 756

Ragstone

1 item

Flint

2 items

Other

11 items

Building material samples

2113 Concretion used as post hole packing

Area A-F

Deposit of builders lime in ditch fill

Area G

2130 Worked stone from pit fill

Area A-F

2152 Mortar from kiln

756

2161 Mortar from the walls of well shaft

2119

918

2162 Mortar from the fill of well

918

Quernstones

Niedermendig

10 fragments

Millstone grit

30 items including 19 from the firebox

of kiln 777

Hertfordshire Puddingstone

3 items

Metals (excluding small finds)

Slag:

1.820g

32 fragments, average 57g

Unidentified Iron Objects:

1.295g,

77 items, average 17g

Nails with two and three dimensional co-ordinates from Area A-F: 195

Glass

Unstratified

Stratified

206.5g (11 fragments)

20g (6 fragments)

Small Finds		A 6075	,,	
Coins (awaiting specialist identification)		A 6078	Strap attached to three chain	
Find No.	Find No.		links	
A 6067	Copper alloy	A 6082	Spear head	
A 6068	2.9	A 6089	Staple	
A 6077	Silver	A 6090	Hobnail	
A 6084	Copper alloy	A 6091	Unidentified object	
A 6112	**	A 6099	Blade	
A 6117	,,	A 6100	Unidentified object	
A 6515	Copper alloy coin in iron setting	A 6106	Hobnail	
	(medallion?) from cremation 911	A 6108	Two hobnails	
A 6517	Silver Vespasian	A 6109	Hobnail	
A 6531	Copper alloy	A 6110	**	
A 6532	,,	A 6111	**	
A 6535	,,	A 6115	Strap fragment	
Copper allo	y objects	A 6126	Lamp holder from cremation	
A 6069	pin		861	
A 6072	Brooch pin	A 6127	151 Hobnails "	
A 6076	Medieval trading token	A 6509	Knife blade (located between the	
A 6079	Bracelet fragment		vertebrae of Inhumation 924)	
A 6080	Pin	A 6514	Unidentified object	
A 6081	Unidentified fragment	A 6521	Strap fragment	
A 6086	Brooch pin	A 6522	Arrow head	
A 6095	Bracelet	A 6523	Chisel blade	
A 6114	Pin	A 6524	Adze blade	
A 6530	Brooch	A 6526	Blade fragments	
A 6533	Wire fragment	A 6529	Unidentified object	
A 6576	Post-medieval button	A 6578	Hobnail	
Iron objects		A 6579	Unidentified object	
A 6071	Hook	A 6603	183 hobnails from cremation	
A 6074	Unidentified object		911	

Others	
A 6083	Fragment of jet/shale bracelet
A 6087	Bone counter
A 6093	Patterned samian
A 6094	,,
A 6096	,,
A 6113	Glass working slag
A 6121	Polychrome mosaic fragment
A 6122	Wall plaster
A 6123	Decorated bone gaming counter
A 6124	Red and white mosaic fragment
A 6125	Painted wall plaster
A 6512	Unidentified lead object
A 6516	Glass fragment
A 6518	Decorated wall plaster
A 6519	Lead fragment
A 6520	Bone pin fragment
A 6527	Unidentified lead object
A 6528	Glass fragment
A 6534	Unidentified silver object

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