

**ARCHAEOLOGICAL
EVALUATION ON LAND AT
WITHAM ROAD,
WOODHALL SPA,
LINCOLNSHIRE
(WSWR 06)**

Work Undertaken For
Mr David Shelton

December 2006

Report Compiled by
Paul Cope-Faulkner BA(Hons) AIFA

National Grid Reference: TF 1785 6215
The Collection Accession No: 2006.252
OASIS Record No: archaeol1-21642

A.P.S. Report No. **184/06**



ARCHAEOLOGICAL PROJECT SERVICES

CONTENTS

List of Figures

List of Plates

1.	SUMMARY	1
2.	INTRODUCTION	1
2.1	DEFINITION OF AN EVALUATION	1
2.2	PLANNING BACKGROUND	1
2.3	TOPOGRAPHY AND GEOLOGY	1
2.4	ARCHAEOLOGICAL SETTING	2
3.	AIMS	2
4.	METHODS	2
4.1	TRIAL TRENCHING	2
4.2	POST-EXCAVATION	3
5.	RESULTS	3
5.1	DESCRIPTION OF THE RESULTS	3
5.2	TRENCH 1	3
5.2	TRENCH 1	3
5.3	TRENCH 3	4
5.4	TRENCH 4	4
5.5	TRENCH 5	4
6.	DISCUSSION	4
7.	CONCLUSIONS	5
8.	ACKNOWLEDGEMENTS	5
9.	PERSONNEL	5
10.	BIBLIOGRAPHY	5
11.	ABBREVIATIONS	6

Appendices

1	Specification for archaeological evaluation
2	Context Descriptions
3	The Post-Roman Pottery – Assessment report <i>by Anne Boyle</i>
4	Glossary
5.	The Archive

List of Figures

- Figure 1 General location plan
- Figure 2 Site location plan
- Figure 3 Trench layout plan
- Figure 4 Trench 1 plan
- Figure 5 Plans of Trenches 2 and 4
- Figure 6 Sections 1 to 3, 8 and 9
- Figure 7 Sections 4 to 7

List of Plates

- Plate 1 General view across the proposed development area
- Plate 2 Trench 1 showing the post-medieval pit (1003)
- Plate 3 Trench 2, Section 5 showing the post-medieval ditch (2002)
- Plate 4 Trench 2 showing the tree throw (2009)
- Plate 5 Trench 4 showing the undated pit (4003)
- Plate 6 Trench 4 showing the post-medieval pit (4005)
- Plate 7 Trench 4, Section 3 with the recent pit (4007) in the background and pit (4003) in the background

1. SUMMARY

An archaeological evaluation was undertaken on land at Witham Road Woodhall Spa in advance of proposed redevelopment at the site.

The site lies close to a possible Bronze Age (2200-800 BC) causeway across the Witham valley and near to Iron Age (800 BC-AD 43) settlement. Medieval remains are highlighted by the remains of Kirkstead Abbey, which dates from the 12th century.

The evaluation identified a sequence of natural, undated and post-medieval deposits. The post-medieval remains, comprising pits and a ditch, yielded pottery wasters suggesting the site lies close to a kiln. Undated features may be contemporary with the 16th century dated remains, although a lack of artefactual material renders this only a speculative suggestion.

The pottery retrieved from the investigation is generally of 16th – 17th century date and some of the examples were produced in local kilns. Pottery of this type was known to have been produced within the nearby precinct of Kirkstead Abbey, perhaps in the early 17th century.

2. INTRODUCTION

2.1 Definition of an Evaluation

An archaeological evaluation is defined as, >a limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site. If such archaeological remains are present Field Evaluation defines their character and

extent, quality and preservation, and it enables an assessment of their worth in a local, regional, national or international context as appropriate= (IFA 1997).

2.2 Planning Background

The site is the subject of a proposal for housing development. The Historic Environment Officer, Lincolnshire County Council advised that an archaeological evaluation by trial trenching would be required to help determine any future planning application.

Archaeological Project Services was commissioned by the Robert Doughty Consultancy on behalf of Mr David Shelton to undertake the archaeological evaluation of the site in accordance with the requirements of Lincolnshire County Council. The work was undertaken between the 26th and 30th November 2006 in accordance with a specification prepared by Archaeological Project Services and approved by the Built Environment Officer, Lincolnshire County Council.

2.3 Topography and Geology

Woodhall Spa is situated 10km southwest of Horncastle and 22km southeast of Lincoln, in the administrative district of East Lindsey, Lincolnshire (Fig. 1).

The site itself lies west of the centre of Woodhall Spa close to Kirkstead Bridge, a modern road bridge, which crosses the River Witham, at National Grid Reference TF 1785 6215 (Fig. 2). The site encompasses approximately 416 square metres and lies on the east bank of the River Witham, on a gentle slope down to the west at 4m OD. Current ground usage includes workshops, hardstanding and rough ground associated with a metalworking company currently occupying the site.

Local soils are of the Alderby Series, typically sandy loams or loamy sands (Robson *et al.* 1974, 31). These are developed upon a drift geology of upper River Terrace Deposits overlying boulder clay which in turn seal a solid geology of Jurassic Kimmeridge Clay (BGS 1995).

2.4 Archaeological Setting

Prehistoric remains include a causeway across the River Witham. Perhaps dating to the Bronze Age, the causeway was still in existence during the medieval period, whilst nearby a complex of undated cropmarks, known from aerial photographs may be related to the use of the causeway and artefacts believed to be votive offerings have also been found within the area. This is one of several causeways across the Witham valley (Everson and Stocker 2003, Fig. 1).

Iron Age settlement remains were recorded, 200m northeast of the proposed development alongside Witham Road during an evaluation and watching brief. These comprised a 3.5m wide boundary ditch, two gullies and a pit sealed below a thin layer of alluvium, whilst finds of pottery, slag and a loomweight were recovered (Taylor and McDaid 1996).

To the south of the site lies Kirkstead Abbey, founded by the Cistercians in 1139, following a grant of land by Hugh, Lord of Tattershall. Kirkstead Abbey was a prosperous foundation with granges in both Lincolnshire and Yorkshire. There is some uncertainty about the original location of the abbey as leave to move to a larger more suitable location was granted in 1187, although the architectural style of the surviving masonry is thought to predate 1175 (Cope-Faulkner 1998, 3). A Scheduled Ancient Monument, the remains of the abbey are located approximately 1km southeast of the

present site (Fig. 2).

Ridge and furrow of the medieval field system has been recorded to the south of the site.

Following the dissolution of the abbey in 1537, it is possible that a large post-suppression house was built on the site, although a pottery was established within the monastic precinct during the 16th century (Cope-Faulkner 1998, 3).

Woodhall Spa is a comparatively recent settlement developed since 1811, when a shaft sunk in search of coal filled with mineral rich water and was though suitable for therapeutic purposes (Wright 1982, 59).

3. AIMS

The aim of the evaluation, as detailed in the specification (Appendix 1), was to gather information to establish the presence or absence, extent, condition, character, quality and date of any archaeological deposits in order to enable the archaeological curator to formulate a policy for the management of the archaeological resources present on the site.

4. METHODS

4.1 Trial Trenching

Although four trial trenches two measuring 25 x 1.6m, one of 10 x 1.6m and a third 5 x 1.6m test-pit were planned, ground obstacles on site necessitated changing this to one 20 x 1.6m (Trench 1), two trenches measuring 13 x 1.6m and 12 x 1.6m set at a right angle (Trenches 2 and 3), one 5 x 1.6m test-pit (Trench 5) and one 10 x 1.6m trench (Trench 4) (Fig. 3). No trenches were excavated through the northern part

of the site as the former course of Witham Road ran across this area prior to its diversion over Kirkstead Bridge approximately 30 years ago.

Removal of topsoil and other overburden was undertaken by mechanical excavator using a toothless ditching bucket. The exposed surfaces of the trenches were then cleaned by hand and inspected for archaeological remains.

Each deposit exposed during the evaluation was allocated a unique reference number (context number) with an individual written description. A list of all contexts and interpretations appears as Appendix 2. A photographic record was compiled. Sections and plans were drawn at a scale of 1:20. Recording of deposits encountered was undertaken according to standard Archaeological Project Services=practice.

The location of the excavated trenches was surveyed in relation to fixed points on boundaries and on existing buildings using an electronic distance measure.

4.2 Post-excavation

Following excavation, all records were checked and ordered to ensure that they constituted a complete archive and a stratigraphic matrix of all identified deposits was produced. Phasing was based on the nature of the deposits and recognisable relationships between them and supplemented by artefact dating.

5. RESULTS

5.1 Description of the results

Archaeological contexts are described below. The numbers in brackets are the context numbers assigned in the field.

5.2 Trench 1

The earliest deposit identified in this trench was a layer of brownish yellow silty clay (1002), identified as the underlying natural geology.

Located at the northwest end of the trench was a north-south aligned linear feature (1008). This measured at least 3m long by 1.55m wide (Fig. 4). This was not excavated but a fill of greyish brown sandy silt (1009) was recorded.

Towards the centre of the trench were two pits. The first (1003) measured 0.9m by 0.45m and was 0.8m deep (Fig. 7, Section 4). Two fills were recorded, a lower of grey sandy silt (1004) and an upper of grey with red mottles sandy silt (1005). Locally made pottery of 16th century date was retrieved from the lower fill.

The second pit (1006) lay to the immediate north and was 1.55m long by over 1.1m wide and 0.2m deep. A single fill of grey sandy silt was identified (1007).

Sealing all deposits was a 0.75m thick topsoil comprising greyish brown sandy silt (1001).

5.2 Trench 2

Natural deposits in this trench consisted of reddish brown sand and gravel (2001). In places natural deposits had been disturbed and coloured yellowish brown (2012).

Located towards the northern end of the trench was a large irregular feature (2009), identified as a probable tree throw (Fig. 7, Section 6). This measured 4m wide and extended beyond the sides of the trench (Fig. 5). Fills comprised a succession of greyish brown clay (2014), silty sand (2015), yellowish brown sandy gravel (2016), brownish grey silty sand (2017), yellowish brown clay (2018), greyish

brown silty sand (2019) and brownish grey silt (2020). Fill (2019) was dated to the late 17th – 18th century, though this deposit, together with (2017) and (2020) all contained 16th century pottery, including wasters or seconds.

Cut into natural at the southeast end of this trench was an indeterminate feature (2006). This was 1.02m wide by 0.46m deep (Fig. 7, Section 5) and contained fills of brownish grey clayey silt (2007) and yellowish brown sand (2008).

This feature had then been cut by an east-west aligned ditch (2002) that was approximately 4m wide and 0.46m deep (Fig. 7, Section 5). This contained a fill of greyish brown silt (2013) and one of greyish brown clayey sand (2003) from which 16th – 17th century pottery was retrieved.

The ditch was cut by a 0.18m wide service trench (2004) in which a cast iron pipe and fill of brownish grey sandy silt (2005) was identified. Pottery of the 17th – 18th century was recovered from (2005)

Sealing all deposits was a subsoil of brownish grey silt (2011) that measured 0.45m thick (Fig. 7, Section 7. This was in turn overlain by a 0.17m thick topsoil of greyish brown sandy silt (2010).

5.3 Trench 3

Natural deposits of yellowish brown sand and gravel (3002) were overlain by intermittent areas of greyish brown sandy silt (3003) infilling root disturbances. Topsoil comprised a 0.48m thick layer of greyish brown sandy silt (3001). Deposits (3001) and (3003) both contained 16th century pottery.

5.4 Trench 4

The earliest deposit recorded in this trench

was the natural of yellow silty clay (4010).

Cutting the natural were two pits. The first (4003) was 1.1m wide and 0.3m deep (Fig. 6, Section 3). A single fill of grey sandy silt (4004) was recorded.

The second pit (4005) measured 0.9m long by 0.68m wide and 0.25m deep (Fig. 6, Section 2). A fill of grey sandy silt (4006) was recorded from which 16th century pottery was retrieved.

Sealing the pits was a former topsoil comprising brownish grey sandy silt (4002) that was 0.2m thick.

Cutting the topsoil was a large pit (4007) that was 5m wide (Fig. 5). This was not excavated due to flooding, but contained a fill of grey clayey silt (4008).

Sealing all layers in this trench was a deposit of limestone fragments (4001) used for hardstanding.

5.5 Trench 5

The earliest deposit encountered in this trench was a layer of yellow silty clay with moderate gravel (5003). This was sealed by a possible subsoil remnant comprising yellowish grey sandy silt with gravel (5002).

Sealing all deposits in the trench was a 0.4m thick topsoil comprising greyish brown sandy silt (5001).

6. DISCUSSION

Natural deposits comprise silty clays, sands and gravel of the underlying drift geology. As such, they are of the Upper River Terrace deposits.

Undated features include a pit and possible ditch in Trench 1, an indeterminate feature

in Trench 2 and a pit in Trench 4. These remain undated due to a lack of artefactual material. However, the proximity of the pits to dated 16th century features in Trenches 1 and 4 may indicate some contemporaneity.

A number of features were dated to the early post-medieval period, including pits and a ditch. The pottery from these features include locally (Kirkstead) produced examples and the assemblage contains either seconds or wasters. This suggests the possibility of a kiln in the vicinity of the site, perhaps closer than that recorded within the precinct of the abbey (Wilson 1972, 12; Marjoram 1973, 43). Other pottery retrieved includes Cistercian ware, Red Glazed earthenwares, stonewares and slipwares all dating between the 15th and 18th centuries.

7. CONCLUSIONS

Archaeological evaluation was undertaken at Witham Road, Woodhall Spa, as the site lay close to remains of prehistoric and medieval date.

However, no remains of this date were identified during the evaluation and undated and post-medieval features were revealed. The post-medieval features contained locally produced pottery seconds or wasters, suggesting the possibility of a kiln located in the vicinity. Pottery production of 16th century date has been suggested as lying within the former precinct of Kirkstead abbey, and the examples included here suggest some association. It is likely that some of the undated features are likely to be contemporary.

8. ACKNOWLEDGEMENTS

Archaeological Project Services wishes to

acknowledge the assistance of Mr Stephen Bate of the Robert Doughty Consultancy who commissioned the fieldwork and post-excavation analysis on behalf of Mr David Shelton. Gary Taylor coordinated the project and edited this report along with Tom Lane. Dave Start kindly allowed access to the parish files and library maintained by Heritage Lincolnshire.

9. PERSONNEL

Project Coordinator: Gary Taylor
 Site Supervisor: Thomas Bradley-Lovekin
 Site Assistant: Neil Parker
 Surveying: Mark Dymond
 Finds Processing: Denise Buckley
 Photographic Reproduction: Paul Cope-Faulkner
 Illustration: Thomas Bradley-Lovekin,
 Paul Cope-Faulkner, Neil Parker
 Post-excavation Analyst: Thomas Bradley-Lovekin

10. BIBLIOGRAPHY

BGS, 1995 *Horncastle; solid and drift edition*, 1:50 000 map sheet **115**

Cope-Faulkner, P., 1998 *Desk-top assessment of the archaeological implications of proposed reservoir construction at Woodhall Spa and Kirkstead, Lincolnshire* APS Report No **14/98**

Everson, P, and Stocker, D, 2003 'Coming from Bardney...' -The Landscape Context of the Causeways and Finds Groups of the Witham Valley, in Catney, S, and Start, D (eds) *Time and Tide. The Archaeology of the Witham Valley*

IFA, 1999 *Standard and Guidance for Archaeological Field Evaluations*.

Marjoram, J, 1973 'Archaeological Notes 1972', *Lincolnshire History and Archaeology* Vol. **8**

Robson, JD, George, H, and Heaven, FW, 1974 *Soils in Lincolnshire 1: Sheet TF16 (Woodhall Spa)*, Soil Survey Record No. **22**

Taylor, C. and McDaid, M., 1996, *Archaeological Evaluation: Proposed Residential Development, Witham Road, Woodhall Spa*, Unpublished LAS Report

Wilson, CM, 1972 'Archaeological Notes 1971', *Lincolnshire History and Archaeology* Vol. **7**

Wright, NR, 1982 *Lincolnshire Towns and Industry 1700-1914*, History of Lincolnshire Vol. **XI**

11. ABBREVIATIONS

- APS Archaeological Project Services
BGS British Geological Survey
IFA Institute of Field Archaeologists
LAS Lindsey Archaeological Services



Figure 1 - General location plan

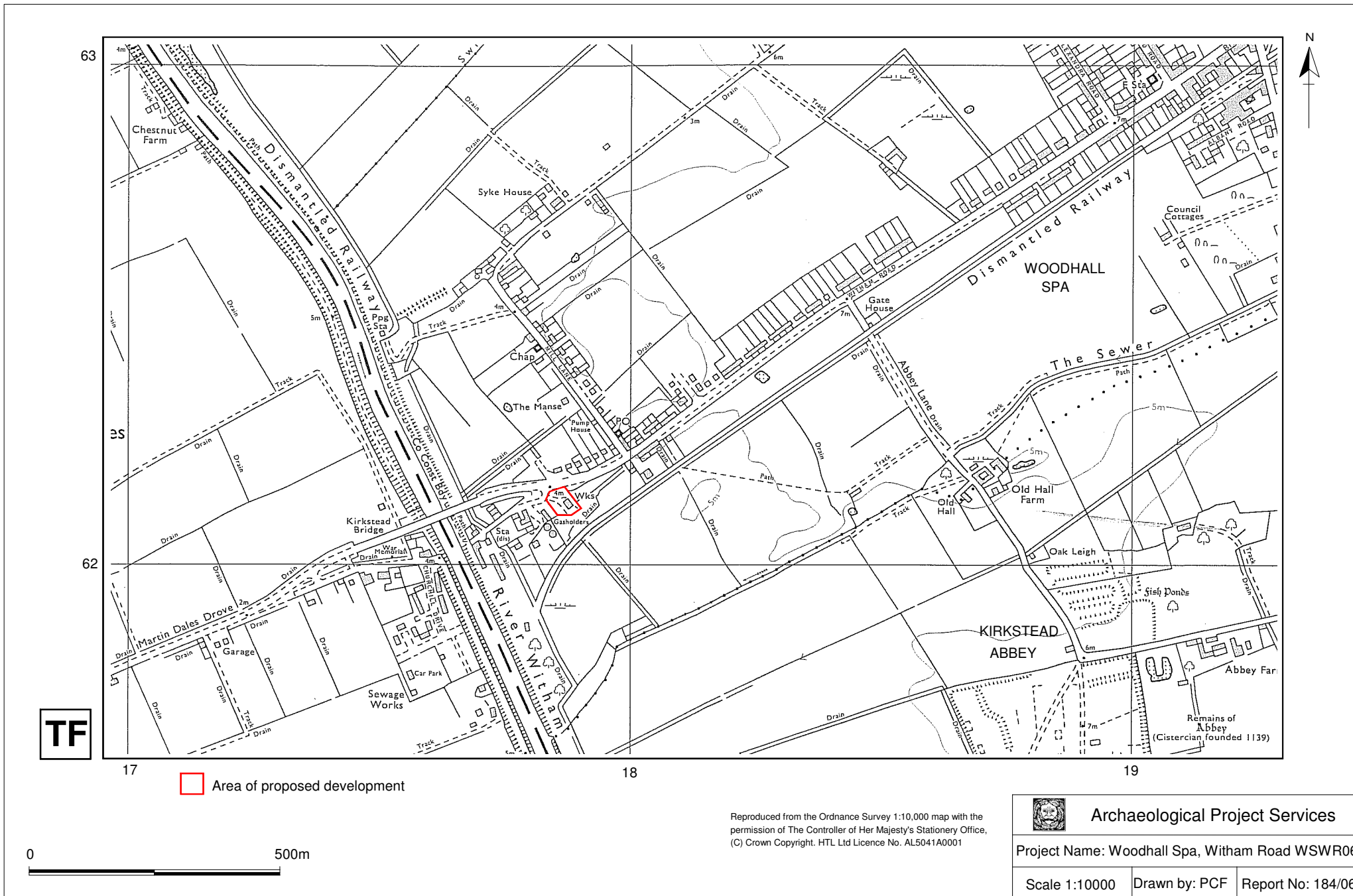
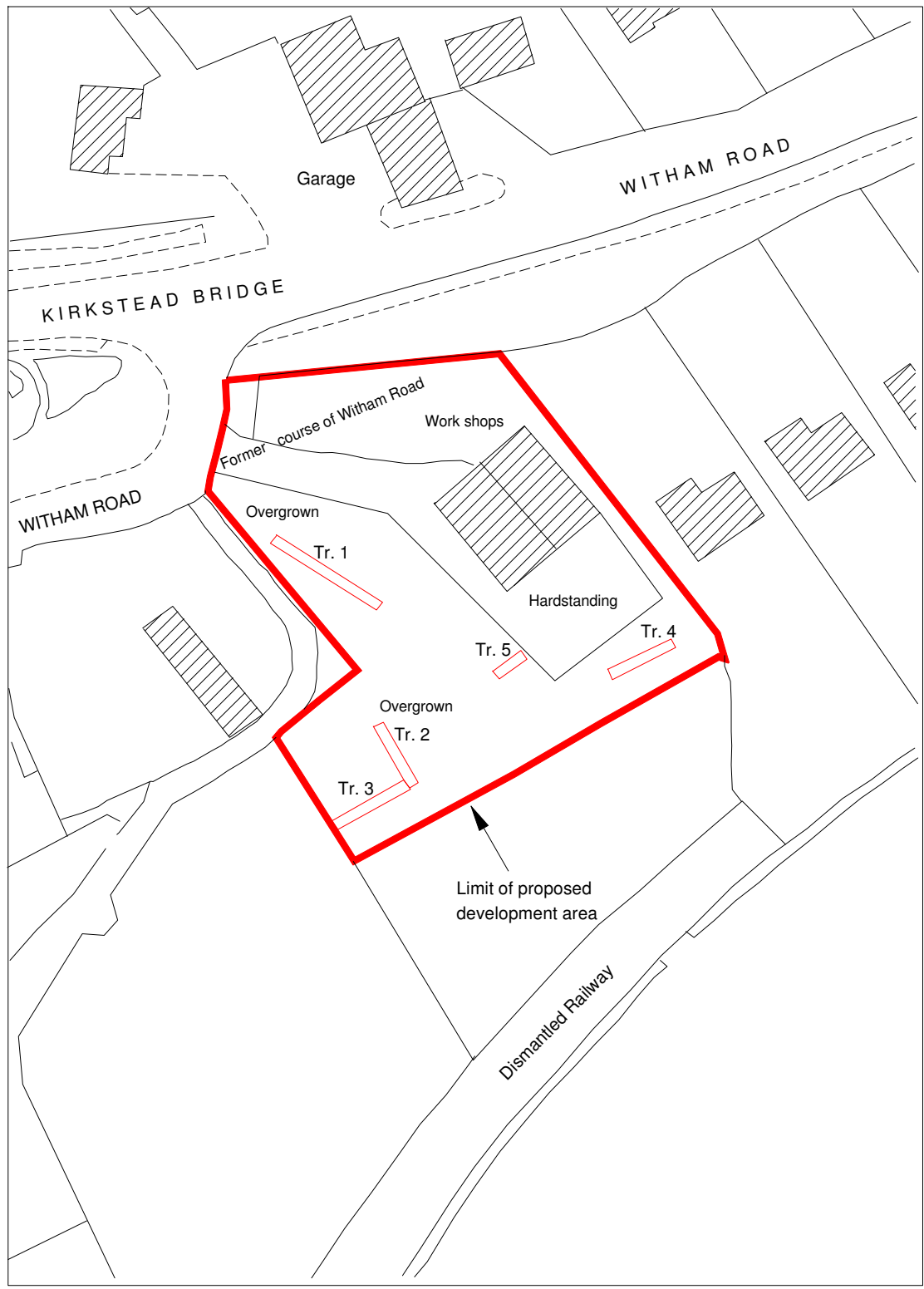



Figure 2 - Site location plan



Tr. 5
 Evaluation Trench




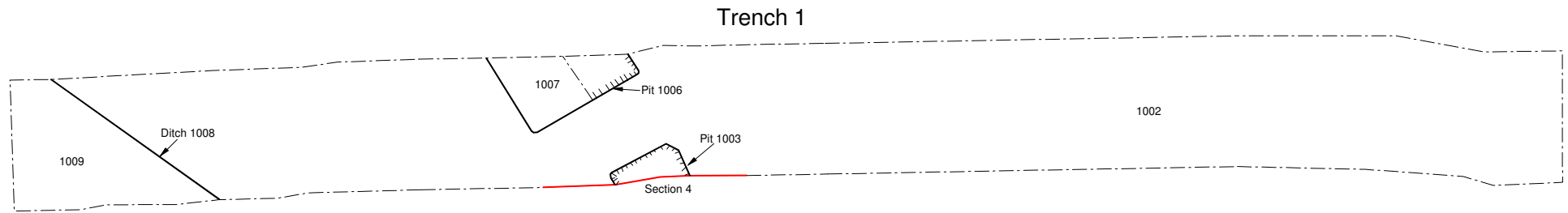
 Archaeological Project Services		
Project Name: Woodhall Spa Witham Rd. WSWR06		
Scale 1:1000	Drawn by:TBL	Report No: 184/06

Figure 3 - Trench location plan




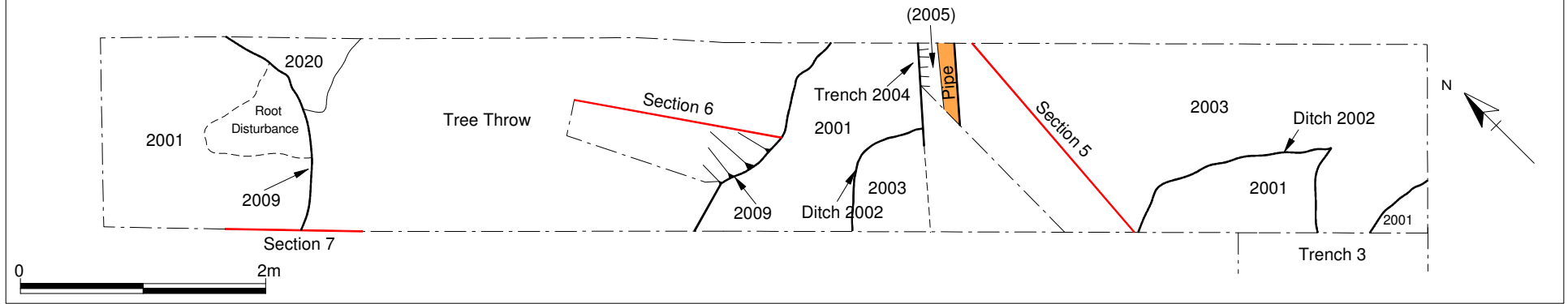
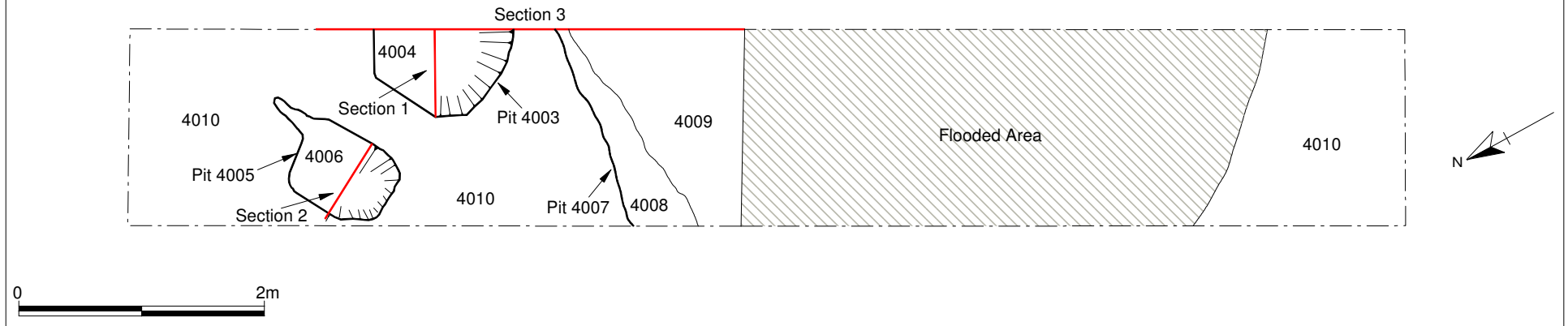
	Archaeological Project Services	
Project Name: Woodhall Spa Witham Road WSWR06		
Scale 1:75	Drawn by: NP	Report No: 184/06

Figure 4 - Trench 1 plan

Trench 2



Trench 4



Archaeological Project Services

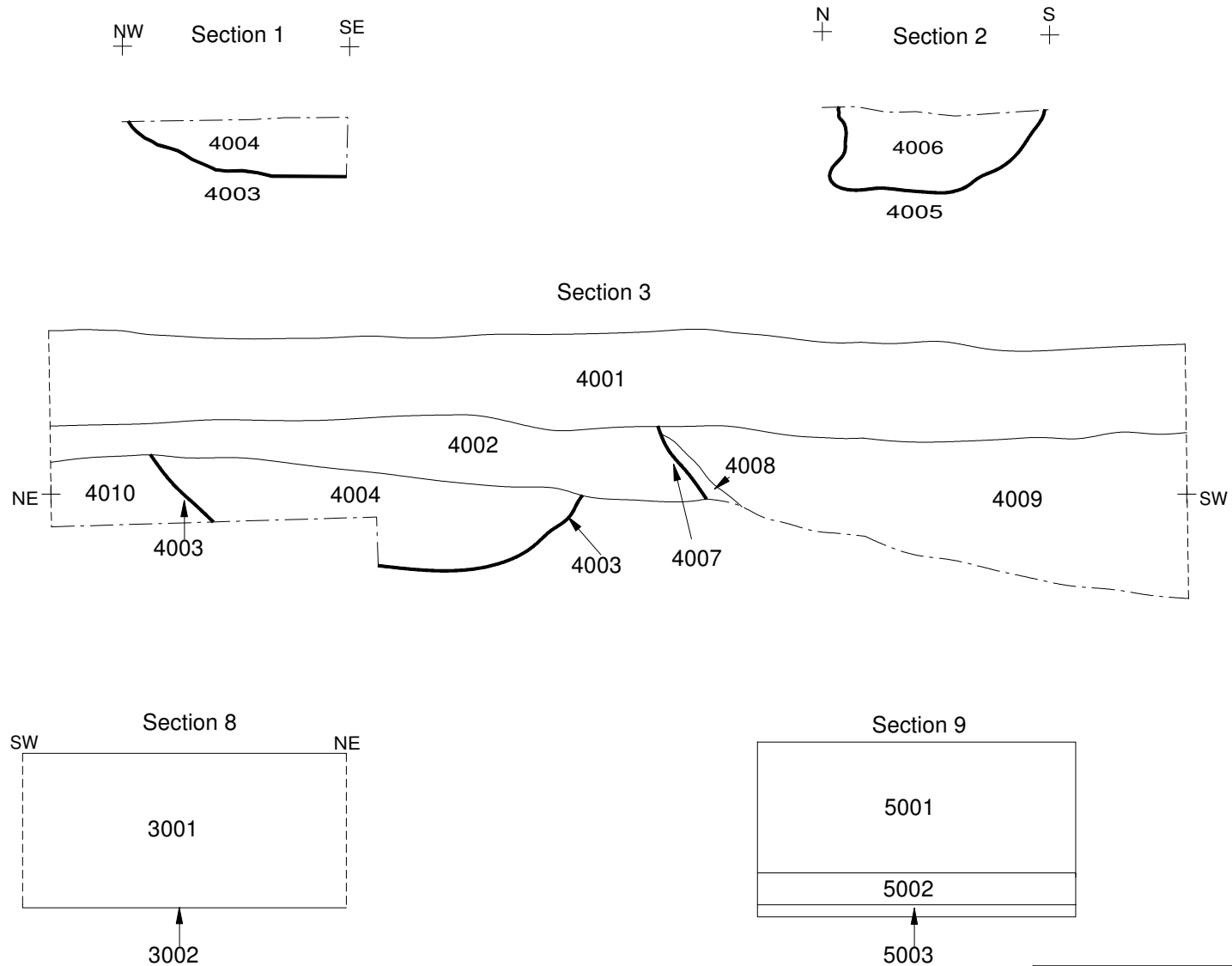
Project Name: Woodhall Spa Witham Road WSWR06

Scale 1:50

Drawn by: NP

Report No: 184/06

Figure 5 - Plans of Trenches 2 and 4




 Archaeological Project Services		
Project Name: Woodhall Spa Witham Road WSWR06		
Scale 1:20	Drawn by: NP	Report No: 184/06

Figure 6 - Sections 1 to 3, 8 and 9

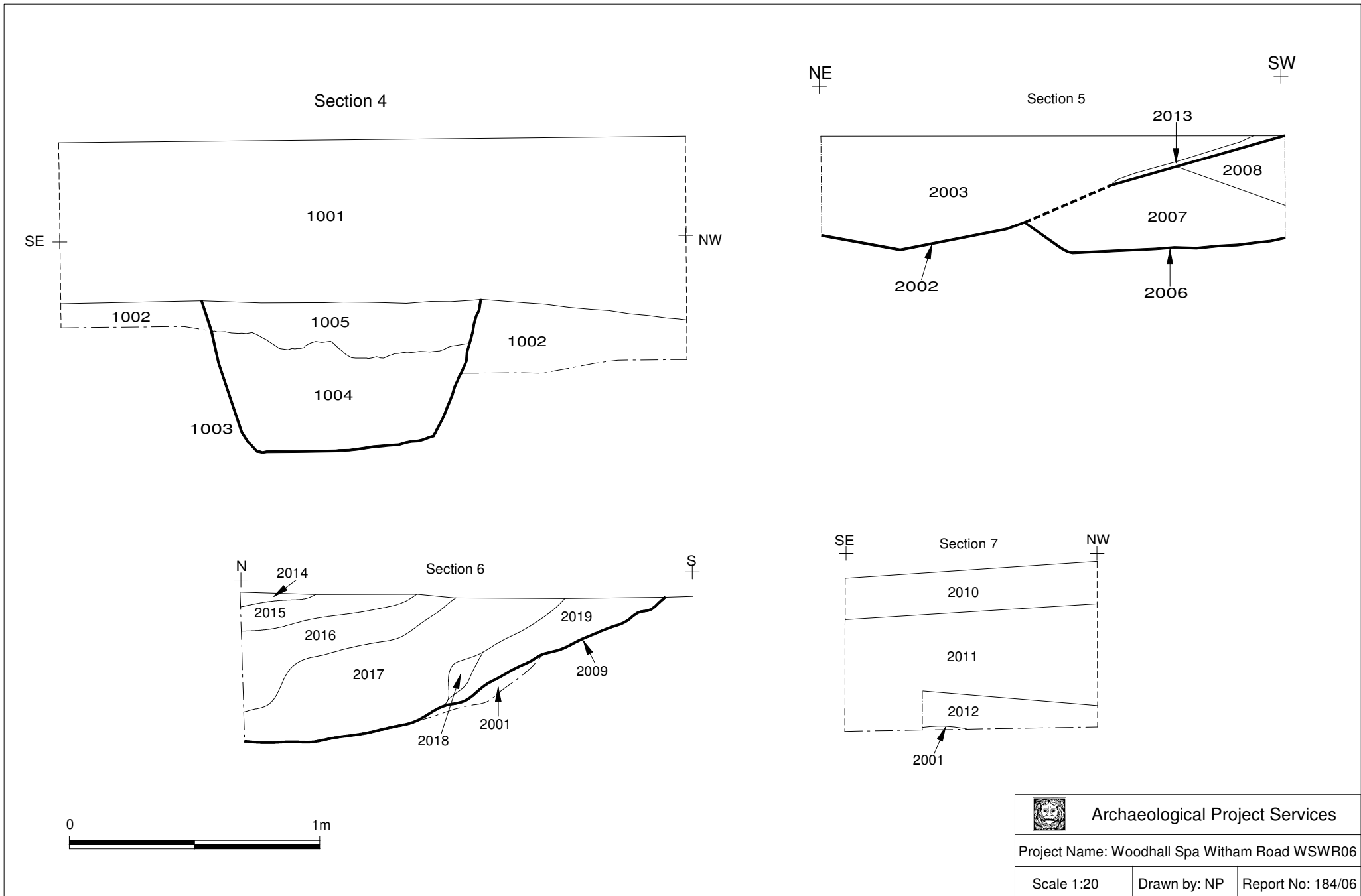


Figure 7 - Sections 4 to 7

Appendix 1

LAND AT WITHAM ROAD, WOODHALL SPA, LINCOLNSHIRE - SPECIFICATION FOR ARCHAEOLOGICAL EVALUATION

1 SUMMARY

- 1.1 This document comprises a specification for the archaeological field evaluation of land off Witham Road, Woodhall Spa, Lincolnshire.*
- 1.2 The area is archaeologically sensitive, lying close to causeway in use from the prehistoric to medieval periods. Cropmarks that may be related to the causeway have been identified. Artefacts thought to be votive offerings have also been found nearby.*
- 1.3 A programme of archaeological evaluation by trial trenching is required at the site.*
- 1.4 On completion of the fieldwork a report will be prepared detailing the findings of the investigation. The report will consist of a text describing the nature of the archaeological deposits located and will be supported by illustrations and photographs.*

2 INTRODUCTION

- 2.1 This document comprises a specification for the archaeological field evaluation of land off Witham Road, Woodhall Spa, Lincolnshire.
- 2.2 The document contains the following parts:
- 2.2.1 Overview
 - 2.2.2 The archaeological and natural setting
 - 2.2.3 Stages of work and methodologies to be used
 - 2.2.4 List of specialists
 - 2.2.5 Programme of works and staffing structure of the project

3 SITE LOCATION

- 3.1 Woodhall Spa is located about 10km southwest of Horncastle and 23km southeast of Lincoln in the East Lindsey district of Lincolnshire. The site is about 1.5km southwest of the town centre, about 200m east of the River Witham, on the south side of Witham Road at National Grid Reference TF 1785 6215.

4 PLANNING BACKGROUND

- 4.1 An enquiry was made to Lincolnshire Archaeology Section in respect of potential redevelopment of the site. The Archaeology Section advised that not enough information was available and that an archaeological evaluation by trial trenching was required to provide site specific data to inform any planning decisions. This document provides a specification for such trial trenching.

5 SOILS AND TOPOGRAPHY

- 5.1 Soils at the site are typical stagnogleys of the Beccles 2 Association developed on river terrace gravels (Hodge *et al.* 1984). The site is on the east bank of the River Witham, on a gentle slope down to the west at 4m OD.

6 ARCHAEOLOGICAL OVERVIEW

- 6.1 The site lies close to a prehistoric causeway across the adjacent River Witham. Of prehistoric, possibly

Bronze Age, origin, this causeway remained in existence till the medieval period. A complex of cropmarks nearby may relate to the causeway. Artefacts believed to be votive offerings have also been found in the area.

7 AIMS AND OBJECTIVES

- 7.1 The aim of the work will be to gather sufficient information for the archaeological curator to be able to formulate a policy for the management of the archaeological resources present on the site.
- 7.2 The objectives of the work will be to:
 - 7.2.1 Establish the type of archaeological activity that may be present within the site.
 - 7.2.2 Determine the likely extent of archaeological activity present within the site.
 - 7.2.3 Determine the date and function of the archaeological features present on the site.
 - 7.2.4 Determine the state of preservation of the archaeological features present on the site.
 - 7.2.5 Determine the spatial arrangement of the archaeological features present within the site.
 - 7.2.6 Determine the extent to which the surrounding archaeological features extend into the application area.
 - 7.2.7 Establish the way in which the archaeological features identified fit into the pattern of occupation and land-use in the surrounding landscape.

8 LIAISON WITH THE ARCHAEOLOGICAL CURATOR

- 8.1 Close contact will be maintained with the archaeological curator throughout the investigation to ensure that the scheme of works fulfils their requirements.

9 TRIAL TRENCHING

9.1 Reasoning for this technique

- 9.1.1 Trial trenching enables the *in situ* determination of the sequence, date, nature, depth, environmental potential and density of archaeological features present on the site.

9.2 General Considerations

- 9.2.1 All work will be undertaken following statutory Health and Safety requirements in operation at the time of the investigation.
- 9.2.2 The work will be undertaken according to the relevant codes of practice issued by the Institute of Field Archaeologists (IFA). *Archaeological Project Services* is an IFA Registered Archaeological Organisation (No. 21).
- 9.2.3 Any and all artefacts found during the investigation and thought to be 'treasure', as defined by the Treasure Act 1996, will be removed from site to a secure store and promptly reported to the appropriate coroner's office.
- 9.2.4 Excavation of the archaeological features exposed will only be undertaken as far as is required to determine their date, sequence, density and nature. Not all archaeological features exposed will necessarily be excavated. However, the investigation will, as far as is reasonably practicable, determine the level of the natural deposits to ensure that the depth of the archaeological sequence present on the site is established.
- 9.2.5 Open trenches will be fenced if necessary. Subject to the consent of the archaeological curator, and following the appropriate recording, the trenches, particularly those of excessive depth,

will be backfilled as soon as possible to minimise any health and safety risks.

9.3 Methodology

- 9.3.1 Removal of the topsoil and any other overburden will be undertaken by mechanical excavator using a toothless ditching bucket. To ensure that the correct amount of material is removed and that no archaeological deposits are damaged, this work will be supervised by Archaeological Project Services. On completion of the removal of the overburden, the nature of the underlying deposits will be assessed by hand excavation before any further mechanical excavation that may be required. Thereafter, the trenches will be cleaned by hand to enable the identification and analysis of the archaeological features exposed.
- 9.3.2 Investigation of the features will be undertaken only as far as required to determine their date, form and function. The work will consist of half- or quarter-sectioning of features as required and, where appropriate, the removal of layers. Should features be located which may be worthy of preservation *in situ*, excavation will be limited to the absolute minimum, (*ie* the minimum disturbance) necessary to interpret the form, function and date of the features.
- 9.3.3 The archaeological features encountered will be recorded on Archaeological Project Services pro-forma context record sheets. The system used is the single context method by which individual archaeological units of stratigraphy are assigned a unique record number and are individually described and drawn.
- 9.3.4 Plans of features will be drawn at a scale of 1:20 and sections at a scale of 1:10. Should individual features merit it, they will be drawn at a larger scale.
- 9.3.5 Throughout the duration of the trial trenching a photographic record consisting of black and white prints (reproduced as contact sheets) and colour slides will be compiled. The photographic record will consist of:
- 9.3.5.1 the site before the commencement of field operations.
 - 9.3.5.2 the site during work to show specific stages of work, and the layout of the archaeology within individual trenches.
 - 9.3.5.3 individual features and, where appropriate, their sections.
 - 9.3.5.4 groups of features where their relationship is important.
 - 9.3.5.5 the site on completion of field work
- 9.3.6 Should human remains be encountered, they will be left *in situ* with excavation being limited to the identification and recording of such remains. If removal of the remains is necessary the appropriate Home Office licences will be obtained and the local environmental health department informed. If relevant, the coroner and the police will be notified.
- 9.3.7 Finds collected during the fieldwork will be bagged and labelled according to the individual deposit from which they were recovered ready for later washing and analysis.
- 9.3.8 The spoil generated during the investigation will be mounded along the edges of the trial trenches with the topsoil being kept separate from the other material excavated for subsequent backfilling.
- 9.3.9 The precise location of the trenches within the site and the location of site recording grid will be established by a GPS and/or EDM survey.

10 ENVIRONMENTAL ASSESSMENT

- 10.1 If appropriate, during the investigation specialist advice will be obtained from an environmental archaeologist. The specialist will visit the site and will prepare a report detailing the nature of the environmental material present on the site and its potential for additional analysis should further stages

of archaeological work be required. The results of the specialist's assessment will be incorporated into the final report.

11 POST-EXCAVATION AND REPORT

11.1 Stage 1

11.1.1 On completion of site operations, the records and schedules produced during the trial trenching will be checked and ordered to ensure that they form a uniform sequence constituting a level II archive. A stratigraphic matrix of the archaeological deposits and features present on the site will be prepared. All photographic material will be catalogued: the colour slides will be labelled and mounted on appropriate hangers and the black and white contact prints will be labelled, in both cases the labelling will refer to schedules identifying the subject/s photographed.

11.1.2 All finds recovered during the trial trenching will be washed, marked, bagged and labelled according to the individual deposit from which they were recovered. Any finds requiring specialist treatment and conservation will be sent to the Conservation Laboratory at the City and County Museum, Lincoln.

11.2 Stage 2

11.2.1 Detailed examination of the stratigraphic matrix to enable the determination of the various phases of activity on the site.

11.2.2 Finds will be sent to specialists for identification and dating.

11.3 Stage 3

11.3.1 On completion of stage 2, a report detailing the findings of the investigation will be prepared. This will consist of:

11.3.1.1 A non-technical summary of the results of the investigation.

11.3.1.2 A description of the archaeological setting of the site.

11.3.1.3 Description of the topography and geology of the investigation area.

11.3.1.4 Description of the methodologies used during the investigation and discussion of their effectiveness in the light of the results.

11.3.1.5 A text describing the findings of the investigation.

11.3.1.6 Plans of the trenches showing the archaeological features exposed. If a sequence of archaeological deposits is encountered, separate plans for each phase will be produced.

11.3.1.7 Sections of the trenches and archaeological features.

11.3.1.8 Interpretation of the archaeological features exposed and their context within the surrounding landscape.

11.3.1.9 Specialist reports on the finds from the site.

11.3.1.10 Appropriate photographs of the site and specific archaeological features or groups of features.

11.3.1.11 A consideration of the significance of the remains found, in local, regional, national and international terms, using recognised evaluation criteria.

12 **ARCHIVE**

12.1 The documentation, finds, photographs and other records and materials generated during the investigation will be sorted and ordered into the format acceptable to the appropriate local museum. This sorting will be undertaken according to the guidelines and conditions stipulated by the museum, and appropriate national guidelines, for long-term storage and curation.

13 **REPORT DEPOSITION**

13.1 Copies of the investigation report will be sent to: the client for distribution to the planning authority.

14 **PUBLICATION**

14.1 Details of the investigation will be input to the Online Access to the Index of Archaeological Investigations (OASIS).

14.2 Notes or articles describing the results of the investigation will also be submitted for publication in the appropriate national journals: *Medieval Archaeology* and *Journal of the Medieval Settlement Research Group* for medieval and later remains, and *Britannia* for discoveries of Roman date.

15 **CURATORIAL MONITORING**

15.1 Curatorial responsibility for the archaeological work undertaken on the site lies with the Lincolnshire County Archaeology Section. They will be given written notice of the commencement of the project to enable them to make monitoring arrangements.

16 **VARIATIONS TO THE PROPOSED SCHEME OF WORKS**

16.1 Variations to the scheme of works will only be made following written confirmation from the archaeological curator, the client and their consultant.

16.2 Should the archaeological curator require any additional investigation beyond the scope of the brief for works, or this specification, then the cost and duration of those supplementary examinations will be negotiated between the client and the contractor.

17 **STAFF TO BE USED DURING THE PROJECT**

17.1 The work will be directed by Tom Lane MIFA, Senior Archaeologist, Archaeological Project Services. The on-site works will be supervised by an Archaeological Supervisor with knowledge of archaeological evaluations of this type. Archaeological excavation will be carried out by Archaeological Technicians, experienced in projects of this type.

17.2 The following organisations/persons will, in principle and if necessary, be used as subcontractors to provide the relevant specialist work and reports in respect of any objects or material recovered during the investigation that require their expert knowledge and input. Engagement of any particular specialist subcontractor is also dependent on their availability and ability to meet programming requirements.

<u>Task</u>	<u>Body to be undertaking the work</u>
Conservation	Conservation Laboratory, City and County Museum, Lincoln.
Pottery Analysis	Prehistoric: Dr D Knight, Trent and Peak Archaeological Trust Roman: B Precious, independent specialist Anglo-Saxon-post-medieval: J Young, independent specialist/A Boyle, APS
Other Artefacts	J Cowgill, independent specialist; or G Taylor, APS
Human Remains Analysis	Dr R Gowland, independent specialist
Animal Remains Analysis	J Kitch, APS

Environmental Analysis	Environmental Archaeology Consultancy, or Val Fryer, independent specialist
Radiocarbon dating	Beta Analytic Inc., Florida, USA
Dendrochronology dating	University of Sheffield Dendrochronology Laboratory

18 PROGRAMME OF WORKS AND STAFFING LEVELS

- 18.1 Fieldwork is expected to be undertaken by appropriate staff, including supervisors and assistants, and will take about a week.
- 18.2 Post-excavation analysis and report production will take about two weeks. A project officer or supervisor will undertake most of the analysis, with assistance from the finds supervisor, CAD illustrator and external specialists.

19 INSURANCES

- 19.1 Archaeological Project Services, as part of the Heritage Trust of Lincolnshire, maintains Employers Liability insurance to £10,000,000. Additionally, the company maintains Public and Products Liability insurances, each with indemnity of £5,000,000. Copies of insurance documentation are enclosed.

20 COPYRIGHT

- 20.1 Archaeological Project Services shall retain full copyright of any commissioned reports under the *Copyright, Designs and Patents Act 1988* with all rights reserved; excepting that it hereby provides an exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project as described in the Project Specification.
- 20.2 Licence will also be given to the archaeological curators to use the documentary archive for educational, public and research purposes.
- 20.3 In the case of non-satisfactory settlement of account then copyright will remain fully and exclusively with Archaeological Project Services. In these circumstances it will be an infringement under the *Copyright, Designs and Patents Act 1988* for the client to pass any report, partial report, or copy of same, to any third party. Reports submitted in good faith by Archaeological Project Services to any Planning Authority or archaeological curator will be removed from said Planning Authority and/or archaeological curator. The Planning Authority and/or archaeological curator will be notified by Archaeological Project Services that the use of any such information previously supplied constitutes an infringement under the *Copyright, Designs and Patents Act 1988* and may result in legal action.
- 20.4 The author of any report or specialist contribution to a report shall retain intellectual copyright of their work and may make use of their work for educational or research purposes or for further publication.

21 BIBLIOGRAPHY

Hodge, CAH, Burton, RGO, Corbett, WM, Evans, R, and Seale, RS, 1984 *Soils and their use in Eastern England*, Soil Survey of England and Wales **13**

Appendix 2

CONTEXT DESCRIPTIONS

Trench 1

No.	Description	Interpretation
1001	Friable dark greyish brown clayey sandy silt, 0.75m thick	Topsoil
1002	Firm light brownish yellow silty clay	Natural deposit
1003	?Rectangular feature, 0.9m long by >0.45m wide and 0.8m deep, steep sides and flat base	Pit
1004	Soft mid grey sandy silt	Fill of (1003)
1005	Loose dark grey/ mottled red sandy silt	Fill of (1003)
1006	?Rectangular feature, 1.55m long by >1.1m wide and 0.2m deep	Pit
1007	Soft mid grey sandy silt	Fill of (1006)
1008	Linear feature, aligned north-south, >3m long by >1.55m wide, not excavated	Ditch
1009	Soft dark greyish brown clayey sandy silt	Fill of (1008)

Trench 2

No.	Description	Interpretation
2001	Loose mid reddish brown sand and gravel	Natural deposit
2002	Linear feature, aligned east-west, 4m wide by 0.46m deep, shallow sides and slightly rounded base	Ditch
2003	Friable dark greyish brown clayey sand	Fill of (2002)
2004	Linear feature, aligned northeast-southwest, 0.18m wide, vertical sides, not fully excavated	Service trench
2005	Dark brownish grey sandy silt with cast iron pipe	Fill of (2004)
2006	Feature, 1.02m wide by 0.46m deep, steep sides and flat base	?Pit
2007	Loose dark brownish grey slightly clayey silt	Fill of (2007)
2008	Loose mid yellowish brown sand	Fill of (2006)
2009	Irregular feature, 4m wide by 0.6m deep, shallow rounded sides and base	Probable tree throw
2010	Loose mid greyish brown sandy silt, 0.17m thick	Topsoil
2011	Loose dark brownish grey silt, 0.45m thick	Subsoil
2012	Loose buff yellowish brown sand and gravel	Natural deposit
2013	Loose dark greyish brown silt	Fill of (2002)
2014	Plastic mid yellowish brown and mid greyish brown clay	Fill of (2009)
2015	Loose dark greyish brown silty sand	Fill of (2009)
2016	Loose mid yellowish brown sandy gravel	Fill of (2009)
2017	Loose dark brownish grey slightly silty sand	Fill of (2009)
2018	Plastic mid yellowish brown clay	Fill of (2009)
2019	Loose dark greyish brown silty sand	Fill of (2009)
2020	Loose dark brownish grey silt	Fill of (2009)

Trench 3

No.	Description	Interpretation
3001	Firm dark greyish brown sandy silt, 0.48m thick	Topsoil
3002	Loose mid yellowish brown sand and gravel	Natural
3003	Firm dark greyish brown sandy silt, infilling root disturbances in base of trench.	Topsoil/natural interchange

Trench 4

No.	Description	Interpretation
4001	Loose light yellowish grey limestone hardcore, 0.3m thick	Modern hardstanding
4002	Soft dark brownish grey sandy silt, 0.2m thick	Former topsoil
4003	Sub-circular feature, 1.1m wide by 0.3m deep, steep sides and flattish base	Pit
4004	Loose mid grey sandy silt	Fill of (4003)
4005	Sub-rectangular feature, 0.9m long by 0.68m wide and 0.25m deep, steep to near vertical sides and flattish base	Pit
4006	Loose mid grey sandy silt	Fill of (4005)
4007	?Circular feature, 5m wide, not excavated	Pit
4008	Soft mid grey clayey silt	Fill of (4007)
4009	Soft dark grey sandy clayey silt	Fill of (4007)
4010	Firm light yellow silty clay	Natural deposit

Trench 5

No.	Description	Interpretation
5001	Friable dark greyish brown sandy silt, 0.4m thick	Topsoil
5002	Friable mid yellowish grey sandy silt with frequent gravel, 100mm thick	Topsoil/natural interchange
5003	Pale yellow silty clay with moderate rounded gravel	Natural deposit

Appendix 3

THE POST-ROMAN POTTERY - ASSESSMENT REPORT

by Anne Boyle

1.1. INTRODUCTION

Forty sherds of pottery, representing forty vessels and weighing nine hundred and eighty-two grams were recovered from four trenches. All the material was recorded at archive level in accordance with Lincolnshire County Council's Archaeological Handbook (section 13.4.2) and with the guidelines laid out in Slowikowski, *et al.* (2001). The pottery dates to the Post Medieval and Early Modern periods.

1.2. METHODOLOGY

The material was laid out and viewed in context order. Sherds were counted and weighed by individual vessel within each context. The chronology and coding system of the Lincoln Ceramic Type Series was used to assess the pottery (Young *et. al* 2005: Appendix 1), which was examined visually and using x20 magnification. This data was then added to an Access database.

An archive list of the Post-Roman pottery is included in Appendix 1. The range of pottery, codenames and a summary of sherds and vessels is shown in Table 1.

Table 1. Pottery codenames and total quantities by vessel count and weight

Cname	Full Name	Earliest Date	Latest Date	Total sherds	Total vessels
BL	Black-glazed wares	1550	1750	1	1
CIST	Cistercian-type ware	1480	1650	1	1
MY	Midlands Yellow ware	1550	1650	1	1
NOTS	Nottingham stoneware	1690	1900	1	1
PGE	Pale Glazed Earthenware	1600	1750	1	1
PMLOC	Post-medieval Local fabrics	1450	1700	33	33
SLIP	Unidentified slipware	1650	1750	1	1
STSL	Staffordshire/Bristol slipware	1650	1750	1	1

1.3. CONDITION

With the exception of a small number of abraded sherds, the pottery is in fresh condition with sherds mainly falling into the small to medium size range, with an average weight of twenty-four grams.

Three sherds had patchy soot adhering to their surfaces; one pipkin was probably sooted during use. One rim from a Cistercian ware drinking vessel has soot over a broken edge, which is probably the result of post depositional activity.

A number of the Post Medieval Local (PMLOC) fabric K sherds have imperfections from firing. Of the thirty-three sherds present in the assemblage, twenty-three of the sherds are misfired: six have fabric which is vitrified or laminated from over-firing and five sherds are under-fired. Ten sherds have cracked in firing, with glazed and

oxidised breaks. These sherds all appear to be at least seconds, if not wasters.

1.4. CHRONOLOGY AND SOURCE

In total, forty vessels in eight identifiable post-roman pottery ware types, were recovered from the site. The range of forms is restricted, with jugs, bowls and jars forming the majority of the assemblage. Examples of drinking vessels, a pipkin and a press moulded dish are also present.

1.5. DISCUSSION BY PERIOD

The material represents a small early post medieval assemblage, consisting in the main of a locally produced ware - PMLOC fabric K. This ware type is believed to be produced on or near to the land which was formerly owned by Kirkstead Abbey. This ware is typified by 16th century forms, a purplish glaze (common on vessels from this period) and a fabric containing common milky quartz grains. The ware looks similar to that produced at Toynton/Bolingbroke. The forms present in this assemblage consist of jugs, jars and bowls. Some of the rims have a indent running along their outside edge which appears to be another characteristic of this ware (*pers. comm.* Jane Young).

Two vessels were recognised as a new fabric and have been characterised as PMLOC fabric D (contexts **2003** and **3001**). It is believed these may also be linked to the nearby pottery production, though their dating is uncertain. The fabric is hard fired and smooth, with abundant very fine background quartz, sparse to moderate, fine to coarse iron inclusions and grog/clay pellets. It appears to be highly micaceous. The glaze appears as both splashed and as a suspension. This is a feature common on vessels from Toynton Bolingbroke. The pipkin (context **2003**) is very similar in appearance to Glazed Red Earthenwares of the late 16th and 17th centuries but has a sandier fabric. The vessel from context **3001** has a splashed green glaze, which may indicate this ware was in production prior to the post medieval period.

The other wares in the assemblage were represented by single examples. These are types fairly typical of post medieval/early modern assemblages from this area.

1.6. DISCUSSION

The assemblage represents a small, but significant, number of vessels that can be tentatively linked to the production at Kirkstead Abbey.

The production of pottery at Kirkstead post-dates the dissolution of the house in 1537, and apparently ends in the early 17th century with the death of Francis Moodie, potter ‘**of Christead**’ (White 1989: 110-11). Three dumps of waster sherds are known within the precinct of the former Abbey (White 1989: 109, Healey 1975: 37); the site of WSWR06 is less than a mile from Kirkstead. It seems likely that the PMLOC sherds within this assemblage are associated with the pottery production at the former Abbey, though it is possible an earlier, or contemporary pottery was also operating in the area. Potters were expected to repair any holes they created in roads or common ground when extracting clay. Often these clay pits were backfilled with wasted pottery. This also may explain why waster

material appears away from the 'main' potting site. Several 'old clay pits' occur on maps of the 19th century to the south and east of the former Abbey.

The presence of two vessels in a fine fabric shared were defined and named PMLOC fabric D. This fabric appears similar to that of Late and Post Medieval pottery produced at Boston and Bourne. However, it seems likely PMLOC fabric D is produced local to Kirkstead.

1.7. SUMMARY

This is a small, but important, assemblage of pottery which expands the sphere of known potting activity in Kirkstead. Typologically, this locally produced pottery appears to fall into a 16th century date, though further work is required to confirm this.

1.8. RECOMMENDATIONS

All the pottery should be retained for future study. The vessels with drawing numbers should be illustrated at archive level. Several of the sherds have been removed to a fabric type series. The material should be included in any future programme of ICPS and thin section analysis of PMLOC fabrics K and D.

BIBLIOGRAPHY

~ Lincolnshire Archaeological Handbook 2003 edition [internet]. Available from <<http://www.lincolnshire.gov.uk/section.asp?catId=3155>>

Healey, H., 1975. *Medieval and Sub-Medieval Pottery in Lincolnshire*, unpublished MPhil, University of Nottingham.

Slowikowski, A.M., Nenk, B. and Pearce, J., 2001. Minimum standards for the processing, recording, analysis and publication of post-Roman ceramics. Occasional paper 2. London: Medieval Pottery Research Group

White, A.J., 1989. *Post-Medieval Pottery in Lincolnshire 1450-1850*, unpublished PhD, University of Nottingham.

Appendix 4

GLOSSARY

Alluvium	A deposit (usually clay, silts or sands) laid down in water. Marine alluvium is deposited by the sea and freshwater alluvium by streams, rivers or within lakes.
Boulder Clay	A deposit formed after the retreat of a glacier. Also known as till, this material is generally unsorted and can comprise of rock flour to boulders to rocks of quite substantial size.
Bronze Age	A period characterised by the introduction of bronze into the country for tools, between 2250 and 800 BC.
Context	An archaeological context represents a distinct archaeological event or process. For example, the action of digging a pit creates a context (the cut) as does the process of its subsequent backfill (the fill). Each context encountered during an archaeological investigation is allocated a unique number by the archaeologist and a record sheet detailing the description and interpretations of the context (the context sheet) is created and placed in the site archive. Context numbers are identified within the report text by brackets, <i>e.g.</i> (004).
Cropmark	A mark that is produced by the effect of underlying archaeological features influencing the growth of a particular crop.
Cut	A cut refers to the physical action of digging a posthole, pit, ditch, foundation trench, <i>etc.</i> Once the fills of these features are removed during an archaeological investigation the original 'cut' is therefore exposed and subsequently recorded.
Fill	Once a feature has been dug it begins to silt up (either slowly or rapidly) or it can be back-filled manually. The soil(s) which become contained by the 'cut' are referred to as its fill(s).
Iron Age	A period characterised by the introduction of Iron into the country for tools, between 800 BC and AD 50.
Layer	A layer is a term to describe an accumulation of soil or other material that is not contained within a cut.
Medieval	The Middle Ages, dating from approximately AD 1066-1500.
Natural	Undisturbed deposit(s) of soil or rock which have accumulated without the influence of human activity.
Neolithic	The 'New Stone Age' period, part of the prehistoric era, dating from approximately 4500-2250 BC.
Post-medieval	The period following the Middle Ages, dating from approximately AD 1500-1800.
Prehistoric	The period of human history prior to the introduction of writing. In Britain the prehistoric period lasts from the first evidence of human occupation about 500,000 BC, until the Roman invasion in the middle of the 1 st century AD.

Appendix 5

THE ARCHIVE

The archive consists of:

45	Context records
5	Trench summary sheets
1	Photographic record sheet
8	Sheets of scale drawings
1	Stratigraphic matrix
1	Box of finds

All primary records and finds are currently kept at:

Archaeological Project Services
The Old School
Cameron Street
Heckington
Sleaford
Lincolnshire
NG34 9RW

The ultimate destination of the project archive is:

The Collection
Art and Archaeology in Lincolnshire
Danes Terrace
Lincoln
LN2 1LP

Accession Number: 2006.252

Archaeological Project Services Site Code: WSWR 06

The discussion and comments provided in this report are based on the archaeology revealed during the site investigations. Other archaeological finds and features may exist on the development site but away from the areas exposed during the course of this fieldwork. *Archaeological Project Services* cannot confirm that those areas unexposed are free from archaeology nor that any archaeology present there is of a similar character to that revealed during the current investigation.

Archaeological Project Services shall retain full copyright of any commissioned reports under the *Copyright, Designs and Patents Act 1988* with all rights reserved; excepting that it hereby provides an exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project as described in the Project Specification.