97/12. **DESK-TOP ASSESSMENT OF THE** ARCHAEOLOGICAL IMPLICATIONS OF PROPOSED DEVELOPMENT ON LAND ADJACENT TO CHURCH STREET, PINCHBECK, LINCOLNSHIRE (PCS97)



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# DESK-TOP ASSESSMENT OF THE ARCHAEOLOGICAL IMPLICATIONS OF PROPOSED DEVELOPMENT ON LAND ADJACENT TO CHURCH STREET, PINCHBECK, LINCOLNSHIRE (PCS97)

Work Undertaken For Patterson Properties

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Report compiled by Paul Cope-Faulkner

Planning Application No: H14/1049/97 National Grid Reference: TF 2420 2630

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# 1. SUMMARY

A desk-top assessment was undertaken to determine the archaeological implications of proposed development on land adjacent to Church Street, Pinchbeck, Lincolnshire. Several archaeological sites and findspots are located in the vicinity of the development.

Romano-British (A.D. 50-400) occupation of the region has been identified in the vicinity of the proposed development. However, the nature of the finds do not enable the size, layout or type of this activity to be ascertained. It is possible that Romano-British features are sealed beneath layers of alluvium.

Medieval activity is well represented in the vicinity. Pinchbeck was a wealthy village during this period, evidenced by the church. Two manors held land in the village, one which may be located on the site of the present Pinchbeck Hall, to the only 250m south of the development area. Medieval ridge and furrow, indicating agricultural activity, is evident within the investigation area.

The earliest maps indicate that the investigation area was once open ground prior to the mid 20th century. Development since then has largely been associated with a nursery comprising at least one glasshouse.

Present ground conditions and the likelihood of alluvium suggest the possibility of fair preservation of any surviving archaeological remains. Ground conditions are not suitable for geophysical survey or fieldwalking.

# 2. INTRODUCTION

# 2.1 Planning Background

Archaeological Project Services was commissioned by Patterson Properties to undertake a desk-top assessment of land adjacent to Church Street, Pinchbeck, Lincolnshire. This was in order to determine the archaeological implications of proposed development at the site, as detailed in planning application H14/1049/97 The archaeological assessment was undertaken in accordance with specification designed a by Archaeological Project Services and agreed by the Assistant Archaeological Officer, Lincolnshire County Council (Appendix 1).

An Archaeological Desk-based Assessment is defined as 'an assessment of the known or potential archaeological resource within a specified area or site, consisting of a collation of existing written and graphic information in order to identify the likely character, extent, quality and worth of the known or potential archaeological resource in a local, regional, national or international context as appropriate.' (IFA 1994, 1)

## 2.2 Topography and Geology

Pinchbeck is located 3km north of Spalding and 20km southwest of Boston, in the fens of south Lincolnshire (Fig. 1).

The proposed development site is located 700m north of the centre of Pinchbeck as defined by the parish church of St. Mary (Fig. 2). Situated at a height of *c*. 4m OD on land adjacent to Church Street (National Grid Reference TF 2420 2630), the proposed development sites cover approximately 1.5 hectares on fairly level ground (Fig. 3).

The local soils map of the area indicate a broad ridge of Romney Series soils extending from Surfleet and into Pinchbeck. Romney Series are typically dark brown silt or sandy silt loam and develop on roddons (infilled creeks) and may indicate a former course of the River Glen (Robson 1990, 26). Either side of the surmised roddon are soils of the Wisbech Association, coarse silty calcareous alluvial gley soils developed in stoneless marine alluvium (ibid, 36-37). These soils are developed on young marine alluvium or former estuarine deposits and overlie a solid geology of Oxford Clay (BGS 1992).

Local topography describes a southwest to northeast ridge of higher ground (c. 4m) running along the line of the possible roddon with levels on either side at about 3m OD. The River Glen flows alongside the northern edge of the roddon.

# 3. AIMS

The aims of the desk-top assessment, as outlined in the specification (Appendix 1), were to locate and, if present, appraise known archaeological sites in the vicinity and to determine the archaeological potential of the proposed development area. Such location and assessment of significance would permit the formulation of an appropriate response to integrate the needs of the archaeology with the proposed development programme.

### 4. METHODS

Compilation of the archaeological and historical data relevant to the area of the proposed development site involved examination of all appropriate primary and secondary sources available. These have included:

- historical documents, held in Lincolnshire Archives
- enclosure, tithe, parish and other maps and plans, held in Lincolnshire Archives
- recent and old Ordnance Survey maps
- the County Sites and Monuments Record
- the files maintained by Heritage Lincolnshire
- aerial photographs
- archaeological books and journals
- place-name evidence

Information obtained from the literature and cartographic examination was supplemented by a walk-over survey of the proposed development site. This walk-over survey investigated the present land-use and condition; the extent of hardstanding and other firm surfaces; the presence, or otherwise, of dumped materials; and the appropriateness for fieldwalking, earthwork and geophysical survey.

Results of the archival and field examinations were committed to scale plans of the area.

### 5. **RESULTS**

### 5.1 Historical Data

Pinchbeck is first referred to in 1051 and again in the Domesday Survey of 1086. The first element is derived from the Old English pinca meaning finch or pinc meaning minnow and the second element is from the Old English bæce meaning stream (Ekwall 1974, 367). However, it is unlikely that the form pinca was ever used (Fellows-Jensen 1978, 219). The Domesday Survey records that Pinchbeck was Sokeland of Ivo Taillebois' manor at Spalding and Guy of Craon's manor at Holbeach. The parish had 22 sokemen (free

peasants) and 4 fisheries which rendered 1500 eels (Foster and Longley 1976).

A reference survives to a donation of land at Pinchbeck to the Abbey at Crowland, along with land at Spalding, Whaplode and Holbeach by a person named *Algarus comes* [Count Algarus] (Page 1934, 6). If this account is correct, this donation would probably predate the Domesday Survey of 1086, and may date from before the Norman Conquest.

Soon after the Domesday Survey some of the land was held by Spalding Priory and is believed to have been given as a gift to the Priory by Countess Lucy, the widow of Ivo Taillebois (Page 1906, 123). By 1291, the second manor of 84 acres (34.2 ha) had passed to John de Bath (Hallam 1965, 176).

Much of the early history of Pinchbeck describes the reclamation of land from the sea and fen. These Newlands or '*offoldfal*' are mentioned in the Cartulary of Spalding Priory between 1229 and 1294 (Hallam 1965, 159).

Reclamation led to increased land useage and Pinchbeck appears to have prospered in the 13th century from crops of grain and flax (Hallam 1965, 181). Although not mentioned in the Domesday Survey as Pinchbeck was not an independent Manor, the village also maintained its own saltpans, an important commodity in medieval Lincolnshire.

The apparent wealth of Pinchbeck may indicate why the size of the clergy stood a 8 plus a subdeacon in 1376 (Owen 1971, 143). However, the number of clergy had dropped to 5 by 1526, which may indicate loss of tithes *etc*.

Reference is made to a single potter working in Pinchbeck in a Lay Subsidy of 1332 (Platts 1985, 129).

# 5.2 Cartographic Data

The area to be developed is situated north of the centre of Pinchbeck. Appropriate maps of the vicinity were examined.

The earliest depiction of Pinchbeck is shown on Ogilby's Itinerary dating from 1675 (Molyneaux and Wright 1974, 11). The map shows the road from Spalding to Boston and Pinchbeck is shown as a small village along a single road with a church towards the southern end. Dating from *c*. 1763 a map of Deeping Fen also shows Pinchbeck (LAO Deeping Fen 1/5/1). However, only the church and several buildings in the vicinity of Crossgate Bridge and Herring Bridge, are depicted.

Bryant's *Map of the County of Lincoln* (1828) portrays Pinchbeck but with little detail apparent (Fig. 3). The investigation area is evident and is depicted as open ground. Immediately south of the proposed development area a building named 'Grove House' is shown.

The 1st edition 1 inch Ordnance Survey map, first published in 1824 and revised in 1882, shows Pinchbeck to be little changed since Bryant's survey.

The 2nd edition 6 inch Ordnance Survey map of 1906 depicts the proposed development area as open ground (Fig. 4). Other than Rose Cottage, no other buildings are shown to impinge upon the proposed development are and the field is undivided.

Later Ordnance Survey maps show gradual development along Church Street, Flax Mill Lane and within the proposed development area.

## 5.3 Aerial Photograph Data

Aerial photographs, including those published or transcribed in secondary sources, were examined for evidence of archaeological remains.

Several aerial photographs of Pinchbeck parish are held in the Lincolnshire County Sites and Monuments Record and the parish files maintained by the Heritage Lincolnshire. However, none of these clearly show the proposed development area.

# 5.4 Archaeological Data

Records of archaeological sites and finds held in the Lincolnshire County Sites and Monuments Record and the files maintained by Heritage Lincolnshire were consulted. Other, secondary, sources were also examined. Details of archaeological and historical remains falling within a kilometre of the proposed development area are collated here and committed to Fig. 5.

Map Code No.	Sites and Monuments Record No.	Description	National Grid Reference
1		Pottery, Bourne A/B ware, medieval	TF24202600
2		Moat/fishpond, medieval	TF24202540
3	22424	Inlaid tile, medieval	TF23902580
4	22425	Moat?, medieval	TF24102540
5	22422	Bronze key (Chamberlain key), post-medieval	TF23952565
6	22426	Pottery, Stamford ware etc, medieval	TF23502640
7	22418	Bronze coin of Commodus (AD 180-192), Romano-British	TF24132605
8	20150	Pottery, assorted wares, medieval	TF23802580
9	22426	Negative watching brief	TF23472640
10	22431	St. Mary's church, 12th century	TF24202559
11		Vicarage, incorporating earlier work, Post- medieval	TF24232553
12		Manor farmhouse, early 17th century	TF23892668
13		Coin, Claudius (AD 41-54), Romano-British	Unlocated
14	22419	Settlement and industrial site, Romano-British	TF23552580
15	22417	Pinchbeck or Otway Hall, Post-medieval	TF24132605
16	22433	Stocks, modern	TF24192593
17	23536	Ridge and furrow, medieval	TF23802625

22417

Pinchbeck is situated in an area of moderate known archaeological activity. Earlier prehistoric activity has not been identified within the area under investigation. It is likely that most of Pinchbeck was typically salt marsh or submerged during the prehistoric period, though the course of the River Glen may have come through this area at this time.

During the Romano-British period the marshland stabilised, enabling settlement, agricultural and salt-making activities. Initially settlement was attracted to the higher ground of roddons. The Fenland Survey correlated Roman sites and cropmarks to landscape data to within 2km of the investigation site (Hayes and Lane 1992). This showed that Roman sites were concentrated on the raised silt levees of ancient watercourses. The Fenland Survey identified several Romano-British sites following a roddon to the west of Pinchbeck and it is conceivable that this line continues through the village (Hayes and Lane 1992, 148).

Romano-British activity is best represented by a suspected settlement located during the construction of Pinchbeck railway immediately south of the station (Fig. 5, No. 14). An occupation layer was found between 0.3m and 0.9m below the ground surface which produced pottery, bone, shell and burnt earth (Phillips 1970, 293). Other finds include a coin of Claudius found during scouring of the River Glen and a coin of Commodus from Otway House, both found in 1742 (*ibid*.).

Medieval activity is represented by the extant remains of the parish church of St. Mary, 600m south of the proposed development. The church replaced an earlier, Norman, church which was partially revealed during restoration work in the 18th century (Sutton 1901, 16). The earlier church had a nave some 70 feet

(21m) long and part of the north transept.

Earthworks, representing moats and fishponds, are visible in several locations in Pinchbeck, notably in the garden of the Vicarage (Fig. 5, No. 2) and along Rose Lane (Fig. 5, No. 4). Ridge and furrow survives across the northern end of the village and is found within the development area (Fig. 5, No. 17).

Unlocated medieval remains include a Guildhall, suggested by the street name as being located in the vicinity of Guildhall Drive, and a chapel that was mentioned in 1363 (Owen 1975, 20). A number of stone coffins were found along Knight Street in 1951 which may indicate the position of the chapel, although it is presumed that these are derived during the restoration work on the church (Spalding Guardian 1951).

Pinchbeck Hall, located 250m south of the development, is probably the location of a former Manor House. Marratt (1814, 227) describes it thus 'some considerable remains of an ancient mansion, which formerly bore the name of Pinchbeck Hall, from a family of that name. Being afterwards possessed by the Otway family it then acquired the appellation of Otway Hall. It appears to have been a large building, and was erected about the time of Henry VIII. It was moated round...'. The building described by Marratt was rebuilt in 1802, parts of which survive today. The Otway Hall is not to be confused with Otway House, which is located southeast of the church which is a later building.

Post-medieval activity is represented by a number of buildings, including the Vicarage, Manor Farmhouse and Pinchbeck Hall (DoE 1988).

Recent archaeological investigations include a fieldwalking survey in fields

north and adjacent to the proposed development (LAS 1995). Medieval pottery was apparent as was later, post-medieval, types although in small numbers typical of manuring scatters and not settlement.

## 5.5 Walk-over Survey

In mid November 1997, a walk-over survey of the proposed development site was undertaken. Visibility was good. The results of the walk-over survey have been committed to Figure 6.

Two buildings survive towards the front (east) end of the property. Although electricity appears to enter the property via overhead cables, the presence of manholes and water pipes suggest the presence of underground services.

Along the northern boundary are several raised areas, with concrete bases, which represent the foundations of temporary structures.

To the rear of the building is an overgrown area within which are the remnants of a greenhouse foundation. A single manhole was noted and further water pipes seen. Beyond this was an area of grassed land, recently mown, which show two furrows of the medieval field system. The ridge and furrow survive well and are suitable for earthwork survey. The northwest corner of the site is overgrown and hides rusting agricultural machinery.

Conditions are unsuitable for fieldwalking and also for geophysical survey as there are numerous metal objects which would affect magnetometer and resistivity surveys. No finds were observed.

No service provisions (gas, electricity, *etc*) are shown to enter the development area. However, this does not imply the absence

of service trenches to the properties fronting Church Street.

# 6. ASSESSMENT OF SIGNIFICANCE

For assessment of significance the *Secretary of State's criteria for scheduling ancient monuments* has been used (DoE 1990, Annex 4; see Appendix 2).

### Period:

Romano-British settlement may be located within the vicinity of the proposed development, although this may only survive at depth.

Medieval ridge and furrow crosses the area of the proposed development and is a characteristic feature of the period.

### **Rarity:**

Romano-British activity as possibly indicated by the findspot of a coin of Commodus, is not particularly rare. However, elements of any settlement may contain rare or unusual features. Medieval ridge and furrow survives and is a common feature of the fenland.

### **Documentation:**

Records of archaeological sites and finds made in the Pinchbeck area are kept in the Lincolnshire County Sites and Monuments Record and the files maintained by Heritage Lincolnshire. Synopses of all the archaeological work carried out in the vicinity have previously been produced.

The present report provides the first sitespecific consideration of the archaeological and historical aspects of the proposed development area.

### Group value:

Only moderate group value can be attained with the association of Romano-British and medieval finds.

# Survival/Condition:

Limited invasive post-medieval development has occurred on the sites and is restricted largely to the eastern half of the site where former glasshouses were located. However, Romano-British deposits may underlie deposits of alluvium. This would have the affect of protecting archaeological features and deposits.

### Fragility/Vulnerability:

As the proposed developments will impact the investigation area into natural strata, any and all archaeological deposits present on the site are extremely vulnerable.

### **Diversity:**

The only function clearly discovered is medieval agricultural activity. Therefore, functional diversity is low. The implications of the findspot of a Roman coin is unclear.

#### **Potential:**

Potential for Romano-British settlement is considered low to medium. Potential is medium to high that remains of medieval ridge and furrow survive more extensively on the site.

# 7. CONCLUSIONS

The concentrations of archaeological finds and observations represent occupation and use of this area of Pinchbeck in the past.

Evidence for prehistoric activity in the vicinity is virtually non-existent. Romano-British activity has been identified in the vicinity of the proposed development. However, it is impossible to ascertain the size, layout and nature of any settlement from the scant evidence that survives. Furthermore, it is quite possible that Romano-British remains lie buried beneath layers of alluvium. Mentioned in the documents dating from prior to the Norman conquest indicates that there was a Late Saxon village of Pinchbeck. This, however, has not been supported by archaeological evidence.

The medieval village of Pinchbeck would appear to have been concentrated to the south of the development, although the present Pinchbeck Hall may lie on the site of an earlier manor. Medieval ridge and furrow has been recorded within the proposed development area and finds of pottery, possibly representing manuring scatters, were found in the field to the north of the development.

The area under investigation appears to have largely been developed in the latter part of this century when the site was used as a nursery. The foundations of greenhouses are apparent towards the centre of the site. These foundations are unlikely to have greatly damaged any archaeological remains present on the site. Ground conditions are not conducive to geophysical survey or fieldwalking.

# 8. ACKNOWLEDGEMENTS

Archaeological Project Services would like to acknowledge the assistance of Mr D. Patterson of Patterson Properties who commissioned this report. The work was coordinated by Gary Taylor and this report was edited by Tom Lane. Access to the County Sites and Monuments Record was kindly provided by Mark Bennet and Sarah Grundy of the Archaeology Section, Lincolnshire County Council. Dave Start, the director of Heritage Lincolnshire, permitted examination of the parish files. Illustrations were undertaken by Phil Mills.

# 9. **REFERENCES**

All of the following sources were consulted in the data-gathering exercise. However, as some references duplicated information available in others, not all of them have been specifically referred to in the text.

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# 10. ABBREVIATIONS

APS	Archaeological Project Services
BGS	British Geological Survey
DoE	Department of the Environment
IFA	Institute of Field Archaeologists
LAO	Lincolnshire Archive Office
LAS	Lindsey Archaeological Services



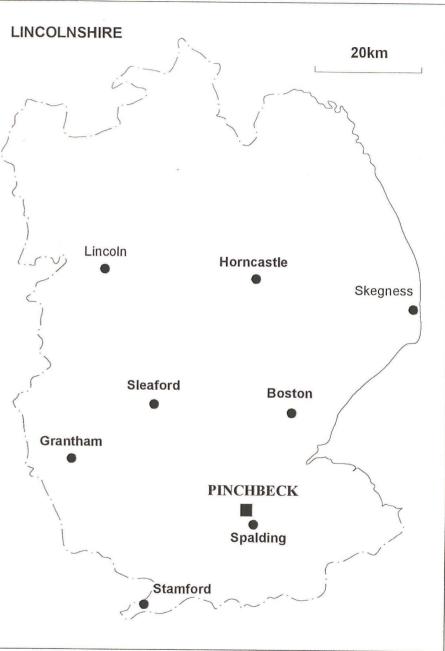
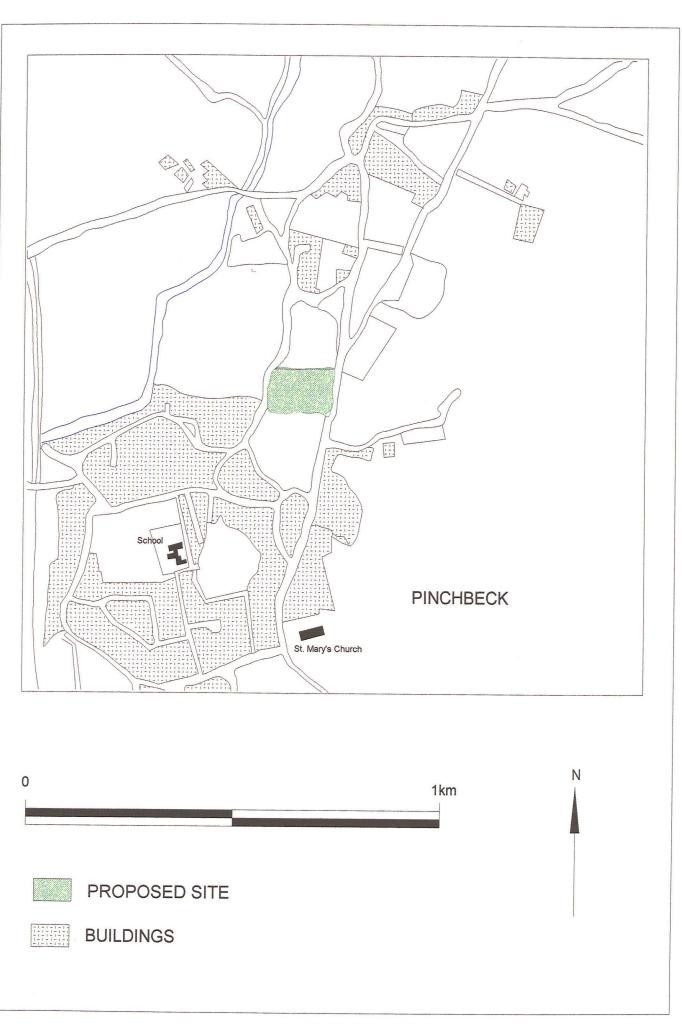
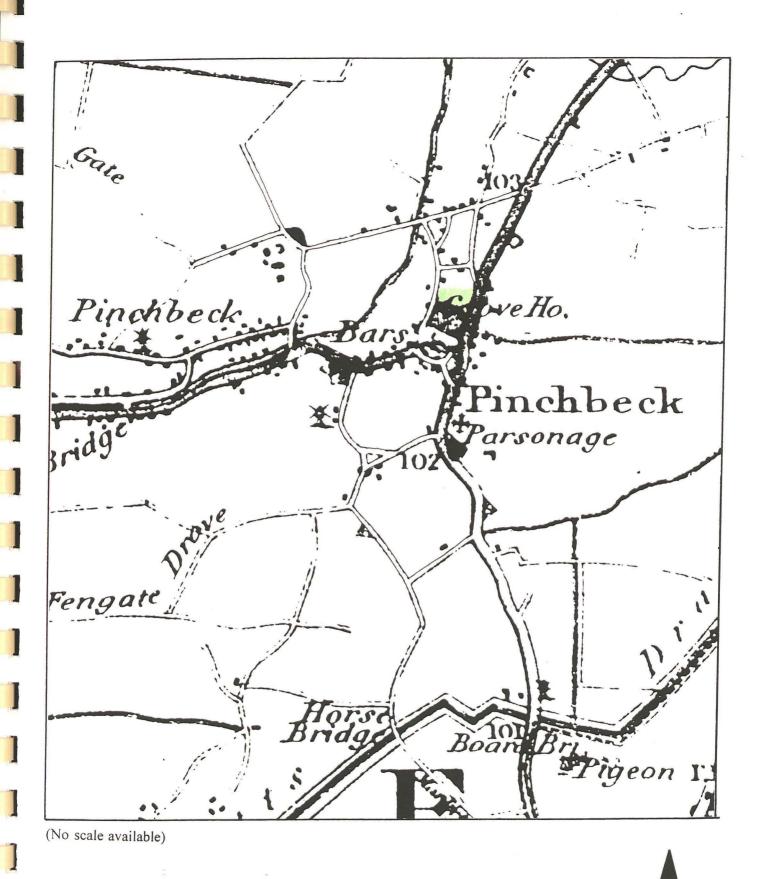
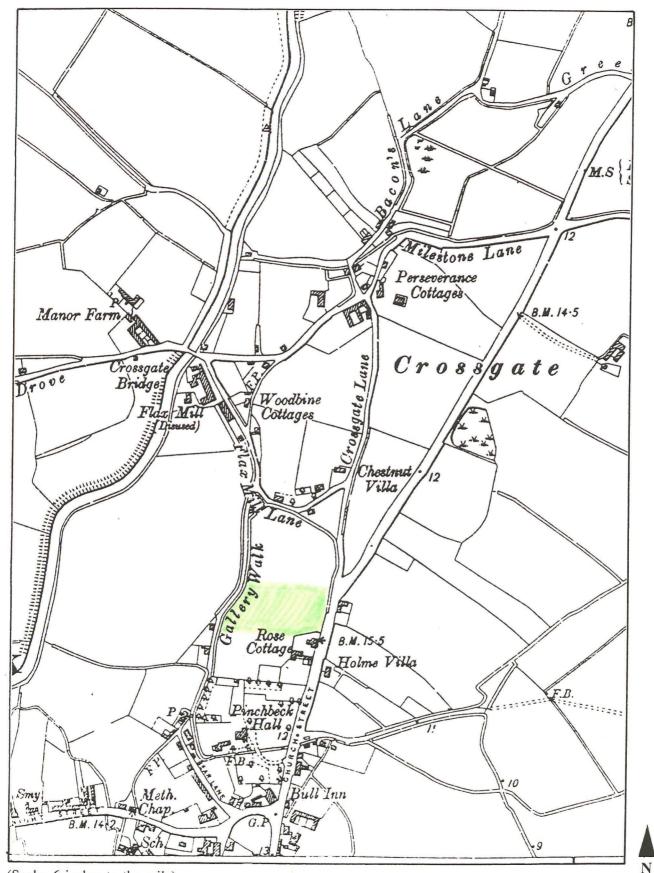


Figure 1 - General Location Plan





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<sup>(</sup>Scale: 6 inches to the mile)

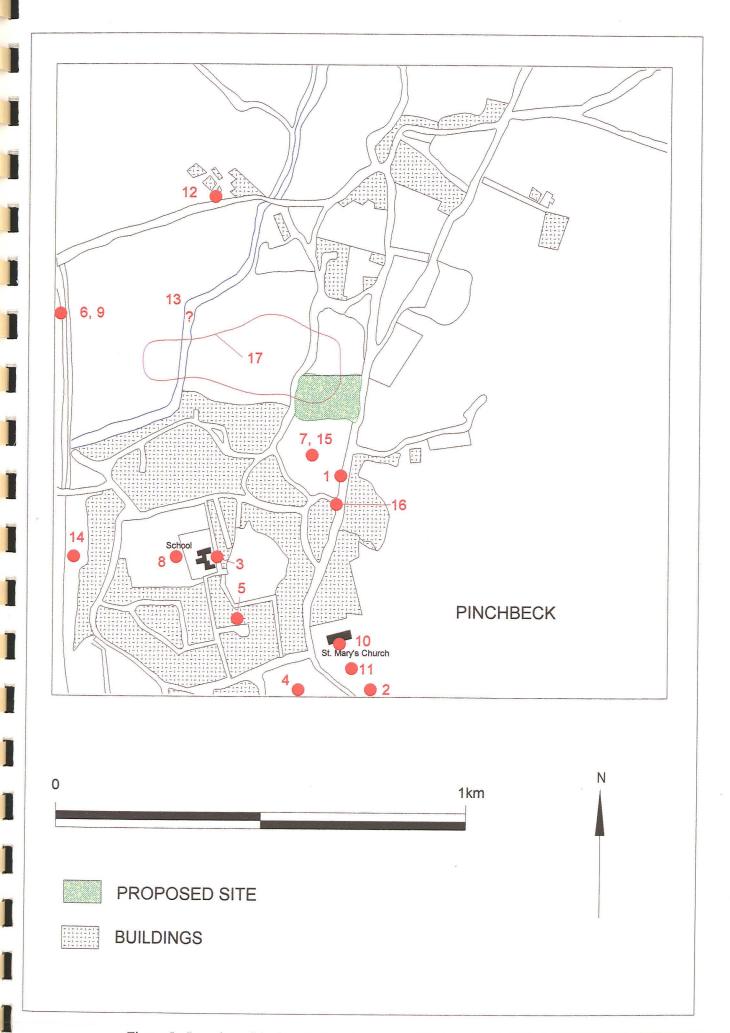


Figure 5 - Location of Archaeological sites in the vicinity of Proposed Development

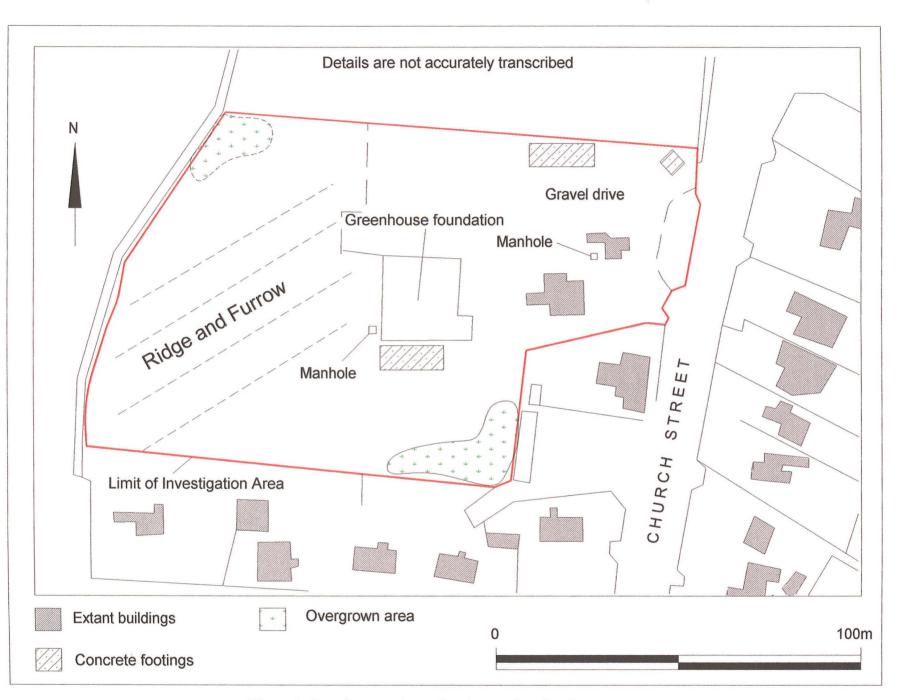


Figure 6 - Development Area, showing results of walk-over survey

## Appendix 1

# SPECIFICATION FOR THE ARCHAEOLOGICAL EVALUATION OF LAND AT CHURCH STREET, PINCHBECK

### 1. SUMMARY

This document comprises a specification for the archaeological evaluation of land at Church Street, Pinchbeck.

A possible Roman settlement has been found some distance to the southwest and a Roman coin is reported from Pinchbeck Hall, immediately south of the investigation site. Medieval remains have been found at various locations in the village and Pinchbeck Hall is of early 18th century origin.

A planning application has been made for development of the area. The archaeological works are being undertaking to provide information to assist the determination of the application.

The archaeological work will in the first instance consist of a desk-top assessment of the archaeological implications of the site. This may be followed by a variety of field investigations which may include geophysical survey, earthwork survey, fieldwalking and trial trenching as appropriate.

If fieldwork is undertaken then, on completion, a report will be prepared detailing the results 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 evaluation of land at Church Street, Pinchbeck, national grid reference TF242262.
- 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 DESCRIPTION

- 3.1 Pinchbeck is located 3km north of Spalding and 20km southwest of Boston in the Fens of south Lincolnshire. Situated on the north side of the village just north of Pinchbeck Hall, the site is located on the west side of Church Street at national grid reference TF242262.
- 3.2 The site is an approximately rectangular block of land of approximately 1.6ha. Currently the site is a former garden centre with buildings.

#### 4. PLANNING BACKGROUND

4.1 A planning application (H14/1049/97) for residential development has been submitted to South Holland District Council. An archaeological evaluation has been requested to provide further information to assist the determination of the application.

#### 5. SOILS AND TOPOGRAPHY

5.1 Pinchbeck is located in the Fens of south Lincolnshire. The site and surrounding area lie close to the east bank of the River Glen on flat and level land at approximately 4m OD. Soils at the site are Wisbech Association coarse silty calcareous soils on stoneless marine alluvium (Hodge *et al.* 1984 361).

#### 6. ARCHAEOLOGICAL OVERVIEW

- 6.1 Evidence of prehistoric activity has been revealed in the parish, though mostly to the west. Any prehistoric ground surface in the vicinity of the proposed development site may be buried deeply by alluvium.
- 6.2 A possible Roman settlement site has been identified at the railway, approximately 700m to the southwest. Additionally, a Roman coin is reported from Pinchbeck Hall, immediately south of the investigation site.
- 6.3 The place-name Pinchbeck is of Old English origin and refers to a stream, probably the River Glen. The parish was referred to in the Late Saxon period and again in the Domesday Survey of 1086 when it appears to have belonged to the adjacent manors of Spalding and Holbeach. Domesday records 4 fisheries in the parish and these are likely to have been located on the river. Medieval pottery and other remains have been found at various locations in the village. Pinchbeck Hall, just to the south of the site, is an early 18th century building with later alterations and additions.

#### 7. AIMS AND OBJECTIVES

- 7.1 The aim of the work will be to gather sufficient information to enable the County Archaeologist to formulate an appropriate policy for the management of the archaeological resource of the site.
- 7.2 The objectives of the work will be to:
  - 7.2.1 Establish the presence/absence of archaeological remains within the site.
  - 7.2.2 Determine the likely extent and spatial arrangement of archaeological activity present within the site.
  - 7.2.3 Determine the condition and quality of the archaeological remains present within the site.
  - 7.2.4 Establish the extent to which the surrounding archaeological features extend into the application area.
  - 7.2.5 Determine the way in which the archaeological features identified fit into the pattern of occupation and land-use in the surrounding landscape.
  - 7.2.6 Determine the date and function of the archaeological features present on the site

#### 8. DESK-TOP ASSESSMENT

#### 8.1 Data collection

- 8.1.1 To enable an effective assessment of the archaeological setting of the site and the remains contained within it, the desk-top assessment will examine the site and the surrounding 500m.
- 8.1.2 The following sources will be consulted:
  - Lincolnshire Sites and Monuments Record: to obtain details of previous archaeological finds and sites within the study area, and other data, including reports of previous archaeological work.
  - The Lincolnshire Archives: to provide historical documentation relating to the site,

including tithe maps, enclosure awards and parish maps.

- Ordnance Survey maps; current and old editions.
- Aerial photographs held in national and local collections. Archaeological data will be plotted using the Mobius network technique.
- Archaeological books and journals with information relevant to the site.
- The records held by the the Heritage Trust for Lincolnshire.
- Data relating to the geotechnical investigation of the site to provide information regarding the potential depth of topsoil/overburden as this may affect the feasibility of any subsequent phases of work should these be required.
- Any other sources with relevant information, located during the work.
- Identify any other constraints on the proposed development.
- As part of the study a field visit will be undertaken to establish the following:
  - a) The state of the site and its suitability for further stages of work, especially geophysical survey and fieldwalking.
  - b) To identify any structural constraints and disturbances to the site.

#### 8.2 Report

- 8.2.1 The findings of the desk-top assessment will be presented in a written report supported by illustrative material reproduced on appropriate scale site plans. The text will summarise all the data collected and the sources consulted will be referenced. The findings will be interpreted and, as far as possible, the various types of activity will be individually discussed.
- 8.2.2 The plans will show the location of the various archaeological sites and finds located during the assessment. The features identified during the search of the relevant aerial photographs will be plotted onto similar scale plans. Additionally, any areas of disturbance or destruction to potential archaeological deposits will be plotted.
- 8.2.3 Any information that is collected from geotechnical reports will also be incorporated into the report.
- 8.2.4 The report will attempt to place the results of the study into a local, regional and national archaeological context, and will identify any specific research priorities that may be may be addressed by the site.

#### 9. GEOPHYSICAL SURVEY

#### 9.1 Reasoning for this technique

- 9.1.1 If appropriate, geophysical survey of the site will be undertaken. This technique enables large areas to be investigated rapidly and the results facilitate the rapid identification of the likely archaeological potential of the site.
- 9.1.2 The effectiveness of the technique is limited by background magnetic susceptibility and the ground cover which ideally should be minimal.

### 9.2 <u>Methodology</u>

9.2.1 The entire site, excluding buildings or other inappropriate areas, will be subject to detailed

survey using a fluxgate gradiometer.

#### 9.3 Report

- 9.3.1 A report will be prepared on completion of the survey detailing the methodologies used and the results of the work. The areas and nature of archaeological activity will be shown on a series of computer generated plots and the anomalies encountered will be interpreted. The report will be prepared in accordance with the English Heritage (1995) document *Geophysical Survey in Archaeological Field Evaluations*, Research and Professional Services Guideline 1.
- 9.3.2 The report will detail the methodologies used and the results of the survey. The areas and nature of magnetic activity will be shown on a series of computer generated plots and the anomalies encountered will be interpreted.

#### 10. FIELDWALKING

- 10.1 Reasoning for this technique
  - 10.1.1 Fieldwalking has been selected as a potential field technique as it is a means of rapidly identifying any surface concentrations of archaeological material present within the plough soil. The technique therefore facilitates the identification of potential archaeological sites. The limiting factor on the effectiveness of this technique is the condition of the surface of the site that must be ploughed and weathered, and with minimal crop coverage.

#### 10.2 Site Operation

10.2.1 All appropriate areas of the site will be examined. The survey will be undertaken using the walk-through method based on transects spaced at 10m. Finds recovered from the surface of the field will be referenced to their position along each transect using a geodolite surveying instrument. This will enable the identification of spatial distributions and concentrations of artefacts.

#### 10.3 Report

- 10.3.1 Artefacts recovered during the fieldwalking will be submitted to the appropriate specialists for identification and dating.
- 10.3.2 The results of the fieldwalking survey will be presented in a written report supported by illustrations on appropriate scale site plans. The text will detail the methodologies used and summarise the results. The results (artefact distributions) will be plotted on to scale site plans in terms of date of artefact and, if appropriate, class of material. As far as possible, the report will attempt to interpret the results and place them into a local, regional and national context, where relevant.

#### 11. EARTHWORK SURVEY

#### 11.1 <u>Reasoning for this technique</u>

11.1.1 Earthworks generally reflect the presence of buried archaeological remains. Identification and recording of earthworks can therefore provide information on the location, extent and nature of below-ground archaeological features.

#### 11.2 Methodology

11.2.1 If earthworks are present the entire area of such remains will be surveyed using an Electronic Distance Meter (EDM).

11.2.2 On completion of the field work the results of the survey will be transcribed to plan depicting the earthworks present on the site.

#### 12. LIAISON WITH THE COUNTY ARCHAEOLOGICAL OFFICER

12.1 Prior to the commencement of any trial trenching the arrangement of the as yet undesignated trenches will be agreed with the County Archaeological Officer, to ensure that the proposed scheme of works fulfils their requirements.

#### 13. TRIAL TRENCHING

#### 13.1 Reasoning for this technique

- 13.1.1 Trial trenching enables the *in situ* determination of the sequence, date, nature, depth, environmental potential and density of archaeological features present on the site.
- 13.1.2 If appropriate, the trial trenching will consist of the excavation of an approximately 2% sample of the site. The location of any such trenches will be defined by the County Archaeological Officer in response to the results of the desk-top assessment, geophysical, fieldwalking and earthwork surveys. Should archaeological deposits extend below 1.2m depth then the trench sides will be stepped in, or shored, as appropriate.

#### 13.2 General Considerations

- 13.2.1 All work will be undertaken following statutory Health and Safety requirements in operation at the time of the evaluation.
- 13.2.2 The work will be undertaken according to the relevant codes of practice issued by the Institute of Field Archaeologists
- 13.2.3 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 be excavated. However, the evaluation 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.
- 13.2.4 Open trenches will be marked by hazard tape attached to road irons or similar poles. Subject to the consent of the Archaeological Officer for Lincolnshire County Council 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 problems.

#### 13.3 Methodology

- 13.3.1 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.
- 13.3.2 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.
- 13.3.3 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.

- 13.3.4 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.
- 13.3.5 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:
  - the site before the commencement of field operations.
  - the site during work to show specific stages of work, and the layout of the archaeology within individual trenches.
  - individual features and, where appropriate, their sections.
  - groups of features where their relationship is important.
  - the site on completion of field work
- 13.3.6 Should human remains be encountered, they will be left *in situ* with excavation being limited to the identification and recording of such remains. The appropriate Home Office licences will be obtained and the local environmental health department and the police informed.
- 13.3.7 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.
- 13.3.8 The spoil generated during the evaluation will be mounded along the edges of the trial trenches with the top soil being kept separate from the other material excavated for subsequent backfilling.
- 13.3.9 The precise location of the trenches within the site and the location of site recording grid will be established by an EDM survey.

### 14. ENVIRONMENTAL ASSESSMENT

14.1 If deemed necessary, during the evaluation specialist advice will be obtained from an environmental archaeologist. The specialist will visit the site and will advise on sampling and if appropriate 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

#### 15. POST-EXCAVATION AND REPORT

#### 15.1 Stage 1

- 15.1.1 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.
- 15.1.2 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.

#### 15.2 Stage 2

- 15.2.1 Detailed examination of the stratigraphic matrix to enable the determination of the various phases of activity on the site.
- 15.2.2 Finds will be sent to specialists for identification and dating.

### 15.3 Stage 3

- 15.3.1 On completion of stage 2, a report detailing the findings of the evaluation will be prepared. This will consist of:
  - A non-technical summary of the findings of the evaluation.
  - A description of the archaeological setting of the site.
  - Description of the topography and geology of the evaluation area.
  - Description of the methodologies used during the evaluation and discussion of their effectiveness in the light of the findings of the investigation.
  - A text describing the findings of the evaluation.
  - 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.
  - Sections of the archaeological features.
  - Interpretation of the archaeological features exposed and their context within the surrounding landscape.
  - Specialist reports on the finds from the site.
  - Appropriate photographs of specific archaeological features.
  - A consideration of the significance of the archaeological deposits encountered in local, regional and national terms.

#### 16. ARCHIVE

16.1 The documentation, finds, photographs and other records and materials generated during the evaluation will be sorted and ordered into the format acceptable to the City and County Museum, Lincoln. This sorting will be undertaken according to the document titled *Conditions for the Acceptance of Project Archives* for long term storage and curation.

#### 17. **REPORT DEPOSITION**

17.1 Copies of the evaluation report will be sent to: the client, Patterson Properties Ltd; the agent, Cooper Architectural Design; the County Archaeology Section (County Sites and Monuments Record); and South Holland District Council Planning Department.

### 18. PUBLICATION

18.1 A report of the findings of the evaluation will be published in Heritage Lincolnshire's annual report and an article of appropriate content will be submitted for inclusion in the journal of the Society for Lincolnshire History and Archaeology. 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.

### 19. CURATORIAL MONITORING

19.1 Curatorial responsibility for the project lies with Archaeological Officer, Lincolnshire County Council. Seven days notice in writing will be given to the officer prior to the commencement of the project to enable them to make appropriate monitoring arrangements.

#### 20. VARIATIONS TO THE PROPOSED SCHEME OF WORKS

- 20.1 Variations to the scheme of works will only be made following written confirmation of acceptability from the Archaeological Officer, Lincolnshire County Council.
- 20.2 Should the Archaeologcal Officer for Lincolnshire County Council 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.

#### 21. SPECIALISTS TO BE USED DURING THE PROJECT

21.1 The following organisations/persons will, in principal 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.

Task	Body to be undertaking the work
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: J Young, City of Lincoln Archaeological Unit, Lincoln.
	Medieval and later: H Healey, independent archaeologist
Other Artefacts	J Cowgill, Independent specialist
Human Remains Analysis	R Gowland, Archaeological Project Services
Animal Remains Analysis	Environmental Archaeology Consultancy
Environmental Analysis	Environmental Archaeology Consultancy
Radiocarbon dating	Beta Analytic Inc., Florida, USA
Dendrochronology dating	University of Sheffield Dendrochronology Laboratory

#### 22. BIBLIOGRAPHY

English Heritage, 1995 *Geophysical survey in archaeological field evaluation*, Research and Professional Services Guideline 1

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

# SECRETARY OF STATE'S CRITERIA FOR SCHEDULING ANCIENT MONUMENTS - EXTRACT FROM ARCHAEOLOGY AND PLANNING DOE PLANNING POLICY GUIDANCE NOTE 16, NOVEMBER 1990

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

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

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

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

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

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

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

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

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

# Appendix 3

# GLOSSARY

Anglo-Saxon	Pertaining to the early part of the Saxon period and dating from approximately AD 450-650.
Bronze Age	Part of the prehistoric era characterised by the introduction and use of bronze for tools and weapons. In Britain this period dates from approximately 2000-700 BC.
Cropmark	A mark that is produced by the effect of underlying archaeological features influencing the growth of a particular crop.
Geophysical	
Survey	Essentially non-invasive methods of examining below the ground surface by measuring deviations in the physical properties and characteristics of the earth. Techniques include magnetometery survey and resistivity survey.
Droveway	Area between two parallel ditches that was designed specifically for the corralling of livestock.
Enclosure	Area bounded by a ditch along the majority of its perimeter.
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.
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 1st century AD.
Romano-British	Pertaining to the period dating from AD 43-410 when the Romans occupied Britain.

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