



Archaeological Services & Consultancy Ltd

HISTORIC BUILDING RECORDING: ROWLEY FARM LOWFIELD HEATH CRAWLEY SURREY

on behalf of English Partnerships



Karin Semmelmann MA AIFA

September 2006

ASC: 843/CRF/1

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Site Data

ASC project code:	CRF	ASC Project No:	843
County:	Surrey		
Village/Town:	Crawley		
Civil Parish:	Crawley		
NGR (to 8 figs):	TQ 2798 3959		
Present use:	Cow shed		
Planning proposal:	Demolition		
Planning application ref/date:	N/A		
Local Planning Authority:	Crawley Borough Council		
Date of fieldwork:	6 th September 2006		
Client:	English Partnerships Arpley House 110 Birchwood Boulevard Birchwood Warrington WA3 7QH		
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Internal Quality Check

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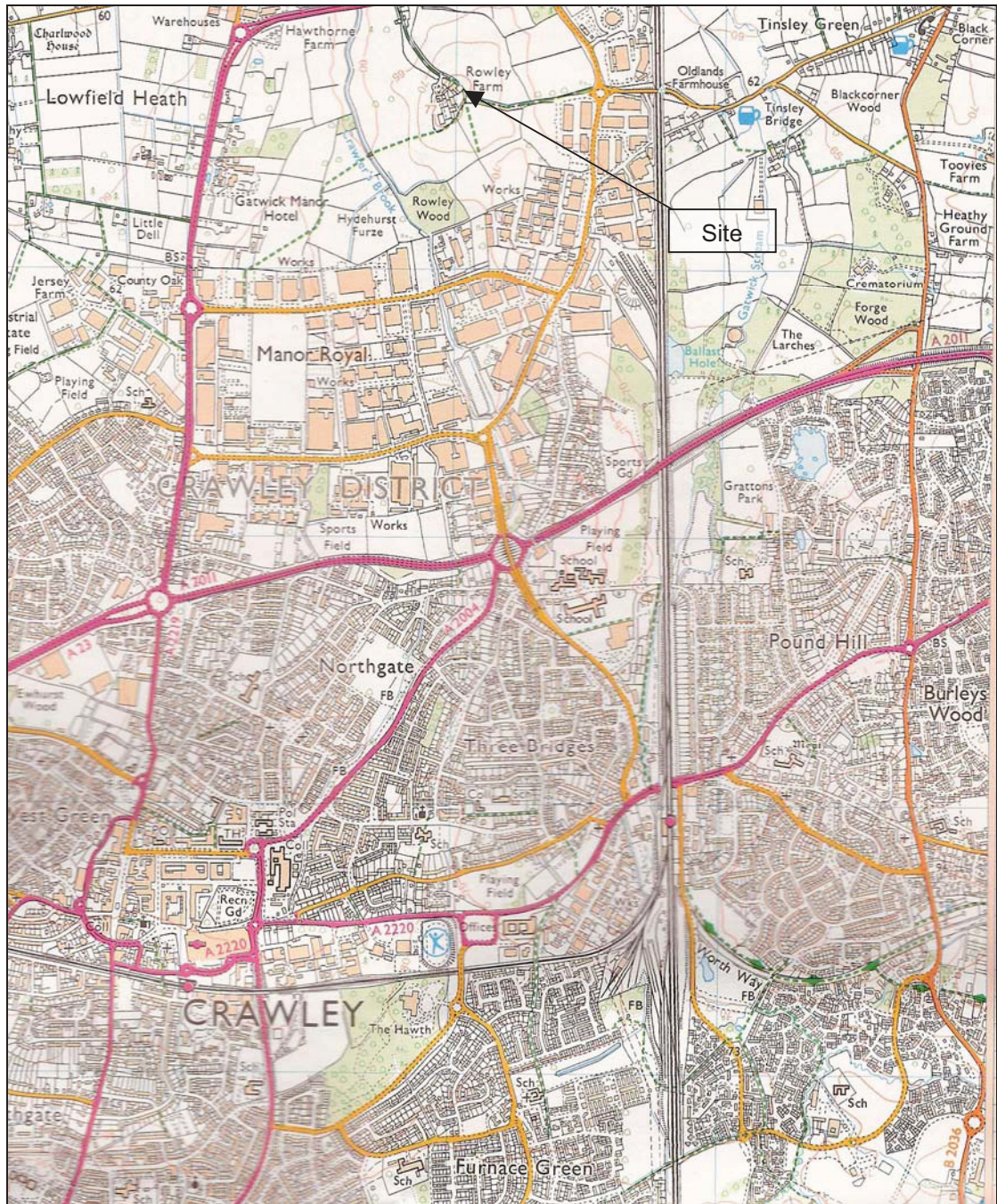


Figure 1: General location (scale 1:25,000)

Summary

In September 2006 Archaeological Services and Consultancy Ltd (ASC) carried out historic building recording of the timbers in a cow shed at Rowley Farm, Lowfield Heath, Crawley, Surrey in response to proposals for the demolition of the building.

The building is a modern blockwork, single storey structure under a metal roof that is hipped at both ends. It is open to the south and north giving access to the yard and a field respectively. The roof timbers are considerably older than the building and appear to have originated from two late 16th century buildings that may have been erected by the same carpenter. The mortices and stud holes in the eastern wallplate suggest that this may have housed the service doors in the screen passage of a hall house. The roof trusses are more likely to have come from a smaller farm building with internal subdivisions or possibly a cross wing.

1 Introduction

1.1 In September 2006 *Archaeological Services and Consultancy Ltd* (ASC) carried out historic building recording of a cow shed at Rowley Farm, Lowfield Heath, Crawley, Surrey (NGR TQ 2798 3959: Fig. 1). The project was commissioned by Lambert Smith Hampton on behalf of English Partnerships and was carried out according to ASC's Standard Method Statement for building recording (Appendix 1). The relevant planning application reference is not known.

1.2 *Planning Background*

This building recording project has been required under the terms of *Planning Policy Guidance Note 15* (PPG15), in response to proposals for the demolition of buildings on the site.

1.3 *Location*

Rowley Farm is located approximately 3km north of the centre of Crawley. The cow shed itself is situated at the northern end of the complex of farm buildings. It is accessed by a track to the northwest that runs from the Brighton Road to Rowley Farm.

1.4 *Description*

The building is a modern blockwork, single storey structure under a metal roof that is hipped at both ends (Fig. 3). It is open to the south and north giving access to the yard and a field respectively.

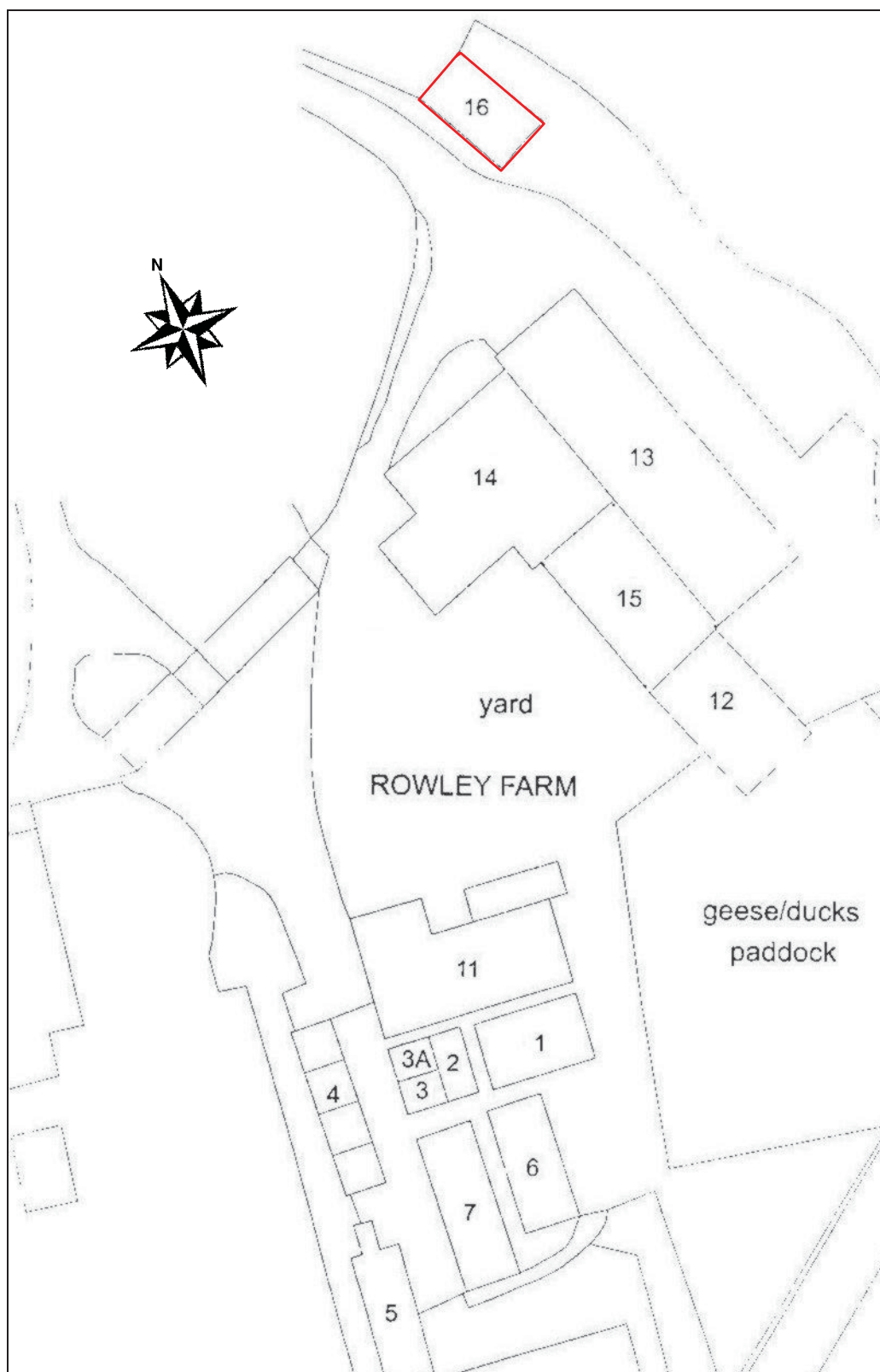


Figure 2: Site location (*not to scale*)

2 Aims & Methods

2.1 Aims

The aims of the building recording were:

- To compile a record of the timberwork associated with the roof
- To ascertain the structural history of the timberwork
- To prepare a report on the subsequent findings

2.2 Standards

The work conforms to the project design, to the relevant sections of the Institute of Archaeologists' *Code of Conduct* (IFA 2000) and *Standard & Guidance Notes* (IFA 2001), to current English Heritage guidelines (EH 1991; EH 2006), and to the relevant sections of ASC's own *Operations Manual*.

2.3 Methods

The work was carried out according to the Method Statement, which required:

- A survey of the timbers
- The preparation of a report, based on the results

3 Description

3.1 *General* (Plates 1-4)

The roof is a clasped purlin type, with one purlin on either side made of single timbers laid with the larger section to the south. The principal rafters appear to have been replaced but the common rafters seem to be largely original, waney-edged timbers at 45cm centres that have been pegged at the apex. The rafters in the northern hipped roof are also waney-edged, with some bark still *in situ* on the eastern two timbers. The rafters on the southern hipped roof are all modern. The two trusses have bowed tiebeams, which are likely to have come from the same tree, probably a hedge oak.

3.2 *Southern Truss* (Fig. 4, Plate 5)

This has three mortices on the underside of the tiebeam, all with a single peg hole above and an iron nail on the northern side of the central mortice, which is scorched to the east and west. There is an iron tie at either end of the tiebeam on the northern side, the western one of which is no longer attached to the wall.

3.3 *Northern Truss* (Plate 6)

This also has three mortices on the underside of the tiebeam. The eastern mortice has two wooden pegs and the central one a single peg. The western end of the tiebeam has additional timbers to the north and south obscuring what appears to be an edge-halved scarf joint with bridled abutments immediately adjacent to the mortice. There is an iron tie on the northern side of the east end of the tiebeam and the southern side of the western end.

3.4 *Eastern Wallplate* (Fig. 5, Plates 7-8)

This has the most visible structural details along its length, including two edge-halved scarf joints with bridled abutments, several stud holes and three mortices with two peg holes above for larger timbers. The southernmost scarf joint is an interesting example of the amalgamation of an edge-halved scarf joint with a mortice on the eastern side.

Carpenter's assembly marks can be seen running consecutively from south to north, and additional assembly marks have been carved into the top and bottom of each of the scarf joints (I and II respectively). The ends of the wallplate, which is 14cm square, are well finished and protrude at either end of the elevation.

3.5 *Western Wallplate* (Plate 9)

This is 14cm high and made up of two timbers joined by an edge-halved scarf joint. The timber to the south of the scarf joint is waney-edged, but that to the north is machine cut. The joint is marked with the number III.

3.6 *Northern Tiebeam*

As much of this rests directly on the north wall only a single mortice can be seen at the western end. This also has two pegs above it. The beam is 25.5cm wide and 19cm deep.

3.7 *Southern Tiebeam* (Plate 10)

This is 17cm wide, 14cm high and is supported by a modern RSJ. There are three mortices on the underside with two pegs above each.



Plate 1: South elevation



Plate 2: West elevation



Plate 3: North elevation



Plate 4: East elevation



Plate 5: Interior looking north



Plate 6: Scarf joint & mortice detail, northern tiebeam



Plate 7: Scarf joint & mortice detail, east wallplate



Plate 8: Carpenters assembly mark, east wallplate



Plate 9: Scarf joint & carpenters assembly marks,
west wallplate



Plate 10: Beam over south opening

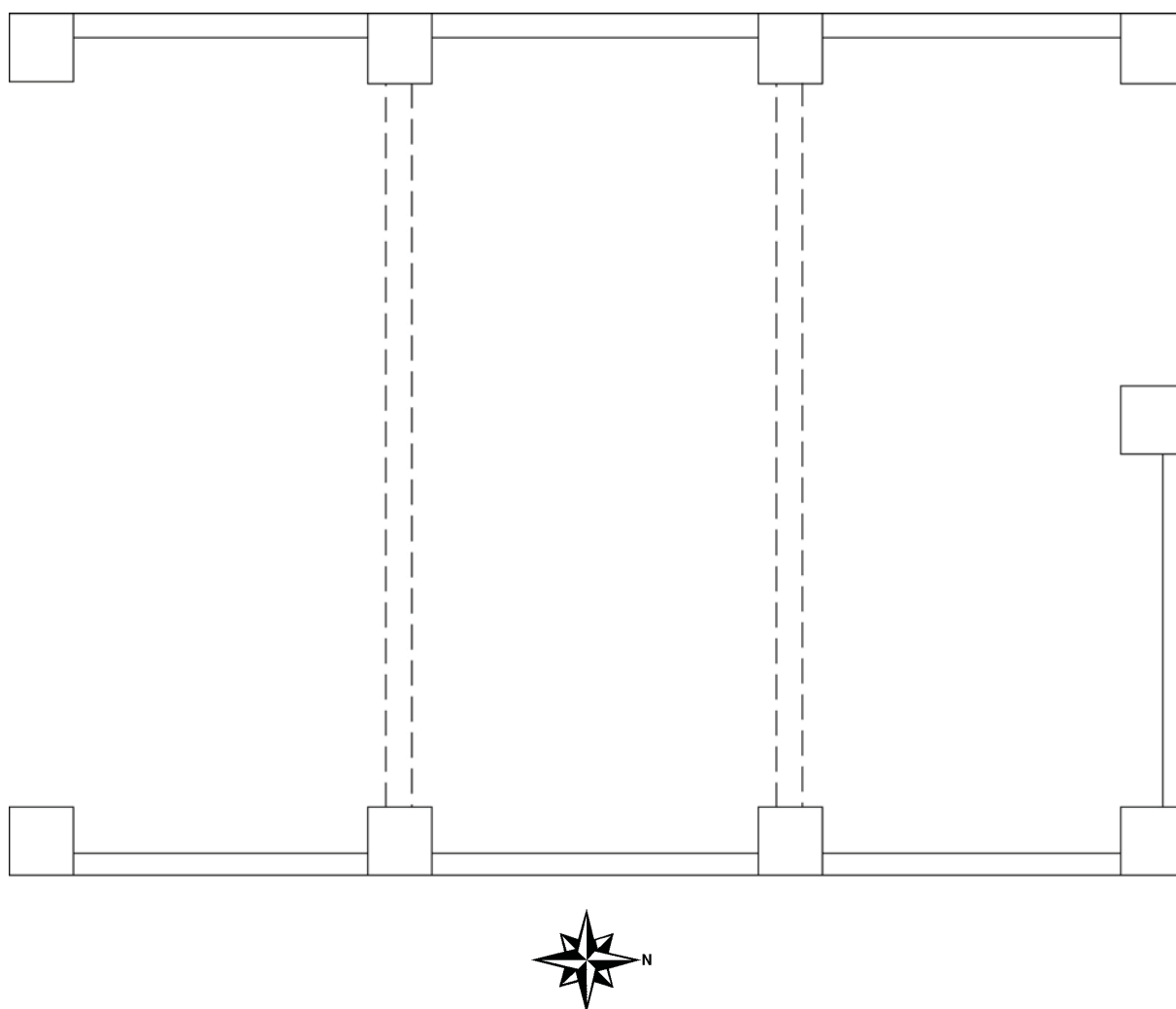


Figure 3: Schematic groundplan (*not to scale*)

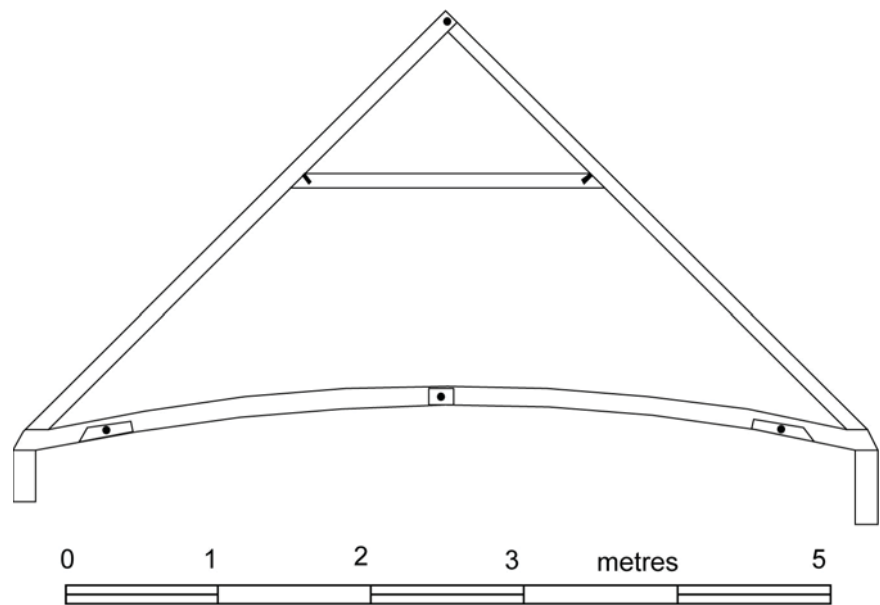


Figure 4: Southern roof truss (*scale 1:50*)

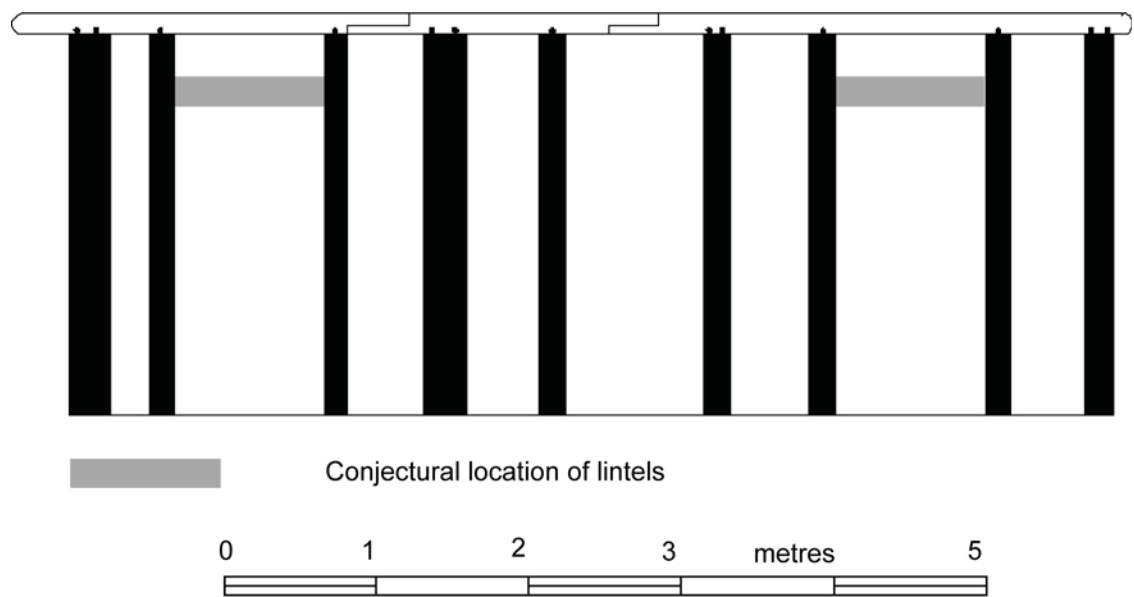


Figure 5: Reconstruction of the wall based on the mortices (*scale 1:50*)

4 Conclusions

The numerous mortices and stud holes indicate that the wallplates and tiebeams at either end of the structure are from a medieval timber framed building. The edge-halved scarf joint with bridled abutments present in the western wallplate had gone out of common usage by the end of the 15th century, which would suggest that the original building was no later than this time. The arrangement of the two neighbouring stud holes at both the northern and southern end of the beam suggest that there were doors located here, which gives rise to the possibility that this was once the beam over a screen.

The southern end of the western wallplate is likely to have come from the same building, although there is no evidence to confirm this at present. The northern end of the wallplate was clearly replaced in the modern era.

The edge-halved scarf joint in the southern roof truss would suggest that both of these are also from a medieval building, although the use of such poor quality wood tends to be associated with the late 17th and 18th centuries. Neither of the tiebeams have mortices on the top, which would suggest that they were intermediate trusses. The question of whether they were part of the same structure as the wallplates is debatable. Certainly the timbers themselves are of a rather poorer quality than one would expect in a domestic building with a screens passage, yet the scarf joint/mortice arrangement in the northern tiebeam is not too dissimilar to the scarf joint/mortice conjunction in the eastern wallplate, and may well indicate the work of a single carpenter. This gives rise to two possibilities; being narrower than the wallplate, the roof trusses either came from the cross wing of the same building or from a contemporary structure within the same complex. If the latter is the case, the presence of the mortices are likely to indicate that they came from a smaller farm building with internal subdivisions, such as stables rather than a barn.

Later additions to the timberwork are evident in the replacement of principal rafters and the northern end of the western wallplate, the edge-halved scarf joint in the latter possibly recreating what was originally there, or merely the modern solution to a wallplate or sillbeam intersection. The purlins, however, are also likely to be from an earlier building, as the scantlings are irregular and appear to have been cleaved from the same tree.

5 Acknowledgements

ASC would like to thank Matt Harper of Lambert Smith Hampton for commissioning this project, John Helse and Rob Brown also of Lambert Smith Hampton for facilitating the survey and Chris Cooke of Rowley Farm for allowing access to the site.

The survey was undertaken by Bob Zeepvat BA MIFA and Karin Semmelmann MA AIFA. The report was written by Karin Semmelmann and edited by Bob Zeepvat.

6 Archive

6.1 The project archive will comprise:

1. Method Statement
2. Report
3. Survey notes
4. Survey drawings
5. List of photographs
6. B/W prints
7. B/W negatives
8. CDROM with copies of all digital files.

6.2 The archive will be deposited with Crawley Museum.

Appendix 1: ASC Method Statement for Historic Building Recording

Aims

- To compile a detailed record of the structure(s) concerned, prior to refurbishment, conversion or demolition
- To ascertain the structural history and development of the building, within its local context
- To provide sufficient information on the historic and architectural significance of the building to inform proposals relating to its refurbishment / conversion.

Standards

The work will conform to the relevant sections of the Institute of Archaeologists' *Standard & Guidance Notes* (2001) and *Code of Conduct* (2000), to current English Heritage guidelines (EH 1991: EH 2006), and to the relevant sections of ASC's own *Operations Manual*.

Methods

- A survey of the building normally to RCHME Level 2 or 3.
- Preparation of a report, based on the results of the above.

Historic building recording involves the preparation of a detailed record and interpretation of a standing building and its fixtures and fittings, by a combination of historical research, written description, measured survey and photography. As such, it is essential that the survey team is given unrestricted access to the structure being recorded, subject to current health and safety requirements and site security.

Written Description

The written description will be prepared from detailed notes and sketches taken on site, using the appropriate *ASC Historic Building Record Sheet*. This information will be augmented if necessary by a study of the drawings and photographs. Depending on the nature of the building, the written description will be presented in a logical and consistent format (e.g. overall structure: external details, roof and walls: internal layout: internal description by room), supported by relevant drawings and photographs.

Measured Survey

Measured surveys will normally be carried out using tapes or LDM (laser distance measurement) for vertical and horizontal measurement throughout. A surveyor's level or Total Station EDM may be used to establish floor levels. Where appropriate, reference may be made to available architects' or engineers' drawings, either on paper or in an appropriate CAD format. Plastic film will be used for all site drawings. Scales used will be appropriate to the size and complexity of the structures or features being recorded: generally 1:50 or 1:100 for floor plans, 1:20 or 1:50 for elevations and sections, and 1:20 or 1:10 for architectural details, plant and machinery, etc.

Photographic Survey

The primary photographic record will normally be compiled in 35mm black & white print format, supplemented by 35mm colour slide and/or digital photography. Medium format (60 × 45mm) black-and-white photography may be used for more detailed recording. A photographic register will be maintained on ASC's *Photographic Record Sheet*, fully cross-referenced. Digital photographs may be used to illustrate the report. Metric scales will be used in photographs where appropriate. Photography will employ natural light wherever possible, but artificial light, flash or floodlighting will be used where necessary. Other techniques, such as video photography, may be used where appropriate.

Reporting

Upon completion of the field stages of the project, an initial report on the results obtained will normally be prepared. This will be produced in ASC's house style, and will typically include:

- a concise non-technical summary of the results
- information relating to the circumstances of the project
- a summary of the aims of the project and the methods used
- background information about the site, including any desk-based studies
- a description of the results, supported by appropriate illustrative material
- a conclusion, summarising the results and examining their significance
- appendices (copies of record sheets, reference works etc.)
- an SMR summary sheet, if required

Copies of the report will be provided as required to the Client, the Planning Archaeologist, the National Monuments Record, the Local Planning Authority, and any other bodies designated by the Planning Archaeologist or client. Eight copies are normally produced: a charge is indicated for providing additional copies.

In accordance with ASC's normal reporting procedures, interim reports on any significant discoveries made during the project will be submitted to the relevant period journals (e.g. *Britannia*, *Medieval Archaeology*) and to any relevant regional journals (e.g. *CBA Mid-Anglia Bulletin*, *South Midlands Archaeology*), within one year of the project's completion.

Once the final report has been accepted by the Planning Archaeologist, an OASIS fieldwork summary form will be completed and submitted to the Archaeology Data Service.

Archiving

All archaeological projects generate a quantity of records and related material (paper, photographic and electronic records, etc). Together, these constitute the *project archive*. While the report may describe the project's findings in some detail, the archive contains the evidence on which the report is based, and its importance cannot be too highly stressed. By their nature, building surveys cannot always be repeated, so the archive often constitutes the only surviving evidence of the building prior to conversion, etc, and arrangements must therefore be made for its deposition and long-term storage.

On completion of the reporting stages of the project, the archive will be prepared for long-term storage, to an appropriate standard and in a format agreed in advance with the relevant local depository. This will be in accordance with guidelines prepared by the UK Institute of Conservation (Walker 1990) and the Museums & Galleries Commission (MGC 1992).

Unless otherwise instructed, ASC will make arrangements to deposit the archive with the relevant local museum, Record Office or library. Provision has been indicated in the project estimates for the likely costs of deposition.

Staffing

The project will be managed by **Bob Zeepvat** BA MIFA, an established archaeologist with extensive experience in managing archaeological projects, and of work on a wide range of historic buildings and structures. He holds a first degree from the University of Leicester, and has been a validated Member of the Institute of Field Archaeologists since 1986. He has been involved in the management of archaeological projects since the late 1970s, formerly as Senior Field Archaeologist for the *Milton Keynes Archaeology Unit*, and as Project Manager for the *Hertfordshire Archaeological Trust*.

Other staff assigned to the project will normally have appropriate experience of historic building recording and research. Any staff undergoing training on the project will be fully supervised by experienced staff.

References

EH 1991 *Management of Archaeological Projects* (2nd edition). English Heritage (London).

EH 2006 *Understanding Historic Buildings: a guide to good recording practice*. English Heritage (London).

IFA 2000 Institute of Field Archaeologists' *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*.

IFA 2001a Institute of Field Archaeologists' *Standard & Guidance for the Investigation and Recording of Standing Buildings*.

IFA 2001b Institute of Field Archaeologists' *Standard & Guidance for Desk-Based Assessments*.

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Appendix 2: List of Photographs

SITE NAME: Rowley Farm, Lowfield Heath, Crawley, Surrey				SITE NO/CODE: 843/CRF
Shot	B&W	Slide	Digital	Subject
1				North elevation
2				North & west elevations
3				South elevation
4				East elevation
5				Scarf joint detail, west wallplate
6				Scarf joint detail, west wallplate
7				Carpenters assembly mark, west wallplate
8				Scarf joint detail, west wallplate
9				Carpenters assembly mark, west wallplate
10				Carpenters assembly mark, west wallplate
11				Scarf joint detail, * wallplate
12				Mortice in southern tiebeam
13				Scarf joint detail, east wallplate
14				Scarf joint & carpenters assembly marks, east wallplate
15				Internal shot, looking south
16				Mortice, * tiebeam
17				Southern truss from the north
18				Northern beam

Appendix 3: ASC OASIS Form

PROJECT DETAILS			
Project Name:	Rowley Farm, Lowfield Heath, Crawley, Surrey		
Short Description:	<p>In September 2006 Archaeological Services and Consultancy Ltd (ASC) carried out historic building recording of the timbers in a cow shed at Rowley Farm, Lowfield Heath, Crawley, Surrey in response to proposals for the demolition of the building.</p> <p>The building is a modern blockwork, single storey structure under a metal roof that is hipped at both ends. It is open to the south and north giving access to the yard and a field respectively. The roof timbers are considerably older than the building and appear to have originated from two late 16th century buildings that may have been erected by the same carpenter. The mortices and stud holes in the eastern wallplate suggest that this may have housed the service doors in the screen passage of a hall house. The roof trusses are more likely to have come from a smaller farm building with internal subdivisions or possibly a cross wing.</p>		
Project Type:	Building Recording		
Site status: (eg. none, SAM, Listed)	None	Previous work: (eg. SMR refs)	None
Current land use:	Farm building	Future work: (yes / no / unknown)	Unknown
Monument type:	Building	Monument period:	Post-medieval/Modern
Significant finds:	N/A		
PROJECT LOCATION			
County:	Surrey	OS reference (8 figs):	
District:	Crawley Borough	Parish:	Crawley District
Site address:	Rowley Farm, Lowfield Heath, Crawley, Surrey, RH10 9SZ		
Study area (sq. m. or ha):	N/A	Height OD (metres):	N/A
PROJECT CREATORS			
Organisation:	Archaeological Services & Consultancy Ltd		
Project brief originator:	N/A	Project design originator:	N/A
Project Manager:	Bob Zeepvat	Director/Supervisor:	Karin Semmelmann
Sponsor / funding body:	English Partnerships		
PROJECT DATE			
Start date:	6 th September 2006	End date:	6 th September 2006
PROJECT ARCHIVES			
	Location (Accession no.)	Content (eg. pottery, animal bone, files/sheets)	
Physical:	none		
Paper:	Crawley Museum	1 box	
Digital:	Crawley Museum	1 CD	
BIBLIOGRAPHY (Journal/monograph, published or forthcoming, or unpublished client report)			
Title:	Historic Building Recording: Rowley Farm, Lowfield Heath, Crawley, Surrey		
Author(s):	Karin Semmelmann		
Page nos	19	Date:	15 th September 2006