ARCHAEOLOGICAL DESK TOP ASSESSMENT AND FIELD EVALUATION (PHASE I)

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LAND OFF LINWOOD ROAD, MARKET RASEN

Site Code:	LRM 97
LCNCC Acc No.	301.97
NGR	511100 388500
Planning Ref.	96/P/0397

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Report prepared for Hugh Born Developments (Wragby) Ltd. by CPH Palmer-Brown January 1998

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Contents

Summa	ry	1
1.0	Introduction	1
2.0	Location and description	2
3.0	Geology and topography	3
4.0	Planning background	3
	4.1 Archaeology in West Lindsey and the Local Plan	3
5.0	Objectives and methods	4
6.0	Archaeological and historical background	4
	Prehistoric	
	Romano-British	
	Saxon and medieval	
7.0	Archaeological potential	8
	7.1 Information derived from the Lincolnshire Archives Office	8
	7.2 The County Sites and Monuments Record	8
	7.3 Archaeological field walking	8
	7.4 Geophysical survey: a summary of results	9
	7.5 Other information	11
8.0	Impacts to archaeological resources	12
9.0	Conclusions	12
10.0	Acknowledgements	13
11.0	References	13
12.0	Appendices	14
	12.1 Topsoil Magnetic Susceptibility and Gradiometer Survey by Oxford Archaeotechnics Ltd. (presented as independent report)	
	12.2 Catalogue of material derived from the County Sites and	

Monuments Record at Lincs. County Council

Illustrations

- Fig. 1 1: 10,000 site location, incorporating entries from SMR
- Fig. 2 Extract from Open Field System Map (from Russell & Russell 1983)
- Fig. 3 Density of surface artefacts

Fig. 4 Extract Enclosure Map, 1780 (from Russell & Russell 1983)

Summary

This archaeological desk top study and non-intrusive field evaluation report has been prepared in advance of a possible residential development on land east of Linwood Road, Market Rasen, Lincolnshire

The results of this report suggest that the archaeological potential of the site is high and that areas of the highest archaeological activity occur on the west side of the proposed development area

Fieldwalking on parts of the site has resulted in the identification of concentrations of Romano-British artefactual remains within broad zones that correspond with an area of enhanced magnetic susceptibility

It is suggested on the basis of work carried out that development of the site may affect and/or destroy important industrial and settlement remains dating to the Romano-British period

A programme of limited target excavation would assist with the interpretation of archaeological remains present and the production of a mitigation scheme; the objective of which would be to consider the interests of both the developer and the archaeology

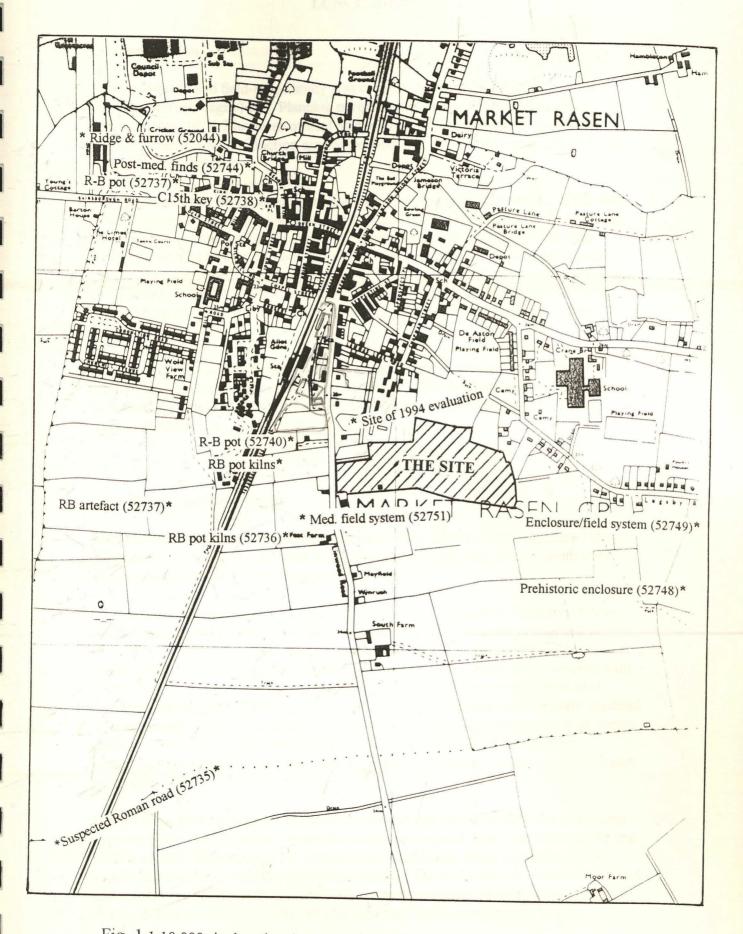


Fig. 1 1:10,000 site location, incorporating information derived from the County Sites and Monuments Record (OS copyright ref. AL 51521A0001)

1.0 Introduction

This desk-based and field-based study was commissioned by Hugh Bourn Developments (Wragby) Ltd. Planning permission is sought for a residential development on c. 6.7 hectares of land immediately to the east of Linwood Road, Market Rasen. Ground reduction associated with this development may affect buried archaeological remains.

The purpose of this report is to assess the overall archaeological potential of the site, without the use of intrusive fieldwork, and to assess the potential impacts which may be posed by development of the area. The report will assist the District Planning Authority with its further decision-making in relation to the archaeological interests of the site, and will likewise inform the client of any archaeological constraints which may be of relevance to the application. This document constitutes the first element of a pre-planning investigation, and will be followed by a selective programme of trial excavation.

The report was researched and written by Colin Palmer-Brown of Pre-Construct Archaeology (Lincoln) (hereafter PCA) in December 1997. Fieldwalking was carried out by Robert Schofield of PCA, and a geophysical survey was carried out by Oxford Archaeotechnics Ltd..

2.0 Location and description

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Market Rasen is in the administrative district of West Lindsey, approximately 18km north-east of Lincoln. It is situated in the Clay Vale to the west of the Lincolnshire Wolds and lies within a zone of dense Cover Sands.

The proposed development site, which measures approximately 6.7 hectares in area, lies immediately south-east of the modern settlement. It is irregular in plan and is defined to the west by Linwood Road, and to the north and east by field and/or property boundaries: the south boundary is arbitrary. Most of the plot is covered with stubble and weed vegetation, although there are some trees and two (almost dry) ponds on the east side of the site. The westernmost hectare was, until recently, covered with tall weeds, which were cut down prior to the undertaking of a geophysical survey (below). There are 11,000 volt electricity cables crossing part of the site (one extending east-west, the other north-south - these are restricted to the central and east part of the site).

For the most part, the land is flat, with the mean height above modern sea level being approximately 30m. There are minor fluctuations in ground level over much of the site (with a notable ridge close to the centre): it is possible that these represent dunes, largely truncated as a result of ploughing. Much of the soil surface is obscured by weed and stubble vegetation, although there are occasional clearer patches, within which sherds of Romano-British pottery can be seen (see fieldwalking results below).

3.0 Geology and topography

The site is located within a zone of podzolised cover sands which lie in a north-south plane, sandwiched between calcareous gleys/glacial till on the west side (central Lincs.) and the chalk of the Wolds on the east side (Straw 1969). The cover sands at Market Rasen overly glacial clays.

The modern ground surface lies at an altitude approximately 30m OD.

4.0 Planning background

An outline planning application has been submitted to West Lindsey District Council for residential development and associated access (application 96/P/0397). In response to this, the District Council has requested the undertaking of a pre-determination evaluation. The results of this evaluation will be assessed by the District Council and, ultimately, a decision will be taken on this basis. This approach is consistent with the advice set out in *Archaeology and Planning: Planning Policy Guidance Note 16*, 1990.

1:2500 and 1:500 scale plans have been provided by the clients for the purpose of this study. They indicate a moderate density housing scheme; of which, only the c. westernmost 2.0 hectares (Phase 1) is shown in detail. The latter is to comprise a mixture of detached and semi-detached dwellings (x27). Ultimately, there will be a double access: eastwards off Linwood Road and westwards from an existing development. There will be a complex of internal access roads, with a central area reserved for open space (c. 55m x 38m). Some of the existing trees (on the west side) will be retained, and there will be some new planting on the south side of the development. Elevation drawings have not been provided, and it is assumed that most of the dwellings will be built using standard strip footings.

4.1 Archaeology in West Lindsey and the Local Plan

The District Council has embraced within its Local Plan most of the guidelines set-out in *Archaeology and Planning: Planning Policy Guidance Note 16* (1990). PPG16 notes that:-

"Archaeological remains should be seen as a finite and non-renewable resource, in many cases highly fragile and vulnerable to damage and destruction. Appropriate management is therefore essential to ensure that they survive in good condition. In particular, care must be taken to ensure that archaeological remains are not needlessly or thoughtlessly destroyed. They can contain irreplaceable information about our past and the potential for an increase in future knowledge. They are part of our sense of national identity and are vulnerable both for their own sake and for their role in education, leisure and tourism."

5.0 Objectives and methods

The purpose of this report is to identify and assess archaeological remains which may be sensitive to the construction works associated with the proposed development and, if necessary, to suggest further methods by which the site may be evaluated in advance of the development.

The report has drawn from the following sources of information:-

The County Sites and Monuments Record (SMR)

The aerial photographic records of the RCHME and Cambridge University (plots held as part of the County SMR)

Records held at the Lincolnshire Archives Office

Information supplied by Hugh Bourn Developments (Wragby) Ltd

Published and unpublished accounts

Two non-intrusive archaeological surveys

6.0 Archaeological and historical background

Although indicated within the County SMR as an area of great archaeological significance, published accounts are few in number, with the bulk of the data comprising SMR entries and unpublished information.

Prehistoric

Prehistoric remains are not well represented within the parish, although there is an undated (though apparently prehistoric) enclosure and associated field system recorded as a cropmark at TF 118 883 (SMR PRN 52748), approximately 0.5km south-east of the proposed development. Almost adjacent to this is a larger cropmark site (PRN 52749) comprising an undated enclosure and field system. There does not appear to be any published information relating to prehistoric occupation of the area (eg May 1976), although the association elsewhere of Mesolithic (Middle Stone Age) sites with early post-glacial cover sands should be born in mind (for example, Risby Warren).

Romano-British

For the Romano-British period, the record is better-served; with a string of SMR entries and some published information as well. For the most part, attention has focused on the extensive pottery production industry due south of the medieval settlement, although there is (not surprisingly) evidence that pottery production was but one (important) element of a settlement focus that has been relatively unexplored.

Communications between the industrial/commercial base at Market Rasen may have relied heavily on a Roman road; thought to branch eastwards off Ermine Street at Spridlington and pass through the parish of Toft Newton to Linwood Warren, south-east of Market Rasen (Whitwell 1992, 54). The line of this road is thought to be preserved by the existing parish boundary, approximately 700m south of the proposed development.

Evidence for the Romano-British pottery industry is extensive, particularly on the west side of Linwood Road below the modern settlement. In 1964, one site was rather crudely brought to the surface following the crash of an RAF Vulcan bomber which landed in a field opposite the proposed development site and brought to the surface pottery sherds and kiln debris (coins were apparently removed from the site by members of the RAF recovery team). Subsequent to this, further pottery has been recorded in the same general location (PRN 52740), and kilns are known to occupy areas approximately 200m south of this (PRN 52736). Whitwell refers to this area as the 'kiln field'.

One of the kiln sites was investigated by members of De Aston School in 1966 under their teacher, Mr D Boyce at NGR TF 907 885. The County SMR contains a summary of the investigations, compiled by Keith Hunter in 1975. Three structures yielding pottery groups were drawn (II, V and VI), although the precise location of these structures is not clear from the records made at the time (the approximate location centres on NGR TF 107 885, close to the crash site of 1964).

Of the kilns excavated, these were of the typical single flue up-draught category. *In situ* kiln furniture was not recovered, although fragments of fire bars were recovered from 'waste heaps', together with fragments of baked clay 'plates', thought to be remnants of superstructures (ie kiln domes).

Most of the pottery recovered from the site consisted of grey domestic sherds, similar to those associated with the Trentside industries of Torksey, Lea, Knaith and Newton on Trent, although nineteen sherds of distinctively stamped and/or rouletted ware were found. These sherds have been likened to the Parisian wares associated with the pre-Roman tribal territory (and Roman *civitas*) of the Parisii of East Yorkshire (Samuels 1983). The implication has been that these wares were being produced at Market Rasen, although there is now doubt and confusion on this matter within the archaeological profession (M Darling, pers. comm.).

The Romano-British pottery industry at Market Rasen appears to have flourished between the 2nd and 4th centuries AD. It was certainly extensive, although its limits have not been determined. A conservative estimate (ie based on existing knowledge) suggests that it extended eastwards at least as far as the neighbouring parish of Linwood Warren.

It is not possible to predict the market distribution of the wares being manufactured at Market Rasen due to the similarity of forms between production sites elsewhere in the region and the lack of thin section work on the fabrics themselves (Field & Palmer-Brown, 1991). However, despite Todd's apparent surprise at the siting of an

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industry at Market Rasen due to its apparent isolation (Todd 1991, 129), a road connecting Market Rasen with Ermine Street would have afforded access to important market centres such as Lincoln and Owmby (Lincoln did have access to more local industries (Carholme Road and the Technical College in Lincoln itself, and at Swanpool and South Carlton, slightly further afield), but, without understanding the nature of market forces at this time, no measure of certainty can be placed on which of these markets the important urban centres were drawing their resources).

Of the excavated kiln material discussed by Hunter in 1975 (SMR records), there area several references to iron slag being found in the base of kiln ovens, which is slightly unusual. One possibility is that some other form of material affected by burning has been incorrectly identified, or it could be that some of the excavated structures were in fact smelting furnaces, not pottery kilns (which may have been filled with soil and broken pottery on abandonment) (J Cowgill, pers. comm.).

The excavations described by Hunter refer no non-kiln structures in the form of post hole alignments. These, he suggests, may have been associated with a hut or shelter.

Judging from the records available, Hunter appears to have focused his mind on pottery production alone, even suggesting (for no good reason) that a fragment of imported Samian pottery may itself have been used as a potters trimming tool. He refers to excavations carried out in 1966 by a party of boys from De Aston School of an area measuring 6ft x 6ft in a paddock. Pottery waster sherds were found during the excavation, indicating the proximity of another kiln, but other finds (including the Samian sherd, a bronze pin, a lead plumb bob and fragments of roofing and box tile) need not necessarily have had any direct relevance to pottery production. Given the apparent longevity of the industry, there can be little doubt that a settlement of perhaps some considerable size must have emerged and developed during the two or more centuries of production.

Saxon and medieval

Like many post-Roman settlements, Market Rasen itself probably emerged, possibly as a minor market centre, in the late Saxon period. However, there is very little evidence (documentary or archaeological) to indicate where the core of the Anglo-Saxon settlement was. Two mounts from a hanging bowl acquired by Hull Museum in the 1950's were said to have come from Market Rasen, but their exact provenance was not recorded. Metal detecting in the Rasen area has yielded three sleeve clasps and a fragment from a cruciform brooch, indicating the proximity (somewhere) of a Saxon cemetery (Leahy 1993, 41) and one Saxon Sceat coin (?720 - 40) has been recovered from the Market Rasen area (Blackburn 1993).

The name Rasen translates (in 1086) to *Resne*, meaning (place at) the plank bridge. In Old English, the spelling was Raesn (Mills 1993, 268). Market Rasen itself does not form an entry within the Domesday Survey: only West and Middle Rasen are recorded, when land was held by Roger Poitou, Alfred of Lincoln and Jocelyn son of Lambert (Morris 1986). The manor belonged to Alfred of Lincoln.

Historically, the importance of Market Rasen lay in its position on the River Rase -Domesday book records that it had a mill in 1086. However, it would appear that Market Rasen was never a town of major significance and it has probably always been a small market centre, primarily serving local requirements.

There are no medieval buildings within the modern town, excluding the parish church, dedicated to St Thomas. This has an ironstone tower, much restored between 1884 and 1862. However, many elements of the structure are considerably earlier, including the Norman south doorway (Pevsner and Harris 1988, 555).

The medieval Market Place lies adjacent to the church. There are now no buildings surviving that can be traced as far back as the Middle Ages, with many dating to the late Georgian and Victorian periods (a time, presumably, when many of the medieval buildings were destroyed).

As part of the rural reform of the 18th century, Market Rasen was enclosed between 1779 and 1781. The plan of the medieval settlement (ie the plan drawn up in 1779 prior to enclosure) shows the market place occupying its present position, with the heart of the settlement lying east and south-east of this. There are burgage type plots on either side of Oxford Street, where this lies south of modern Queen Street, and there appears to be buildings lining both sides of Queen Street between the main road junction and Market Place (note that Linwood Road did not exists prior to enclosure: its precursor appears to have led to an area of pasture known as Lammas Leas and to Cuckoo Close.

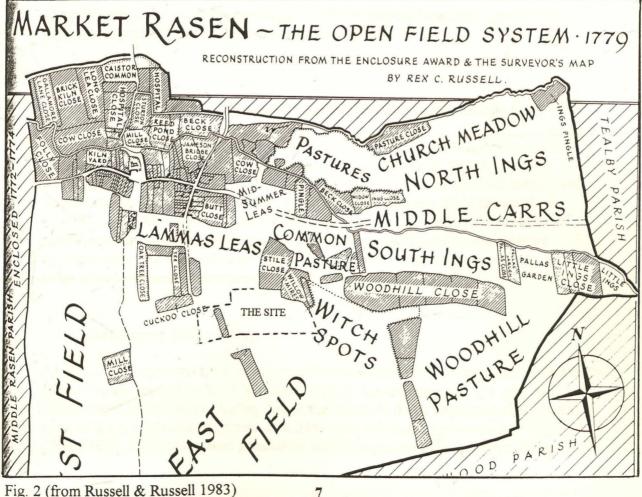


Fig. 2 (from Russell & Russell 1983)

7.0 Archaeological potential

Against the backdrop presented above, there is a body of information that relates more directly to the site of proposed development, some of which (by extended implication) has already been described. Other information is based on the results of two non-intrusive archaeological surveys.

7.1 Information derived from the Lincolnshire Archives Office

Documents and maps held at the Lincolnshire Archives Office were consulted as follows:-

Market Rasen Town Plan, c. 1860 (reference 4BM16)

This plan does include the site of proposed development, but it does not indicate features that are of any meaningful significance to the overall study. At the time that the plan was made, the site was divided into three units.

Tithe Award (reference H665)

Ordnance Survey 1st edition (6 inch map), 1891

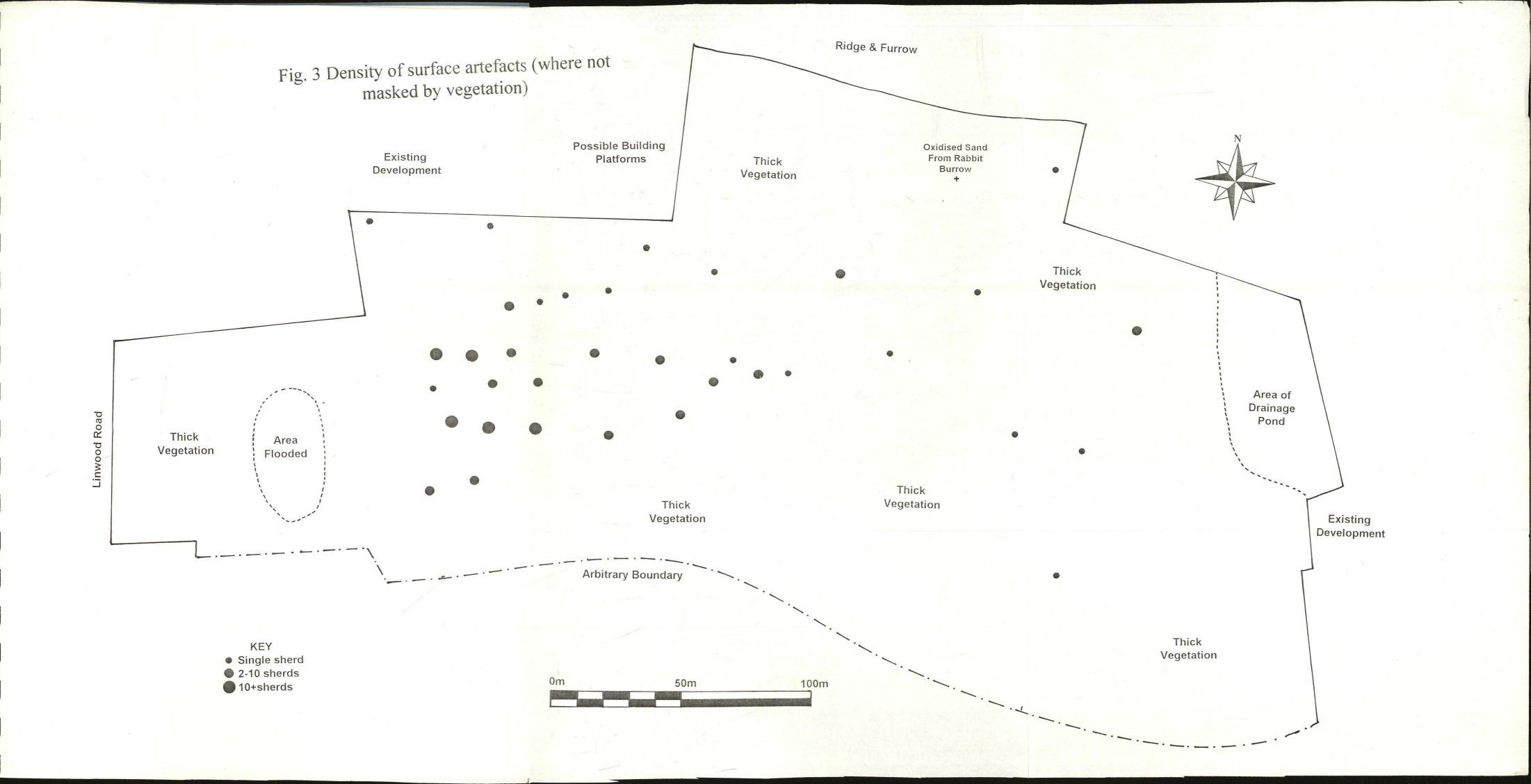
Taken together, the above sources suggest that the site has been used primarily for agricultural/pastoral uses in the post-medieval period.

7.2 The County Sites and Monuments Record (further details in Appendix 1)

The main points of relevance which derive from the SMR have already been described, although it is worth noting that an evaluation was carried out in 1994 by Lindsey Archaeological Services on a small unit of land less than 50m north of the current site. The area investigated measured approximately 65m x 40m and lay to the north of Fairfield on Linwood Road. A geophysical survey was hampered by the presence of extant metallic materials, although three potential archaeological anomalies were detected within the paddock area. None of these, on investigation by trenching, proved to be of any archaeological value.

7.3 Archaeological field walking

As part of this assessment, a programme of archaeological fieldwalking was carried out over a two-day period by Mr R Schofield of PCA. Conditions at the site were not ideally suited to this type of survey due to the relatively dense vegetation that covers most of the proposed development area. However, this was a requirement of the project brief, and it has proved possible to identify some areas containing definite



spreads of surface material (Fig. 3), with these being broadly correlated with the magnetic survey data discussed below.

It should be noted that the results of this survey are not representative of the whole site and it may not be possible, therefore, to use the data as a means of assessing the distribution of buried archaeological remains (although there does appear to be some correlation).

Initially, the archaeologist sought out those areas on the site where the ground surface was partially or wholly visible. These areas were marked with ranging rods and the location of each ranging rod was surveyed using a theodolite. Surface artefacts (consisting only of Romano-British pottery) within the area of each ranging rod were counted and a record made. For the most part, the artefacts were left in situ and were only removed if of diagnostic form (rims and bases) or if potential kiln wasters.

The results of the survey are presented in Fig. 3, and a summary is presented below.

For the most part, the north and south sides of the site were almost completely obscured by vegetation and it was not possible, therefore, to quantify the distribution of artefacts (small numbers of pottery sherds were noted in these areas, where conditions allowed). In one small area on the north-east side, a rabbit burrow had brought to the surface deposits of red (oxidised) sand. This material could indicate the proximity of a burnt structure, where intense heat has resulted in the oxidation of the surrounding sands.

The west side of the site was not suited to fieldwalking because a) the area was covered with thick tall weed vegetation and b) a large area was flooded at the time that the survey took place. It should be noted, however, that, following clearance of this vegetation, significant numbers of pottery sherds and possible kiln waste were noted by the geophysicists (see Appendix 1).

The most productive area was the central-west zone: over a broad area measuring approximately 150m east-west and 100m north-south, it was possible to identify concentrations of surface finds (all of these being Romano-British pottery sherds). Even though these results could be based more on the distribution of the vegetation cover than the artefacts themselves, there does appear to be a reasonable correlation between this information and the results of the geophysical surveys described in Appendix 1.

Ten sherds of pottery were randomly removed from the site (largely on the basis of diagnostic form) and were examined by M J Darling. Of these, only one sherd was dated pre-3rd century, with the remainder suggesting a date range of 3rd - 4th century AD.

7.4 Geophysical survey: a summary of results

In December 1997, following the removal of vegetation on the west side of the site, topsoil susceptibility and detailed magnetometer surveys were carried out by Oxford

Archaeotechnics Ltd. The full results of these works are presented as an independent report (Appendix 1), although a summary is presented below.

The entire site was surveyed using topsoil magnetic susceptibility based on 10m grids. This provides an overview, suggesting that there is more archaeological activity on the west side of the site than there is on the east.

Subsequent to topsoil magnetic susceptibility, five areas of the site (a total of 1.4 hectares) were subjected to detailed magnetometry using a fluxgate gradiometer. Results are summarised as follows:-

Area 1 (60m x 60m block, extreme west side)

In this part of the site, topsoil magnetic susceptibility was high, and clearance of the vegetation had exposed significant quantities of Romano-British pottery, as well as possible kiln/industrial waste.

Several areas within the survey grid contain strong but erratic magnetic anomalies. They may be pits, with some of these exceeding 5m in diameter. Rectilinear patterning was more difficult to interpret, and it is noted that topsoil ferrous litter could be masking more subtle underlying features. It is possible that some of the pits indicated were for clay extraction (?associated with pottery production).

Area 2 (irregular grid measuring 0.63ha, west-central area)

In this area there was a high topsoil magnetic susceptibility. Magnetometry indicates the presence of orthogonal linear elements, possibly translating to enclosure complexes. There is a possible north-south trackway (?extending to the postulated Roman road at the parish boundary). There are also areas of pits and possible burnt features (hand auguring has confirmed that one feature, 4 - 5m in diameter, contains charcoal-rich deposits at a depth c. 1m below the modern ground surface). It is considered possible that post hole structures will also be found in this location.

Area 3 (0.1ha, northern section; area of marginally raised topsoil susceptibility)

The gradiometer survey suggests that there may be subtle underlying cut features in this area, although no features of obvious archaeological significance were noted.

Area 4 (0.1ha, central; area of weak topsoil magnetic susceptibility)

Two possible small pit forms identified.

Area 5 (0.2ha; sited to look at a small focus of magnetically enhanced topsoil in an area of otherwise low magnetic susceptibility)

Excluding potential modern topsoil detritus, several broad anomalies were detected possibly 'clearer' hollows or pits. One linear feature could mark a physical boundary between the area of activity on the west side and the area of relative inactivity on the east side.

General considerations

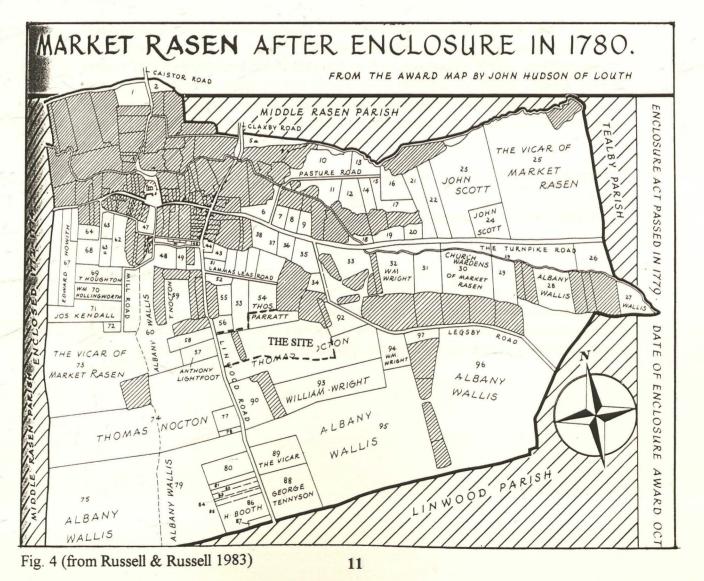
Overall, the magnetometry has worked well in areas where charcoal has been incorporated within the fills of archaeological features. The east side of the site appears to be relatively 'quiet', although this area may be worth checking by intrusive techniques.

7.5 Other information

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Cartographic and other information suggests that, for the most part, the site has been used for agricultural purposes in the post-Roman period. It lies too far south of the medieval settlement for there to be any building remains of the Middle Ages. The pre-enclosure map of 1779 indicates that the site lay immediately west of an area known as Witch Spots (it is noteworthy that the north boundaries have changed little since 1779).

Following enclosure of the land (1779 - 1781), Linwood Road marks the west boundary of the site, and land was in the ownership of Thomas Nocton and Thomas Parrattt.



8.0 Impacts to archaeological resources

Excluding ploughing, it is assumed that there have been limited impacts to the potential archaeological resource. There appears to have been no post-Roman development of the site. Ploughing has brought buried artefacts to the soil surface.

9.0 Conclusions

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It is variously concluded that the archaeological potential of the site is high. It lies within a broad area of intense archaeological activity, and recent non-intrusive surveys suggest that the main foci of activity may be sought on the central/west side (although there may be lesser/ephemeral remains elsewhere).

Although there is a good possibility that features and structures relating to the manufacture of pottery may be found on the site, the enclosure and other complexes indicated by geophysical survey suggest that the site may have functioned as part of a wider settlement; aspects of which may have little or nothing to do with pottery production. Some of these remains will almost certainly be vulnerable to development, although the extent of this vulnerability has yet to be tested by trial excavation.

If industrial remains are encountered, these could yield specific information of local and regional significance. Swan (1984), for example, has noted that very few 4th century pottery kilns have been excavated on the Lincolnshire Wolds or within the western Corieltauvian territory, and there is good evidence to suggest that the Market Rasen industry was still operating at this time. Similarly, if earlier work on the west side of Linwood Road has failed to identify smithing activities, then any such remains on the east side will be worthy of more detailed investigation.

If, as seems likely, there is more to the site at Market Rasen than a purely industrial base, then the settlement complex suggested will need to be investigated on merit. Did it fall within the *territorium* of *Lindum* (Lincoln), for example; is there any indication of pre-Roman settlement?

Without the application of intrusive techniques (ie trial trenching), it is not possible to assess the exact extent to which the archaeological resource will be affected by development. And, whilst the clients may have a general interest in the archaeology themselves, their main concerns (naturally) will be focused on the formulation of a suitable mitigation strategy which, hopefully, can address the interests of development and of the archaeology.

10.0 Acknowledgements

PCA would like to thank Hugh Bourn Developments (Wragby) Ltd. for commissioning this study and providing some of the relevant background information. In particular, thanks are expressed to Mr D Anderson for providing cartographic and other information during the course of the study.

11.0 References

T

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Field FNI and		
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		CHAI P46

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12.0 Appendices

Appendix 1: Topsoil Magnetic Susceptibility and Gradiometer Survey (presented as separate report)

Appendix 2: Catalogue of material derived from the County Sites and Monuments Record at Lincolnshire County Council

- NGR PRN Description
- TF10708854 52740 Romano-British artefact
- TF10408840 52737 Romano-British artefact
- TF10808835 52751 Medieval field system remains
- TF10708830 52736 Romano-British pottery kiln
- TF11808830 52748 Aerial photograph: prehistoric enclosure and associated field system
- TF11908830 52749 Aerial photograph: undated cropmarks
- TF10648921 52738 15th century key
- Unlocated 52739 Romano-British artefact
- Unlocated 52741 Post-medieval artefact
- Unlocated 52742 Romano-British artefact
- TF12108885 52747 Undated brick/tile works
- TF10708925 52747 Medieval settlement remains
- TF10708920 52752 Post-medieval settlement remains
- TF10788932 52753 Post-medieval mill
- Unlocated 52754 Undated water mill
- TF10968940 52755 Post-medieval water mill
- TF11308930 52756 Post-medieval water mill

TF11158905	52757	Modern linear feature
Unlocated	52758	Early medieval artefact
TF12138780	51456	Suspected Roman road (following parish boundary)