
**ARCHAEOLOGICAL
WATCHING BRIEF
AT WOODFIELD AVENUE,
BIRCHWOOD,
LINCOLN,
LINCOLNSHIRE
(LWFD 07)**

**Work Undertaken
For
CgMs Consulting
on behalf of
Haslam Homes**

April 2007

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

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ARCHAEOLOGICAL PROJECT SERVICES



APS Report No. **52/07**

Quality Control
Woodfield Avenue,
Birchwood, Lincoln
LWFD 07

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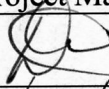

Checked by Project Manager	Approved by Senior Archaeologist
 Dale Trimble	 Tom Lane
Date: 30/04/07	Date: 30 th April 2007

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1. SUMMARY

A watching brief was undertaken during groundworks at Woodfield Avenue, Birchwood, Lincoln. The watching brief monitored the excavation of five trenches as the development had already proceeded without archaeological supervision.

The site lies to the southwest of Lincoln and was formerly in the parish of Skellingthorpe. The site would appear to have been largely marginal land and was probably a principal source of wood for fuel for activities in the city and neighbouring areas since the Romano-British period (AD 42-410). More recently, the site lay within a Second World War airfield.

The watching brief revealed a sequence of natural and modern deposits. A concrete foundation was revealed that may relate to the former airfield along with two field drains. No archaeological features were identified and no artefacts recorded.

2. INTRODUCTION

2.1 Definition of a Watching Brief

An archaeological watching brief is defined as “*a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed.*” (IFA 1999).

2.2 Planning Background

Archaeological Project Services was commissioned by CgMs Consulting on behalf of Haslam Homes to undertake an archaeological watching brief during groundworks associated with new residential development at Woodfield

Avenue, Birchwood, Lincoln, Lincolnshire. Approval for the development was sought through the submission of planning application 2006/0307/F. The watching brief was carried out on the 7th March and 12th April in accordance with a specification prepared by CgMs Consulting (Appendix 1).

2.3 Topography and Geology

Birchwood is located 5km southwest of the centre of Lincoln on the edge of the City of Lincoln administrative district (Fig. 1).

The site is located at the western end of the Birchwood area at National Grid Reference SK 9256 6962 (Fig. 2). The site lies to the east of Woodfield Avenue at a height of c. 20m OD on land that slopes down to the north and south.

Local soils are of the Blackwood Association, typically sandy gley soils (Hodge *et al.* 1984). These soils are developed on a drift geology of Older River Sands and Gravels which in turn seals a solid geology of Jurassic Lower Lias clays and shales (BGS 1973).

2.4 Archaeological Setting

The site is located in an area that has principally been managed woodland since the prehistoric period. During the Romano-British period, the area may have provided fuel for consumption in the city or for the pottery industry.

Birchwood lies within what was the former parish of Skellingthorpe. Skellingthorpe is first mentioned in the Domesday Survey of c. 1086. Referred to as *Scheldinchope* and *Schellingop*, the name is derived from the Old English ‘*hop*’, meaning ‘an enclosure in the marsh’ and perhaps ‘*scelding*’ meaning a shield shaped hill (Cameron 1998, 110). The Domesday Survey records that

Skellingthorpe was held by Baldwin the Fleming, though claimed by Peterborough Abbey, and contained meadow 1 mile in length by two and a half furlongs in breadth with a similar area of underwood (Foster and Longley 1976).

The area probably continued in use as managed woodland, though perhaps was subsequently cleared over time. In 1941, the site was contained within RAF Skellingthorpe and was located at the west end of one of the principal runways.

3. AIMS

The requirements of the watching brief, as detailed in the specification (Appendix 1), were to locate and record archaeological deposits and, if present, to determine their date, function and origin.

4. METHODS

As construction of the new development had proceeded, five trenches were opened at positions around the site to determine the presence or otherwise of buried archaeology. Trenches varied in size from 108m to 20m in length. Overburden had previously been stripped from most of the site. Following excavation, the exposed surfaces were examined for archaeological deposits. Selected deposits were excavated further to retrieve artefactual material and to determine their function. Each deposit was allocated a unique reference number (context number) with an individual written description. A list of all contexts and their descriptions appears as Appendix 2. A photographic record was compiled and sections were drawn at a scale of 1:10 and plans at 1:50 and 1:20. Recording was undertaken according to standard Archaeological Project Services practice.

Following excavation the records were checked and a stratigraphic matrix produced. Phasing was assigned based on

the nature of the deposits and recognisable relationships between them.

5. RESULTS

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

The earliest deposit encountered in each of the areas was a layer of yellowish brown sand and gravel (001), identified as natural.

Located towards the north end of Area 1 were two features. The first (003) was sub-rectangular and measured over 1m long by 1m wide and 0.1m deep and was filled with concrete (002).

The second feature was a field drain (005) aligned northwest-southeast (Fig. 4) with a fill of grey silty sand (004).

A further field drain was identified in the western end of Area 2 (Fig. 4). This contained a ceramic drain and was backfilled with greyish brown sandy silt (006).

Although largely removed from the site, overburden comprising grey sand and gravel with concrete fragments (008) was recorded in Areas 3 to 5.

6. DISCUSSION

Natural deposits of sand and gravel relate to the underlying drift geology.

A concrete filled foundation trench was recorded which is most likely to be related to the former airfield at the site. The overburden also contained amounts of concrete which may have derived from the demolition of the runways. Two field drains were also recorded.

No finds were retrieved during the investigation.

7. CONCLUSION

An archaeological watching brief was undertaken at Woodfield Avenue, Birchwood, Lincoln, as the site lay in an area of woodland exploitation since the prehistoric period.

However, no archaeological remains were encountered and only modern features were recorded. A concrete filled foundation trench may relate to the former use of the site as an airfield. No artefacts were retrieved during the watching brief.

8. ACKNOWLEDGEMENTS

Archaeological Project Services wishes to acknowledge the assistance of Mr P Gajos of CgMs Consulting on behalf of Haslam Homes for commissioning the fieldwork and post-excavation analysis. The work was coordinated by Dale Trimble who 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: Dale Trimble
 Site Supervisors: Mark Peachey, Michael Wood
 Photographic reproduction: Sue Unsworth
 Illustration: Paul Cope-Faulkner
 Post-excavation analysis: Paul Cope-Faulkner

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11. ABBREVIATIONS

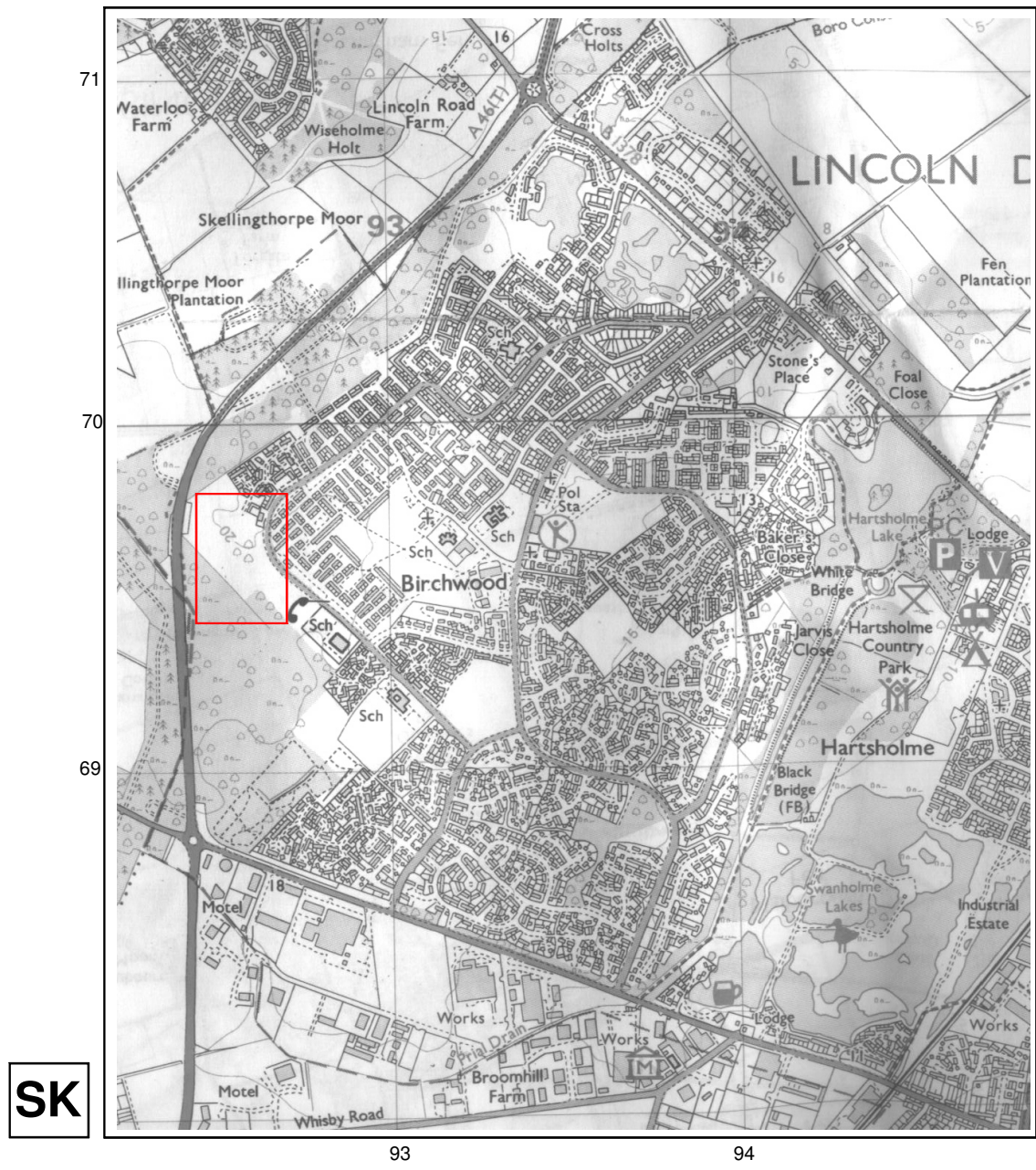
APS Archaeological Project Services

BGS British Geological Survey


IFA Institute of Field Archaeologists

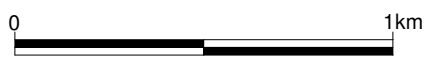


Figure 1 - General location plan



SK

 Area detailed in Figure 3




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Project Name: Woodfield Ave, Birchwood LWFD07		
Scale 1:20000	Drawn by: PCF	Report No: 52/07

Figure 2 - Site location plan

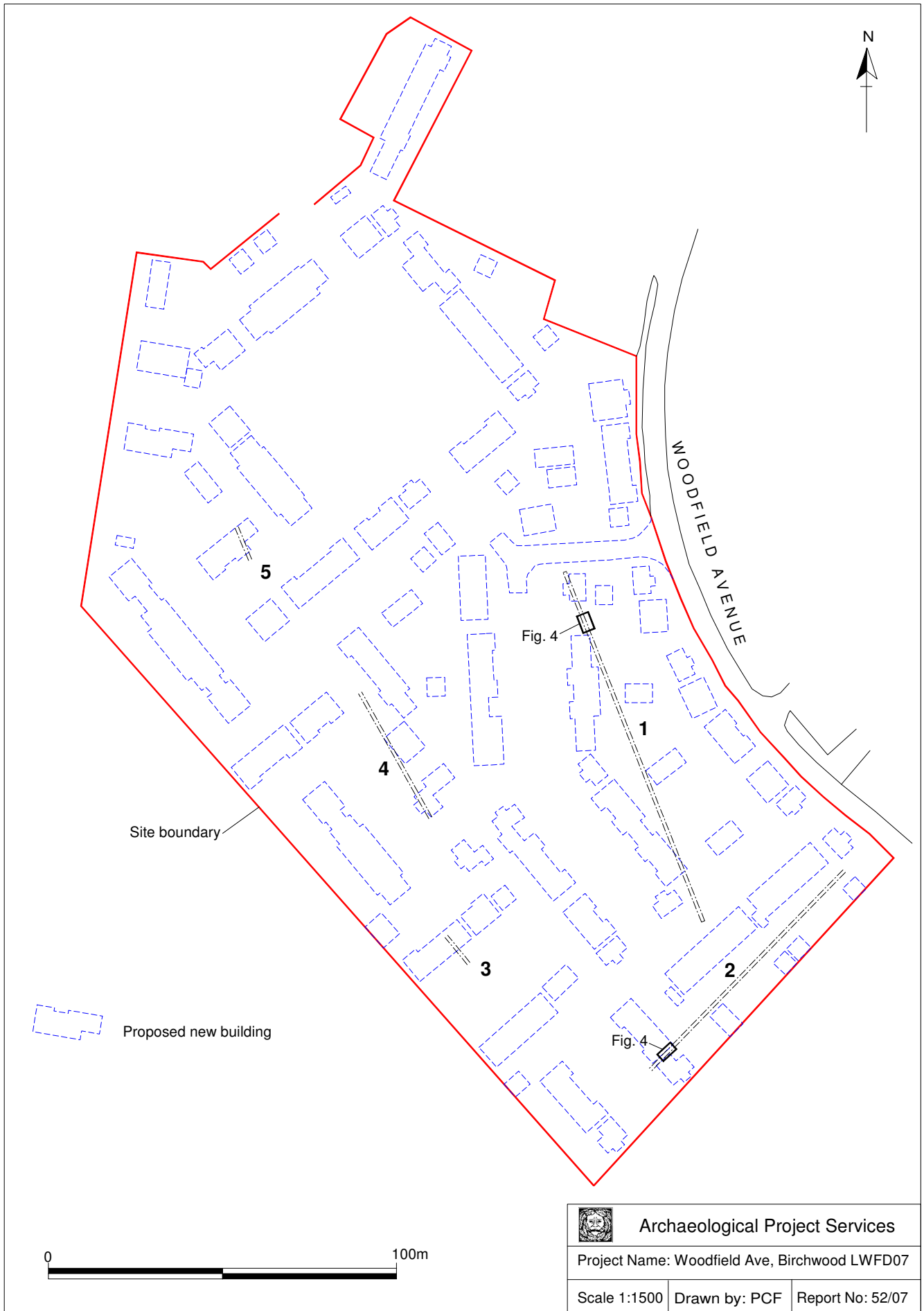


Figure 3 - Plan of the development area showing trench location

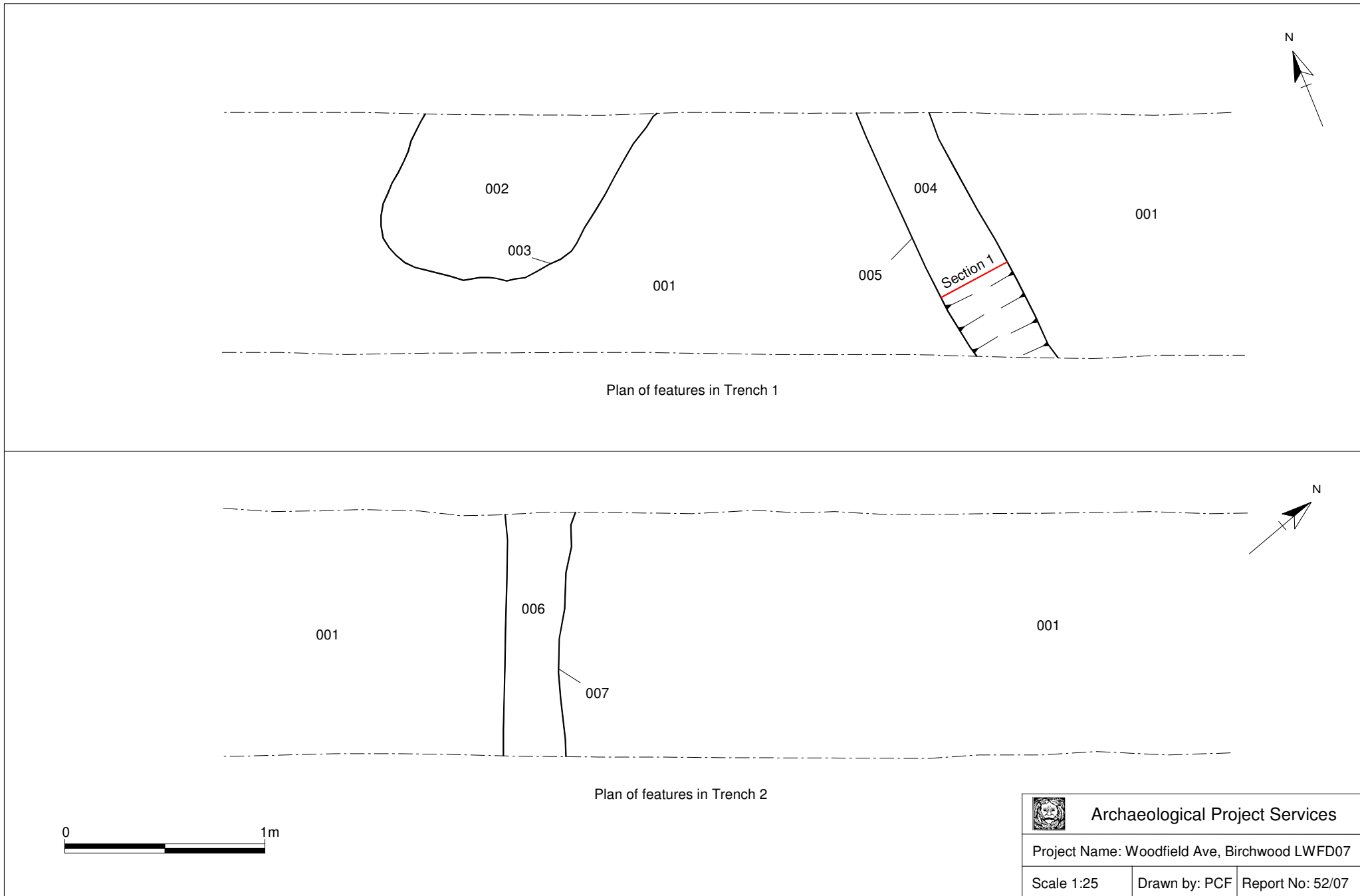
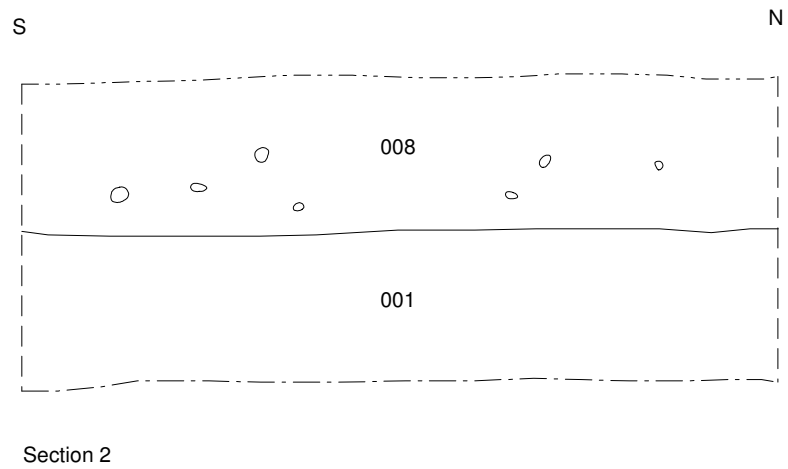
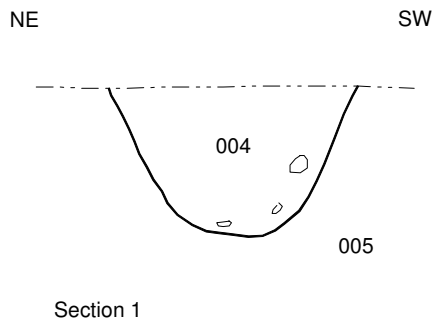


Figure 4 - Plans of features in Trenches 1 and 2




 Archaeological Project Services		
Project Name: Woodfield Ave, Birchwood LWFD07		
Scale 1:10	Drawn by: PCF	Report No: 52/07

Figure 5 - Sections 1 and 2



Plate 1 - View of Trench 1, looking northwest



Plate 2 - Section 1, looking north



Plate 3 - Trench 2, looking northeast



Plate 4 - Trench 3, looking northwest



Plate 5 - Trench 4, looking northwest



Plate 6 - Section 2 showing the general sequence of deposits, looking southwest



Plate 7 - Trench 5, looking northwest

Appendix 1

A SPECIFICATION FOR AN ARCHAEOLOGICAL WATCHING BRIEF: LAND AT WOODFIELD AVENUE, BIRCHWOOD, LINCOLN

SUMMARY

Haslam Homes Ltd have received planning permission (Application No. 2006/0307/F) from Lincoln City Council for a new residential development. The proposed development area is located at Woodfield Avenue, Birchwood, Lincoln, centred on NGR SK 92560 69629. A condition was attached to the planning permission requiring a scheme for an archaeological watching brief to be submitted to and approved by the Local Planning Authority, prior to the commencement of development.

The proposed methodology for carrying out the watching brief is specified in this document and is subject to approval by the Local Planning Authority.

1.0 INTRODUCTION

1.1 Site Location and Description

1.1.1 The site is located at Woodfield Avenue, Birchwood, Lincoln. It is centred on NGR SK 92560 69629 (Fig 1) and lies on fairly level ground at approximately 20mAOD. The prior to development the site comprised open scrubland.

1.1.2 The development is to comprise c.185 new houses with associated access and services (Fig 2).

1.2 Planning and Project Background

1.2.1 Lincoln City Council have granted full planning permission for the construction of 185 new dwellings (Application No 2006/0307/F). A condition of the grant states that:

“No development groundwork shall commence on site until advance written notice (minimum 14 days) of the date of commencement of works on site and the confirmation of appointment of a competent archaeological body to conduct a 'watching brief' has been given to both the Local Planning Authority and the nominated archaeology body. Provision shall then be made for the nominated archaeology body to carry out an archaeological watching brief during the course of all groundwork associated with the development (including any geotechnical investigation of strata, any site clearance or other enabling work and the excavation of foundation and services trenches). Access shall be afforded at all reasonable times to the nominated archaeological body.”

1.2.2 To ensure that satisfactory account is taken of the archaeological implications of the development a brief for an archaeological watching brief has been prepared by the City Archaeologist. However, work was allowed to start on the site before the brief for archaeological works was issued and the developer was not made aware of the archaeological condition on the site. The site has been stripped of topsoil and the roads along with a number of houses along the Woodfield Avenue frontage have already been constructed.

1.3 Archaeological and Historical Background

1.3.1 The Lincoln Archaeological Research Assessment (LARA) has classified the site as having the following potential research agendas;

Prehistoric Era (-10000 – 60); Carr-lands and woodlands

The more difficult (and perhaps more marginal) land to the south-west in the Boultham and Birchwood areas was probably under managed woodland in the Roman era. There is no doubt that both Bronze Age and Iron Age peoples were skilful woodland managers and it is possible that this area was used for managed woodland at these earlier dates. However, we have absolutely no evidence for this, and it may be better to require basic paleo-environmental sampling in this area before trying to set any research agenda here.

Roman Military Era (60-90); Birchwood area and Boultham Moor

Nothing is known about this area of higher ground in the Roman Military period. It would have always been an area of

scrubby woodland on poor, sandy, soils as it was in the Iron Age and in the Roman Colonia Eras. This woodland would have been a valuable resource and may have been the location of, or the stimulation for, woodland industries such as smelting or pottery manufacture. It is conceivable that such operations were in operation during the Roman Military occupation and they may even have been started by the conquerors, although the evidence found to date suggest that they did not begin until later in the Roman period. Even so, these valuable natural resources were located close to the new fortress and as such one might expect that they were contained within the territorium. The capture of environmental evidence will be the first step towards identifying the significance of this component. The surrounding peat may preserve more important environmental deposits than the sands and gravels themselves. Thus a site on the higher ground might be more effectively researched by sampling deposits many hundreds of metres away in the peat.

Roman colonia Era (90-410); Industrial belt south-west of the city

The area of what was probably scrubby woodland on the poor soils above the waterlogged basin may have been an important industrial resource for the colonia. The woodland itself may have provided grazing for pig herds for example (as it clearly did at Domesday) whilst the trees, if coppiced and managed, would have provided fuel both for fires in the city and also for woodland industries within the woods themselves (as it did when moorland at Boutham was granted to Bardney Abbey 'for burning', Thompson 1913-14, 46). Of these industries the only one for which we have any evidence as yet is the pottery industry, although charcoal burning might also be expected and perhaps even iron-working (pers. com. Jane Cowgill). A research agenda for pottery production sites of this type is provided in Fulford and Huddleston 1991, whilst a very specific series of research questions has been posed by Darling (1977, 36-7).

The pottery kilns may have been attracted to the area by easily excavated local clay deposits (Darling 1977, 32-40; Darling and Precious forthcoming), which themselves might have been revealed in the process of sand and gravel digging. Gravel and sand would have been dug for construction projects in the city and neighbourhood, and, along with clay extraction, this digging would have had a marked effect on the local topography. The pits created by such quarrying are likely to be the most frequently encountered archaeological features in this area, even though features of this date may be hard to distinguish from similar features of later periods. The sites adjacent to the quarries, however, where the gravel was processed, the clay dried or the pots fired, will be easier to date and will be of the greatest interest and importance. In looking at the different production sites we should seek to distinguish between the different stages in production and see if any co-ordination between them is evident. It is not clear at present whether we are dealing with the operation of many individuals working within their own area of resources, and in competition with each other, or whether, alternatively, we have something more akin to factory production, where the scattered processes were organised by a single agency or owner, and the individual production sites were little more than locations on a single 'conveyor-belt' of production. These areas of industrial activity will frequently be revealed as geophysical 'hot-spots' and, consequently, geophysical evaluation will be an essential preliminary to development within this area. A great deal can be learnt about this area, however, through the study of bore-holes and associated systematic environmental sampling. The former should eventually give some idea of the original landforms prior to the start of extractive industry and the latter should provide information about the woodland management associated with the industries.

Early Medieval Era (410-850); Central elements of former Roman city and Roman network

We have no information at all about the use to which the land surrounding the city was put in the Early Medieval Era. Obviously the high heathlands north of the walled enclosure would provide good grasslands for grazing and may even have been ploughed. The heavier silts and clays in the valley bottom would be less useful for arable, but the meadows east and west of the walled enclosure would produce good seasonal grazing for cattle. The woodlands in the Birchwood and Boutham Moor areas would still be available, although we have no evidence that the Romans' extensive exploitation of this resource continued under their successors. The Anglo-Saxon culture, however, was very much at home with woodland management and exploitation and so it is unlikely that such a valuable resource would have been abandoned. Furthermore the enigmatic discovery of an Anglo-Saxon pot within the flue of one of the abandoned Rookery Road pottery kilns at least shows activity in the area (Webster 1960; Eagles 1979, 156,377) even if it does not show continuity. Evidence for early and middle Saxon utilisation of these woodland resources is likely to exist, and, although it may be hard to find, it will be especially valuable when recovered. Even with the known rise in water levels in the Early Medieval period, the flat gravel terraces either side of the Witham above Bracebridge will have remained highly favourable to settlement, as they were in earlier eras, although there is no evidence for early medieval settlement here at present.

Early Medieval Era (410-850); Land around city potentially usable for settlement and agriculture

It has been suggested on several occasions (most recently and fully by Kevin Leahy (1993)), that there was a qualitative difference between early Anglo-Saxon settlement around Lincoln and that which was experienced elsewhere in the county. Commentators have pointed to the apparent 'hole' in the distribution of cremation cemeteries around the city (the nearest known sites are no closer than 20 miles in any direction) and suggested that this gap in the distribution represents a community, based on the city, which did not subscribe to the prevailing burial customs of the in-comers.

This might, it is argued, represent evidence for a surviving Romano-British enclave based in the city - perhaps an outpost of sub-Roman Christianity. The only tangible evidence for this community so far, however, is the material from St Paul-in-the-Bail and we have seen (above) that this will as easily sustain interpretation as representing a pagan community as a Christian one. Furthermore, the 'hole' in the distribution pattern might be more apparent than real, and it was reported that cremations were discovered during the salvage recording at the Greetwell Villa in the 1880s (RAZ 8.1.3) although the 'hole' is still evident in the distribution of cremation cemeteries, and the recent discoveries of scatters of early-Anglo-Saxon pottery at Middle Carlton and Cherry Willingham (both about 5 km from the city centre - Vince and Young 1991-4; Williams and Vince 1997) suggest that there were settlements much closer to the city. And these communities used the same pottery types as those used in the cremation cemeteries and it may be that cremation cemeteries have gone under the plough without adequate record.

High Medieval Era (850-1350); Woodlands and wood pasture to the south-west

In the High Medieval Era, as in previous Eras, the woodlands to the south-west of the city were an important economic resource for the city as well as for the parish of Boultham in which they lay. The woods were very probably used for pannage throughout the period, as many local place-names indicate, and as the herds of pigs in adjacent parishes such as Swinderby show (Cole 1897-8; Darby 1952, 56-7). The archaeological remains of such use will be fugitive, and neither can we tell to what extent these pigs were owned or bred for consumption in the city. We do need, however, to characterise the woodland management through extensive sampling, particularly in the areas adjacent to wetlands.

But the (presumably pollarded or coppiced) woods were not only useful as woodland pasture. They also produced several other products which were important for the city: firewood, timber for construction, charcoal and bark for tanning. The bark would be particularly important, and it may be that the tanneries were located in the southern part of Wigford in order to be close to supplies of this important raw material. The fringes of the woodland on Boultham's poor soils may also have been important for the cultivation of bracken. Although useful for bedding litter and household fuel, bracken was a crucial source of potash in the medieval period (Rackham 1986, 295), and potash would have been a vital raw ingredient in the dyeing process undertaken in Lincoln (Campbell 1971, 24). Although we can probably identify the archaeological remains of charcoal stands, it is not entirely clear how one should distinguish a medieval potash hearth (although detailed consideration has recently been given to such structures in Cumbria - Bowden 2000, 24-5), but it is likely that the burning would have taken place in or near the place of cultivation. The archaeological remains of these various woodland industries are likely to be fragile, and will consist of a variety of hearths and other structures. Although unspectacular, and if such features can be detected, they will be of considerable interest.

Early Modern Era (1350-1750); Woodlands and wood pasture to the south-west

As in previous Eras, the woodlands to the south-west of the city were an important economic resource for the city as well as for the parish of Boultham in which they lay. The woods may have continued in use for pannage, although there is little positive evidence for the practice. Any archaeological remains of pig farming will be more evident in the village of Boultham rather than in the woodland itself.

Nevertheless we do need to characterise the woodland management regime in the Early Modern Era through extensive paleo-botanical sampling, particularly in the areas adjacent to wetlands. The woods, presumably pollarded or coppiced, were probably not only used as woodland pasture. They may also have produced several other products which were important for the city: fire-wood, timber for construction, charcoal and bark for tanning. The latter would be of particular importance, and it may be that the tanneries were located in the southern part of Wigford in order to be close to supplies of this important raw material. Certainly Dr Vince has shown (chapter 9a) that there were a number of tanners established in Wigford in the later medieval period. With the collapse of the cloth trade in the city, the bracken, which we have suggested may have been grown on Boultham's poor soils as a source of potash, would have become less important. Even so, it would still be useful for bedding litter and household fuel and it may even have continued in use as a mordant in the domestic-scale cloth production in the city. An effort to document the development of bracken cover in these woodland areas, therefore, may be usefully linked with the collapse of industrial scale cloth production in the city.

Charcoal burning may have continued, although the archaeological remains of such woodland industries are likely to be fragile, and will consist of a variety of hearths and other structures. Although unspectacular, if such features can be detected they will be of considerable interest.

Industrial Era (1750-1945); Woodlands and wood-pasture to the south-west

As in previous Eras, the woodlands to the south-west of the city would have been an important economic resource for the city as well as for the parish of Boultham in which they lay. During the Industrial Era, however, charcoal burning and other more traditional industries will have given way to gravel digging.

Nevertheless, we do need to characterise the woodland management regime in the 18th and 19th centuries through extensive paleo-botanical sampling, particularly in the areas adjacent to wetlands. The woods, presumably pollarded or coppiced, were probably not only used as woodland pasture. They may also have produced several other important products which were important for the city: firewood, timber for construction, charcoal and bark for tanning. The last, in particular, would be particularly important, and it may be that the tanneries were located in the southern part of Wigford in order to be close to supplies of this important raw material. There is no real evidence that the bracken, which had been grown in Bracebridge during the prosperity of the city's high medieval cloth industry, continued to be collected. Even so, it would still be useful for bedding litter and household fuel, and it may even have continued in use as a mordant in the domestic scale cloth production in city. An effort to document the development of bracken cover in these woodland areas, therefore, may be usefully linked with activity in the city.

Industrial Era (1750-1945); Skellingthorpe airfield

During World War Two Lincolnshire became the home for many RAF aerodromes (Otter 1996) of which one was within the city boundary at Birchwood Heath, then in the parish of Skellingthorpe. The field was opened in November 1941; it was a heavy bomber base, staffed mainly by 50 and 61 Squadrons. It was built to a standard design and archaeological recording will be required on any surviving remains so that details of its layout and construction can be compared with the many similar Lincolnshire fields. Apart from underground bunkers, no buildings are known to survive so these will only be recovered through archaeological excavation, however, the plan of the airfield produced in 1945 (Fig 3) indicates that the only potential building to exist within the site was located at the northern extremity of the site and comprised the fused and spare bomb store.

1.4 AIMS

1.4.1 The aims of this project are:

- To determine the presence or otherwise of buried remains of archaeological interest within the development area;
- To preserve by record any significant archaeological remains within the development area and to attempt a reconstruction of the history and use of the site in order to address some of the research objectives outlined in section 1.3 above.

1.4.2 It is proposed that this be achieved by means of a watching brief, maintained during excavation and soil stripping carried out in connection with the development.

1.4.3 An archaeological watching brief has been defined as a programme of observation and investigation conducted during any operation carried out for non-archaeological reasons within a specified area or site...where there is the possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive (IFA, 2001).

1.4.4 The overall objective of the watching brief will be to monitor ground disturbance across the site (Fig 2) during the course of the development, in order to establish whether any archaeological deposits survive within the site, and to ensure their preservation by record where they may not be left in situ. This may require limited excavation in order to define the date, extent and importance of any such remains.

1.4.5 This specification conforms to the requirements of Planning Policy Guidance: Archaeology and Planning (DoE 1990) (PPG16). It has been designed in accordance with current best archaeological practice and the appropriate national standards and guidelines including:

Management of Archaeological Projects (English Heritage, 1991);

Model Briefs and Specifications for Archaeological Assessments and Field Evaluations (Association of County Archaeological Officers, 1994);

Code of Conduct (Institute of Field Archaeologists, 2000);

Standard and Guidance for an Archaeological Watching Brief (Institute of Field Archaeologists, 2001).

2.0 METHODOLOGY

2.1 Fieldwork

- 2.1.1 The initial phase of fieldwork is to comprise the re-stripping of certain areas of the site as indicated in figure 2. The stripping will be carried out by a machine fitted with a c.2m wide toothless ditching bucket under constant archaeological supervision.
- 2.1.2 Any features revealed in this initial stripping exercise will be recorded as set out in section 2.2 below.
- 2.1.3 Any continued watching brief work will be informed by the initial phase of archaeological work in accordance with the requirements of the City Archaeologist.
- 2.1.4 The watching brief will take the form of supervision by a suitably qualified professional archaeologist to monitor all ground works as they commence and proceed on a comprehensive basis. It includes the provision for the pausing of ground works in order to allow for full investigation of any significant archaeological remains. In practice, this will involve:
- i. Archaeological inspection of overburden and any slab and foundation removal to the depth required;
 - ii. Inspection of subsoil for archaeological features;
 - iii. Recording of archaeological features in plan;
 - iv. Rapid excavation of features if necessary to determine their date, significance and character;
 - v. Inspection of natural for archaeological features, to be cleaned, excavated and recorded where identified;
 - vi. Excavation, removal and recording of any human remains encountered, compliant with appropriate statutory consents and licences (see below, Section 2.2.8)
- 2.1.5 The developer or agent shall provide adequate facilities for archaeological staff to observe earth-moving operations in progress and to facilitate the recording of features as detailed in Section 2.1.2 above.

2.2 Recording

- 2.2.1 Excavated archaeological features will be recorded in plan and section by measured drawing at appropriate scales (normally 1:20) and photography, and the deposits encountered will be fully described on pro-forma individual context recording sheets. The recording system is based on the Museums of London's Archaeological Site Manual (1994). Spot heights and those of individual features will be recorded relative to Ordnance Datum. Features will also be recorded relative to the National Grid.
- 2.2.2 A photographic record will be maintained during the course of all site works and will include:
- i. The site prior to commencement of fieldwork;
 - ii. The site during work, showing specific stages of fieldwork;
 - iii. The layout of archaeological features within each trench;
 - iv. Individual features and, where appropriate, their sections;
 - v. Groups of features where their relationship is important.
- 2.2.3 All artefacts will be treated in accordance with UKIC guidelines, 'First Aid for Finds' (1981). All finds will be bagged and labelled according to the individual deposit from which they were recovered, ready for later cleaning and analysis.
- 2.2.4 A suitable specialist, where appropriate, will make a site visit to advise on deposits suitable for environmental sampling.

- 2.2.5 Any securely dated deposits containing the following will be sampled at a minimum of 20 litres where possible:
- i. Charred plant remains;
 - ii. Large quantities of molluscs;
 - iii. Large quantities of bone;
 - iv. Hearths and other burnt features;
 - v. Other domestic features, e.g. house gullies, potentially containing the above.
- 2.2.6 Charred plant samples will be wet sieved with flotation using a 0.5mm mesh. All residues will be checked.
- 2.2.7 Should waterlogged deposits be encountered further consultation with specialists will determine methods for recovery. Procedures for environmental sampling will adhere to recommendations outlined in 'Working papers of the Association for Environmental Archaeology, Number 2. Environmental Archaeology Evaluations, September 1995'.
- 2.2.8 Any human remains encountered will be cleaned with minimal disturbance, recorded and left in situ and only removed if necessary. The contractor will comply with all statutory consents and licences under the Disused Burial Grounds (Amendment) Act, 1981 or other Burial Acts regarding the exhumation and interment of human remains. The archaeological contractor will comply with all reasonable requests of interested parties as to the method of removal, re-interment or disposal of the remains or associated items. Every effort will be made, at all times, not to cause offence to any interested parties.
- 2.2.9 Every effort will be made to implement the watching brief without affecting the construction timetable.
- 2.2.10 If extensive archaeological remains which are potentially of regional or national significance be identified, it may be necessary to pause ground works until a strategy designed to fully establish their character, distribution, extent, condition, dating and further treatment has been agreed with the Lincoln City Archaeologist. If such remains are discovered, the developer, if deemed necessary, will make reasonable contingency arrangements.
- 2.3 Post-excavation
- 2.3.1 Post excavation work will comprise the following:
- i. Checking of drawn and written records during and on completion of fieldwork;
 - ii. Production of a stratigraphic matrix of the archaeological deposits and features present on the site, if appropriate;
 - iii. Cataloguing of photographic material and labelling of slides which will be mounted on appropriate hangers;
 - iv. Cleaning, marking, bagging and labelling of finds according to the individual deposits 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. Finds will be identified and dated by appropriate specialists.
- 2.3.2 A report detailing the findings of this investigation will be prepared within three months of the completion of site works and receipt of specialist reports and will consist of:
- i. A title page detailing site address, site code and accession number, NGR, author/originating body, client's name and address;
 - ii. Full contents listing;
 - iii. A non-technical summary of the findings of the fieldwork;
 - iv. A description of the archaeological background with reference to the desk-based assessment and

previous fieldwork, if available;

- v. A description of the topography and geology of the fieldwork area;
- vi A description of the methodologies used during the fieldwork;
- vii. A description of the findings of the fieldwork;
- viii. Plans of each of the trenches showing the archaeological features exposed;
- ix. Sections of the excavated archaeological features;
- x. Interpretation of the archaeological features exposed and their context within the surrounding landscape;
- xi, Specialist reports on the artefactual/environmental remains from the site;
- xii Appropriate photographs of specific archaeological features;
- xiii. A consideration of the importance of the archaeological remains present on the site in local, regional and national terms;
- xiv. A list of contexts.

2.3.3 Copies of the report will be sent to the client, the Local Planning Authority, the Lincoln City Archaeologist and the Lincolnshire Sites and Monuments Records Office.

2.3.4 The project archive will be prepared according to the recommendations in Guidelines for the Preparation of Excavation Archives for long term storage (UKIC 1990), and Standards in the Museum Care of Archaeological Collections (Museums and Galleries Commission 1992). This excludes items of gold and silver, which by law must be reported to Her Majesty's Coroner. An archive list will be sent to the County Archaeological Office for subsequent inclusion in the SMR. It is hoped that the archive will ultimately be deposited in an appropriate local museum.

2.3.5 Notes or articles describing the results of the fieldwork will be submitted for publication to an appropriate local journal, dependant on the nature of the results. A copy of any such works will be sent to the Lincoln City Archaeologist and to the SMR.

2.3.6 CgMs Consulting shall retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved, excepting that it hereby provide exclusive licence to the client for use of such documents by the client in all matters directly relating to the project as described in the project design.

3.0 TIMETABLE AND PERSONNEL

3.1 Details of the timetable and CVs of key personnel will be supplied to the Lincoln City Archaeologist on request.

3.2 CgMs staff will be available throughout the groundworks programme and it is expected that post-excavation work and a report of the results will be complete within two months of the completion of fieldwork.

3.3 Specialist assistance where required will be provided by appropriate persons. In the recent past, CgMs have employed the services of a number of specialists, including:

Jane Cowgill -Slags and small finds

Robert White -Conservation

Lynne Bevan -Iron Age and Roman pottery

Jane Young, Stephanie Ratkai -Medieval pottery

Stephanie Ratkai -Post-Medieval pottery

James Rackham,

Angela Moncton (ULAS),

Umberto Albarella -Environmental sampling/animal bone analysis

John Carney -Geological and soil analysis

Lynne Bevan -Flint

- 3.4 Should other remains not covered by the above specialisations be encountered then a suitable specialist will be appointed following consultation with the Lincoln City Archaeologist.

4.0 INSURANCE

- 4.1 The archaeological contractor will produce evidence of Public Liability Insurance to the minimum value of £5m and Professional Indemnity Insurance to the minimum of £2m.

5.0 HEALTH AND SAFETY

- 5.1 It is the policy of CgMs Consulting ('the Employer') to conform fully with the requirements of the Health & Safety at Work Etc. Act (1974).
- 5.2 It is accepted that it is the duty of the Employer to ensure, so far as is reasonably practical, the health and safety of all his employees at work.
- 5.3 The employer also has a duty to ensure that his employees are aware of their responsibility for their own health and safety, and for the health and safety of others, including the general public, who might be affected by their work.
- 5.4 Where employees are temporarily engaged at other workplaces, they are to respect relevant local regulations, both statutory and as imposed by other employers within the Health and Safety at Work etc. Act (1974).
- 5.5 In furtherance of the duty of care imposed by the Health & Safety at Work etc. Act (1974), the Employer shall make available to his employees whatever reasonable facilities are required by particular circumstances, e.g. appropriate protective clothing, safety equipment, rest breaks for specialised tasks, etc.
- 5.6 Attention is paid to the requirements of more recent legislation including the provision and use of Work Equipment Regulations 1992, the Management of Health and Safety at Work Regulations 1992 and the Construction (Design and Management) Regulations 1994. A risk assessment is undertaken, a safety officer appointed and all aspects of health and safety noted during work.

Appendix 2

CONTEXT DESCRIPTIONS

No.	Area	Description	Interpretation
001	All	Firm dark yellowish brown sand and gravel	Natural deposit
002		Firm mid grey concrete	Fill of (003)
003		Sub-rectangular feature, >1m long by 1m wide and 0.1m deep, vertical sides	Foundation trench
004		Friable dark grey silty sand	Fill of (005)
005		Linear feature, aligned northwest-southeast, 0.32m wide by 0.2m deep	Field Drain
006		Friable mid greyish brown sandy silt with ceramic drain pipe	Fill of (007)
007		Linear feature, aligned north-south, 0.32m wide	Field Drain
008	3, 5, 4	Firm dark grey sand and gravel with concrete fragments, 0.2m thick	Overburden

Appendix

GLOSSARY

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).
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).
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.
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.
Romano-British	Pertaining to the period dating from AD 43-410 when the Romans occupied Britain.
Saxon	Pertaining to the period dating from AD 410-1066 when England was largely settled by tribes from northern Germany.

Appendix 4

THE ARCHIVE

The archive consists of:

8	Context records
1	Photographic record sheet
5	Sheets of scale drawings
1	Stratigraphic matrix

All primary records 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: 2007.51

Archaeological Project Services Site Code: LWFD 07

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.

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