

99/18

**DESK-BASED ASSESSMENT OF THE
ARCHAEOLOGICAL IMPLICATIONS OF
PROPOSED DEVELOPMENT ON
LAND BETWEEN
EAGLE HALL WOOD AND TUNMAN WOOD,
EAGLE,
LINCOLNSHIRE
(EHF 98)**



A P S
ARCHAEOLOGICAL
PROJECT
SERVICES



Lincolnshire County Council
Archaeology Section
1 5. OCT 99
ack 15/10/99

Eagle and Swinethorpe
North Scarle
Swinderby
Thorpe on the Hill

Grid LI3179
Source LI5531

**DESK-BASED ASSESSMENT OF THE
ARCHAEOLOGICAL IMPLICATIONS OF
PROPOSED DEVELOPMENT ON
LAND BETWEEN
EAGLE HALL WOOD AND TUNMAN WOOD,
EAGLE,
LINCOLNSHIRE
(EHF 98)**

Work Undertaken For
Mrs V.J. Squires
on behalf of
Aggregate Industries UK Limited

February 1999

Report Compiled by
Neil Herbert BA (Hons), AIFA

Central National Grid Reference: SK 8725 6522

A.P.S. Report No: 14/99

*Archaeological Project Services is an IFA Registered
Archaeological Organisation (No. 21)*

CONTENTS

List of Figures

1.	Summary	1
2.	Introduction	1
	2.1 Planning Background	1
	2.2 Definition of a Desk-Based Assessment	1
	2.3 Topography, Geology and Soils	1
3.	Aims	2
4.	Methods	2
5.	Results	2
	5.1 Historical Data	2
	5.2 Cartographic Data	4
	5.3 Aerial Photograph Data	5
	5.4 Archaeological Data	6
	5.5 Site Investigation	9
6.	Constraints	10
7.	Assessment of Significance	10
8.	Conclusions	12
9.	Acknowledgements	13
10.	References	13
11.	Abbreviations	14

Appendices

1	Extract from <i>Criteria for the scheduling of ancient monuments</i>
---	--

List of Figures

- Figure 1 General location map
- Figure 2 Area of proposed development and known archaeological sites
- Figure 3 Area of proposed development and main cropmark complex
- Figure 4 Aerial photograph showing northern extent of proposed development and rectilinear cropmark complex (circled)
- Figure 5 Extract from Armstrong's Map of Lincolnshire (1778)
- Figure 6 Extract from Ordnance Survey Map of Lincolnshire (1824)
- Figure 7 Extract from Bryant's Map of Lincolnshire (1828)
- Figure 8 Extract from Estate Map of Eagle Hall and Eagle (1879)
- Figure 9 Extract from Ordnance Survey Map of Lincolnshire (1904)
- Figure 10 Extract from Ordnance Survey Map of Lincolnshire (1918)
- Figure 11 Extract from Ordnance Survey Map of Lincolnshire (1922 and 1949)
- Figure 12 Extract from Ordnance Survey Map of Lincolnshire (1953)
- Figure 13 Area of proposed development and current landuse

1. SUMMARY

A desk-based assessment was undertaken to determine the archaeological implications of a proposed gravel quarry to the south of Eagle, Lincolnshire.

Investigations within a 2km radius of the proposed development have located archaeological remains dating from the prehistoric (pre AD 43), Romano-British (AD 43-450), Anglo-Saxon (AD 450-1066), medieval (AD 1066-1485) and post-medieval periods (post AD 1485). In addition, a group of undated rectilinear cropmark features have been recorded by aerial photography at the centre of the site.

The cropmark complex may represent the position of natural geological features, although human derivation cannot be dismissed. Early occupation, north of the proposed extraction scheme, is perhaps attested by an undated hearth, associated with unstratified prehistoric and Romano-British artefacts.

Earthworks of a medieval preceptory and post-medieval gardens, recorded as a Scheduled Ancient Monument, lie immediately northwest of the site. A single earthwork, apparently associated with this monument, appears to extend toward the western limit of the proposed development.

No archaeological site or finds are currently known from the area of the proposed quarry.

2. INTRODUCTION

2.1 Planning Background

Archaeological Project Services was commissioned by Mrs V.J. Squires on behalf of Aggregate Industries UK Limited to undertake a desk-based assessment of land south of Eagle, Lincolnshire. This was in order to determine the archaeological implications of a proposed gravel extraction scheme on land between Eagle Hall Wood and Tunman Wood. The archaeological assessment was undertaken in accordance with guidelines set by the Lincolnshire Archaeological Handbook (1998) and the Institute of Field Archaeologists (1997).

2.2 Definition of a Desk-Based Assessment

A desk-based assessment is defined '*as an assessment of the known or potential archaeological resource within a specified area or site on land, 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 1997).

2.3 Topography, Geology and Soils

Eagle is located 15km northeast of Newark and 11km southeast of Lincoln in the administrative district of North Kesteven, Lincolnshire (Fig. 1).

The area of investigation is located between Eagle Hall Wood and Tunman Wood, straddling the line of the Newark to Lincoln railway (Fig.2). Most of the proposed development is defined by the course of a circuitous tarmac road, connecting Eagle Hall Farm, Eagle Barnsdale, Morton Hall

Prison and Swinderby Station. The site covers an area approximately 1km wide and 2km long and is centred upon National Grid Reference SK 8725 6522. Topography within the proposed development is generally flat, at approximately 14mOD, though slightly higher ground occurs towards the central part of the site.

The proposed development encompasses a surface geology of the Wickham 2 Association, comprising chiefly of fine loamy over clayey typical stagnogley soils of the Wickham Series. In Lincolnshire this type of soil tends to occur in the Lias Clay vale between Lincoln and Newark, where the River Trent terrace deposits are a source for the superficial loamy drift (Hodge *et al.* 1984, 351)

3. AIMS

The aims of the desk-based assessment were to locate and, if present, appraise known archaeological sites in the vicinity and additionally 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.

Further to the above, statutory and advisory heritage constraints were identified as well as physical or Health and Safety restrictions.

4. METHODS

Compilation of archaeological and historical data relevant to the area of the proposed development site involved examination of all appropriate primary and secondary sources available. These 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
- records maintained by Heritage Lincolnshire
- aerial photographs
- archaeological books and journals
- place-name evidence

Information obtained from literary and cartographic sources was supplemented by a walk-over survey of the proposed development site. The 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 geophysical survey.

Results of the archival and field examinations were committed to scale plans of the area (Figs 2-13).

5. RESULTS

5.1 Historical Data

Eagle village, north of the proposed development, is first mentioned in the Domesday Survey of 1086. Referred to as *Aclei* or *Aycle*, the name is derived from the Old English '*āc-lēch*' meaning 'oak wood'

(Ekwall 1974, 155).

At the time of the Domesday Survey, land within Eagle parish belonged to the Roger of Poitou, Durand Malet, Ordo the Arblaster and Countess Judith. It is also recorded that the settlement contained a church and resident priest (Foster and Longley 1976).

Eagle Hall (Fig.2) marks the site of a medieval *fermerarium* or infirmary, reputed to have been founded during the reign of King Stephen (AD 1135-1154) and occupied by the Knights Templars. This building had the status of a preceptory, but specialised in housing old or disabled men who had been retired from military service (Mills 1990, 7). Military orders such as the Knights Templars were created to protect pilgrims travelling to and from Jerusalem. For their support they were endowed with estates, and houses, known as preceptories, were established to supervise their property (Bennett 1993, 48).

King Henry II (AD 1154-1189) later granted the preceptory manorial rights of the Soke of Eagle, incorporating parts of Swinderby, Scarle, Eagle Woodhouse and Eagle (Mills 1990, 7).

In 1312, following a suppression of the Templars, the preceptory became a commandery of the Knights Hospitallers, being linked during the 14th and 15th centuries with other preceptory sites at Temple Bruer and Willoughton (Newton 1994). In 1338 it is recorded that the population of the preceptory was sixteen persons, including a Knight Preceptor. Following the Dissolution (in AD 1541) the preceptory estate at Eagle Hall was granted to the Earl of Rutland and Robert Tyrwhitt, when it was valued at 124 pounds and 2 shillings per annum (White 1856, 345).

In the 1330's Walter of Ferriby of Brant

Broughton, known as 'Black Wat', plundered nearby Morton and Swinethorpe, burning property and destroying livestock (Platts 1985, 256).

It was reported in 1365 that the chapel, founded at Eagle village with three chaplains to celebrate for the welfare of King Stephen's soul, had been without a chaplain for the last thirty years (Owen 1981, 95). Many religious establishments suffered in this way as a result of insufficient or shrinking endowments, shifts of population, and local neglect.

During 1656 the inhabitants of Eagle complained their land was insufficient to support the local population, which had doubled since 1563 (Holmes 1980). The population growth may reflect a degree of economic prosperity in the 16th and 17th centuries.

In the later 19th century Eagle Hall existed as an extra-parochial hamlet (separate from Eagle parish), containing 60 souls and 1,000 acres of land, with an additional 130 acres of woods or plantations. The Hall and much of the land is ascribed to the possession of Henry Nevile. Extra-parochial status was perhaps originally conferred during the occupation of the medieval preceptory at Eagle Hall, and represents the continuity of property rights from this period.

Eagle Woodhouse is also mentioned in the 19th century as an extra-parochial settlement, though was obviously smaller and held only 110 acres and 6 inhabitants. It is suggested that both Eagle Hall and Eagle Woodhouse were formerly properties belonging to the medieval Knights commandery (White 1856, 345).

It was not until 1876 that Eagle Hall was re-integrated to the parochial system, and currently exists within Eagle and

Swinethorpe parish (*ibid.*).

5.2 Cartographic Data

The area of investigation lies south of Eagle, between Eagle Hall Wood and Tunman Wood. Appropriate maps of the immediate locality were examined.

Armstrong's '*Map of Lincolnshire*', dating from 1788 represents one of the earliest detailed maps of the county (Fig.5). Eagle village is shown with a church, and a cluster of buildings lies either side of a road connecting the settlement with Swinderby. Farther west, Eagle Hall is depicted within a clearing inside a large expanse of woodland, on the north side of a stream.

It is important to recognise that comparison of the settlement and road features shown here, with later maps, reveals a number of surveying errors. In particular, the villages of Eagle and Swinderby are depicted much closer together than they are shown by 19th century survey, a result of either misrepresentation, or error, as opposed to actual settlement shift. Nonetheless, the position of Eagle Hall, in relation to the circuit of road that encompasses the proposed development, appears to be correct.

First edition Ordnance Survey maps (Fig.6; OS 1824), revised throughout the 19th century, show the route of the Nottingham and Lincoln Branch Railway, which runs across the central part of the proposed development. A railway station has been constructed at the southwestern corner of the site. Although field boundaries are rarely recorded by these early surveys, a rectangular enclosure, either side of a road that forms the northern boundary of the site, is first recorded by this map. Deforestation has clearly altered woodland shown by earlier survey (Fig.5; Armstrong 1778) to

surround Eagle Hall. Remnants of the once complete forest, named Eagle High Wood and Eagle Low Wood, are shown to be separated by open ground that spans a stream course. This stream passes north of Eagle Hall and must represent a canalisation of the earlier course, which is first recorded passing to the south of the Hall (Fig.5; Armstrong 1778).

Bryant's *Map of the County of Lincoln* (Fig.7; Bryant 1828) presents the area of proposed development with greater accuracy, because this plan has not been altered by later revisions, and does not include the course of the Newark to Lincoln Railway. Roads surrounding the site concur with the pattern first recorded by Armstrong (Fig.5; Armstrong 1778).

Importantly, Bryant's map also defines the extent of the extra-parochial areas at Eagle Hall, shown by a thick dashed line, crossing the centre of the investigation area and returning west, to the south of Low Wood. The eastern and southern extent of the proposed development lie outside the extra-parochial area, and appear to be divided between both Swinderby and Eagle parish. The course of the extra-parochial boundary appears fossilised on later maps, following the alignment of watercourses, footpaths and hedgerows (Figs 8-12).

Morton extra-parochial area is also recorded, exclusive to the road marking the eastern limit of the site.

A map entitled *A Plan of an Estate at Eagle Hall in the County of Lincoln* (Fig.8; Anon 1879) is the first to record field boundaries within the proposed development, though only part of the investigation area is shown by this particular survey. Most of the field names, recorded by this document, evoke contemporary land-use or environmental conditions. Names such as 'Brackens' (Field

45) and 'Low Moor' (Field 46) suggest those in proximity to the course of a stream were particularly barren, whilst 'Near Holmes' (Field 43) and 'Far Long Holmes' (Field 44) may represent water meadow toward the northernmost part of the same stream course. 'Woolstocking' (Field 39) hints that this area was previously woodland, as 'stocks' are tree stumps and 'stocking' is former woodland (Lane *pers comm*). It is apparent that the stream bisecting the proposed development, first recorded in entirety during the early 19th century (Figs 5-6), has been straightened by the time of the estate survey and does not follow such a 'natural' course.

Second edition Ordnance Survey maps show the entire investigation area with field boundaries (Fig.9; OS 1904). However, certain edges of the original documents are in poor condition and are therefore not depicted. The pattern of field boundaries, first represented on the Eagle Hall Estate map (Fig.8), are unchanged. Moreover, the general pattern of land division suggests these field boundaries were not reorganised after the construction of the Newark to Lincoln Railway, because this feature appears superimposed. A track passes on a north-south alignment through the centre of the site, crossing the stream by a footbridge, and most probably representing the course of a more ancient thoroughfare between settlement at Eagle and Swinderby. The antiquity of this feature is suggested because, in part, it follows the line of an extra-parochial boundary, recorded by earlier survey (Fig.7; Bryant 1828).

Later Ordnance Survey maps (Fig.10; OS 1918) show little variation from the earlier 20th century editions, though limits of the extra-parochial areas at Morton and Eagle Hall are once again recorded. Moreover, this survey depicts the course of a probable curvilinear ditch within Low Wood, just

outside the western edge of the proposed development. This feature seems to originate from a northwest-southeast aligned boundary that marks the northeastern edge of Low Wood, and continues northeast to connect with the southwestern corner of the moat at Eagle Hall.

The pattern of land-use remains unchanged into the post-war period, when the Ordnance Survey re-printed maps of the area, with boundary revisions (Fig.11; OS 1922 and 1949). Extra-parochial boundaries do not appear and much of the site is shown within Eagle parish, with small parts lying in Swinderby parish.

Later survey (Fig.12; OS 1953) shows a windpump at the northwestern corner of the proposed development, though no major changes are apparent.

5.3 Aerial Photograph Data

A vertical aerial photograph, entitled *Eagle Hall* (and kept in the North Kesteven parish file) depicts the area of proposed development (Fig.4).

Although this photograph is without reference, amounts of shrub or small tree cover depicted on installations known to have been used during World War II (Fig.2 no 5; not shown on Fig.4) suggest it was probably taken in the post-war period. The picture shows that land within the proposed development was farmed at this time (Fig.4). A group of cropmarks appear as dark lines at the centre of this photograph, within the proposed development area, and are transcribed onto Figure 3 (no 1). In addition, cropmarks plotted by the National Mapping Programme, although not visible on Figure 4, are depicted in detail on Figure 3 (no 2) in order to portray the full extent of this complex.

new record
SK 870 652
61058

These cropmarks have a sub-rectangular morphology and appear to be interconnected. Some of the larger sub-rectangular features contain smaller curvilinear or linear cropmarks. None of these continue south of a track that crosses the site on an east-west alignment, most probably a result of differential crop cover south of the track.

The photograph of the cropmark complex has been examined by an archaeologist with extensive experience of aerial survey and photographic interpretation and, in his opinion, they are believed to represent *ice polygons* (Roger Palmer *pers comm*). Ice polygons are natural features created by differential expansion in the surface geology, caused by the presence of frozen groundwater.

However, it should be emphasised that similar shaped cropmarks can also be caused by underlying archaeological features and, as such, it is also possible that the recorded features may define enclosures or field systems.

5.4 Archaeological Data

Records of archaeological sites and finds are held by the North Kesteven Heritage Officer and the Lincolnshire County Sites and Monuments Record Office. Other, secondary, sources were also examined. Details of archaeological and historical remains falling within *c.* 2km of the proposed extraction area are collated in Table 1 and committed to Figure 2, with detailed cropmark information on Figure 3. Where a grid reference is incorrect it is appears in italics, with the correction written after.

Table 1: Archaeological sites in the vicinity of the proposed development

Map Code (Fig.2)	SMR	NK	Description	NGR (SK)
1	60126	27.6	Site of medieval preceptory and post-medieval gardens (SAM 22620).	865657
2	61063	46.1	Undated cropmarks.	853655
3	60418	27.5	Iron Age beehive quern.	877671
4	60407	27.10	Fragment of 10 th or 11 th century cross shaft.	877673
5	60772		Norton Disney airfield (disused). Bomb, ammunition and gas depot.	865645
6	60126	27.1	Site of Commandery of Knights Templars. Extant earthworks.	880680
7		no ref	Undated earthwork bank	849668
8	Event LI789	27.7/8	Cropmarks of possible Bronze Age barrow cemetery. Prehistoric flint blades. Negative evaluation.	890666
9	Event LI789	27.9	Cropmarks showing possible Bronze Age barrow.	892664
10		64.4	Early Bronze Age pot.	878642
11		64.7	Morton Hall and Park. Possible deserted medieval village.	877641
12		64.5	Flint arrowhead.	885639
13		62.2/5	Roman coin. Watching brief records modern deposits.	868632
14		64.9	Possible pre-Roman earthwork bank and ditch on parish boundary.	896635 896634
15		62.3	Cropmarks showing two possible rectilinear enclosures.	876623
16		64.6	Morton Manor. Possible deserted medieval village.	885638
17		62.4	Earthwork bank, flanked by ditches, on parish boundary.	890631
18	60665		Undated hearth and prehistoric flint recovered during watching brief.	876662
19	61062	46.2	Anglo-Saxon glass bead.	no ref
A		NMP	Undated rectilinear and linear cropmarks.	86NE
B		NMP	Undated linear and parallel linear cropmarks.	86NE
C		NMP	Undated linear and circular cropmarks.	86NE
D		NMP no ref	Undated rectilinear and linear cropmarks. Some recorded by NMP, others found on unreferenced aerial photograph.	86NE
E		NMP	Undated parallel linear cropmarks.	86NE

NGR refers to National Grid Reference location, as identified on the record
 NK refers to sites recorded by the North Kesteven parish files
 NMP refers to the National Mapping Programme sheets
 SMR refers to sites recorded by the County Sites and Monuments Record

Prehistoric Archaeology

Several prehistoric sites (pre AD 43) are identified within the area of investigation (Fig.2 nos 3, 8, 10, 12 and 18).

Prehistoric flints were retrieved as surface finds c.200m north of the proposed development during previous archaeological investigations (Fig.2 no 18; Tann 1997). This work also recorded a hearth, though no dateable material was found in this feature (*ibid.*).

Neolithic (3500-2000 BC) activity is represented by a barbed and tanged flint arrowhead, retrieved from ploughsoil, approximately 1.1km southeast of the proposed development (Fig.2 no 12).

An early Bronze Age (2000-1500 BC) pot was found approximately 500m southeast of the investigation site, close to Morton Prison (Fig.2 no 10). Cropmarks of a possible Bronze Age barrow cemetery are known 1.5km northeast of the proposed development (Fig.2 nos 8 and 9), though recent evaluation of the most northerly group of cropmarks (Fig.2 no 8) recorded an absence of prehistoric features, suggesting the ring-ditches had probably been destroyed by ploughing. Two unstratified prehistoric flints were found during this work (Cope-Faulkner 1997).

An Iron Age (600 BC-AD 43) beehive quern was recovered from Eagle village, approximately 1km north of the proposed development (Fig.2 no 3). Fragments of later Iron Age pottery has been identified on the surface of fields to the south of this village (Fig.2 no 18; Tann 1997, 30).

Romano-British Archaeology

The present A46 follows a similar route to the Fosse Way Roman road (Figs 1-2), linking settlement at *Lindum Colonia* (Lincoln) and *Corinium Dobunorum*

(Cirencester).

A 'Roman' coin is recorded from Swinderby village c.1km south of the proposed development (Fig.2 no 13). However, an archaeological watching brief, undertaken in proximity to this find, recorded only 19th and 20th century deposits (Fig. 2 no 13; Walker 1998).

Romano-British pottery has been observed on the surface of fields south of Eagle village (Fig. 2 no 18; Tann 1997, 30).

Anglo-Saxon Archaeology

An Anglo-Saxon (AD 450-1066) glass bead was found mid-way between North and South Scarle (Fig.2 no 7), though the exact location of this findspot is unknown.

Fragments of a late 10th or early 11th century cross shaft lie in the north aisle of Eagle parish church (Fig. 2 no 4; Pevsner and Harris 1989, 262). Other parts of the church fabric, such as the tower, are known to be Early English (AD 1190-1250) (*ibid.*).

Medieval Archaeology

Several ridge and furrow earthworks are recorded in proximity to the site, in the area of Eagle, Tunman Wood and Swinderby (Fig.2). These are characteristic features of medieval (AD 1066-1485) agricultural practice.

Earthworks of a former medieval preceptory lie just beyond the northwestern limit of proposed development (Fig.2 no 1). Remains of this preceptory are preserved as earthworks, including part of the inner precinct and associated fish ponds (Newton 1994). Other surviving features include a rectangular moat (with bank surviving in places), areas of ridge and furrow, hollows and building platforms (Mills 1990). 'Human burials' are recorded from within the area of the preceptory earthworks,

though no formal record of their numbers or location exists (Mills 1990; Newton 1994). A large part of the medieval preceptory is preserved as a Scheduled Ancient Monument (SAM 22620), though the area of this monument does not extend into the proposed development area.

A commandery of the Knights Templars, also surviving as earthworks, is reported north of Eagle village (Fig.2 no 6). Furthermore, deserted medieval settlements are respectively recorded 500m and 2.3km beyond the southeastern corner of the site (Fig.2 nos 11 and 16).

Post-medieval Archaeology

Eagle Hall (Fig.2 no 1) is principally of 18th century date, as is at least one of the farm buildings within the present complex (Pevsner and Harris 1989, 262). These are excluded from the schedule which incorporates the underlying remains of a medieval preceptory (see *Medieval Archaeology*).

Part of a World War II airfield depot lies to the southwest of the proposed development, just south of Eagle Wood (Fig.2 no 5). These appear to survive as at least three separate 'bunker complexes' and are recorded by the most recent Ordnance Survey maps.

Undated Features

A probable ditch, of uncertain date, is known at the eastern canopy of Eagle Hall Wood (Fig.2 no 7). This feature may form an extension of earthworks associated with the medieval or post-medieval occupation of Eagle Hall.

An earthwork bank and ditch, following the line of an existing parish boundary, are recorded on the north side of the Fosse Way (Fig.2 no 14).

Farther west, a bank flanked on either side by ditches, has also been observed on the line of a parish boundary, although this feature runs at a right angle to the Fosse Way (Fig.2 no 17).

5.5 Site Investigation

A site visit was undertaken on 26th January 1999 to assess the condition of the proposed development site. Visibility was good. The results of the reconnaissance have been committed to Figure 13. Access to the northern and eastern parts of the site was restricted due to the presence of a shooting party.

The site is presently used for arable farming, though small areas of wood also occupy some of these fields. Approximately one third of the proposed area is covered by crop stubble, with another third containing a young root crop. Other fields had either weathered surfaces (without crop) or cereal crop cover.

During the site visit a single sherd of probable Roman pottery and very occasional fragments of abraded tile were observed, though it must be emphasised that no systematic fieldwalking was undertaken. Most of the fields seemed to have naturally high levels of groundwater, and water channels that cross the site contained significant volumes of water. Field boundaries are most commonly defined by hedgerows within the investigation area.

The site visit did not observe any aerial cables within the proposed development. It is considered that the entire area is suitable for fieldwalking, geophysical survey and intrusive archaeological investigations.

6. CONSTRAINTS

6.1 Heritage Constraints

Statutory and Advisory Constraints

The proposed extraction area does not incorporate any Scheduled Ancient Monuments protected by the Ancient Monument and Archaeological Areas Act of 1979 (HMSO 1979). However, a Scheduled Monument does lie outside the northwestern limit of the investigation area (Fig.2 no 1; SAM 22620).

Eagle Hall Wood, immediately west of the proposed development, is included in the Nature Conservancy Council Inventory of Ancient Woodland (1989) and most probably has Ancient Woodland Status.

Although no listed buildings are recorded within the site, Swinderby Station, the Station Master's House and Signal Box, at the western edge of the proposed development, are Grade II listed buildings (DoE 1984). As such, any alteration to these structures requires listed building consent.

The proposed extraction will presumably require the removal of a number of hedgerows standing within the investigation area. Removal of hedgerows requires a Hedgerow Removal Notice as detailed in the Hedgerow Regulations of 1997.

Previous non-archaeological excavation has located human burials in proximity to Eagle Hall. If such remains are encountered, and the development requires their removal, it would be necessary to obtain a Home Office licence. Failure to do so constitutes an offence under Section 25 of the Burial Act 1857.

As such, any archaeological remains within the area of the proposed development are protected only through the implementation

of PPG16 (DoE 1990).

6.2 Other Constraints

Health and Safety Constraints

The proposed development site lies between Eagle Hall Wood and Tunman Wood. Although details of the proposed development have not been supplied, the proposed gravel extraction will presumably result in removal and subsequent backfill, or landscaping, of existing surface geology. The following risks have been identified:

- a) Plots of services in the vicinity of the proposed development were requested from all the major services (electricity, water and sewerage, gas and telecommunications) though only electricity plots have been forthcoming. These plans show High Voltage overhead wires crossing the site. However, these were not observed during the site visit, suggesting the information has been superceded. Once other service information is available, this will be supplied to the client. This assessment does not preclude the possibility of other, unrecorded, services within the site confines.
- b) Excavations of trenches for archaeological evaluation entails a certain degree of risk which is enhanced by the use of a mechanical excavator.

7 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 1).

Period

Cropmarks within the proposed development, a hearth to the north, and earthwork to the west, are non-period specific.

Prehistoric flint artefacts, occurring as surface finds, are characteristic of their period. Stone crosses are symptomatic of Late Saxon religious practice, whilst items of personal adornment, such as glass beads are typical of this period in general.

Medieval sites, often surviving as earthworks, are common features of their time. More specifically, the preceptory at Eagle Hall represents ideological concerns that emerged during the 12th century.

Post-medieval gardens are typical features of estate centres, and represent cultural development during this period. World War II airfield depots are representative features of the conflict.

Rarity

Cropmarks are familiar features on the gravel geology in parts of Lincolnshire, though are much less frequently attested in proximity to the area of investigation. Although the origin of those recorded within the proposed development have been provisionally identified as non-archaeological (geological formations), there remains a possibility that they could constitute previously unknown archaeological activity.

Flint artefacts, and scatters of Romano-British pottery, are common. Nonetheless, if contemporary with a possible hearth, they may define an area of occupation. As such, the remains would enhance the understanding of development during the prehistoric and Romano-British periods.

Anglo-Saxon finds are rare and, although

recovered from outside the proposed development, do present the possibility of occupation during this period.

Although medieval earthworks are a common feature of the surrounding landscape, those in the grounds of Eagle Hall are more unusual because they are historically associated with both the Knights Templars and Hospitallers.

Post-medieval gardens are not uncommon, though may reflect an individuality of design. Airfield depots, although typical of surviving World War II remains, may possess unusual or unique characteristics dependant upon their operational role (Lowry 1995, 110).

Documentation

Records of archaeological sites and finds made within the area of investigation are kept in parish files maintained by the North Kesteven Heritage Officer and the Lincolnshire County Sites and Monuments Record Office. Cartographic and historical documents covering the proposed development are currently held by the Lincolnshire County Archives.

The present report provides the first site-specific consideration of the archaeological and historical aspects of the proposed development.

Group value

Undated cropmarks and earthworks, recorded within the area of investigation, cannot be ascribed a group value without knowledge of their date and purpose.

A moderately high group value is conferred by the occurrence of a medieval preceptory with associated chapel and cemetery. This status is further augmented by continuity of occupation, as an estate centre, into the post-medieval period, when the surroundings

were landscaped. Surviving historical documents, referring to medieval and post-medieval occupation add to the group value. It is possible that the undated earthwork bank, outside the western edge of development may, from inspection of the alignment, represent the continuation of a medieval or post-medieval boundary.

Other contemporary modern military sites exist on land surrounding the wider investigation area, conferring a moderately high group value on those remains to the south of Eagle Hall Wood.

Survival/Condition

The site is known from cartographic evidence to have remained undeveloped since the 18th century. However, since the proposed area of development is currently subject to ploughing, and perhaps has been for some time previously, it is probable that the uppermost archaeological horizons, where present, have been damaged.

Fragility/Vulnerability

As the proposed development will impact the investigation area, any and all archaeological deposits, present to the depth of the required gravel extraction are extremely vulnerable.

Diversity

Moderately high period diversity is represented by the possibility of multi-period remains in proximity to the proposed development. Moderate functional diversity is represented by the remains of undated cropmarks and earthworks, a preceptory (incorporating both chapel and cemetery), and a post-medieval estate centre with formal gardens.

Potential

The assessment has indicated that there is potential for prehistoric, Romano-British, medieval and post-medieval remains to lie

within the development area, though none are presently known. There is also a suggestion, from artefacts recovered within the parish, that some vestiges of Anglo-Saxon activity occur in proximity.

There is moderate potential for environmental remains to survive due to waterlogging at depth, even more so in the vicinity of extant streams and ponds. Previous archaeological investigation, undertaken north of the proposed development, suggests surviving remains, where present, lie immediately beneath the ploughsoil.

8. CONCLUSIONS

No archaeological sites or findspots are recorded within the area on existing documentation. However, cropmark features are recorded within the proposed development. Although it is uncertain whether these are a product of geological or human action, the former has been suggested.

An undated hearth, in proximity to unstratified prehistoric and Romano-British finds, may represent early habitation outside the northeastern edge of the site. Medieval earthworks and post-medieval garden features are recorded in proximity to the northwest corner, and may continue within the development area. The earliest available cartographic record suggests the site has remained as a group of enclosed arable fields, at least since the 19th century.

The land is currently used for arable farming and is presently covered by stubble, young root crop or weathered ploughsoil. Assessment has concluded that almost all of the fields would be suitable for fieldwalking, geophysical survey or intrusive archaeological investigation.

9. ACKNOWLEDGEMENTS

Archaeological Project Services would like to acknowledge the assistance of Mrs V.J. Squires who commissioned this report on behalf of Aggregate Industries UK Limited. 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. Kate Orr, Heritage Officer for North Kesteven District Council, allowed access to the relevant parish files. Thanks are also due to the staff of the Lincolnshire Archives Office for providing relevant source material.

10. REFERENCES

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

Anon., 1879 *Plan of an Estate at Eagle Hall and Eagle in the County of Lincoln*

Armstrong., 1778 *Map of Lincolnshire*

Bennett, N., 1993 Religious Houses, in Bennett, S. and Bennett, N. (eds), 1993 *An Historical Atlas of Lincolnshire*

Bryant, A., 1828 *Map of the County of Lincoln*

Cope-Faulkner, P., *Archaeological Evaluation for the Proposed Extension of Whisby Quarry, Eagle and Swinethorpe, Lincolnshire (WJL 97)*, Unpublished APS Report No 22/97

DoE, 1983 *List of Buildings of Special Architectural or Historic Interest, District of*

North Kesteven, Lincolnshire (Parishes of Eagle & Swinethorpe, North Scarle, Swinderby and Thurlby)

DoE, 1990 *Archaeology and Planning, Planning Policy Guidance note 16*

Ekwall, E., 1974 *The Concise Oxford Dictionary of English Place-Names* (4th ed)

Foster, C.W. and Longley, T. (eds), 1976 *The Lincolnshire Domesday and Lindsey Survey*, The Lincoln Record Society 19

HMSO, 1979 *Ancient Monuments and Archaeological Areas Act*

Hodge, C.A.H., Burton, R.G.O., Corbett, W.M., Evans, R. and Seale, R.S., 1984 *Soils and their use in Eastern England*, Soil Survey of England and Wales 13

Holmes, C., 1980 *Seventeenth Century Lincolnshire*, History of Lincolnshire Vol. VI

IFA, 1997 *Standard and Guidance for Archaeological Desk-based Assessments*

LCCAS., 1998 *Lincolnshire Archaeological Handbook: A Manual of Archaeological Practice*

Lowry, B. (ed), 1995 *20th Century Defences in Britain: An Introductory Guide*, Practical Handbooks in Archaeology No 12

Mills, D.R., 1990 *Eagle Hall*, Unpublished Notes

NCC., 1989 *Inventory of Ancient Woodland: Lincolnshire*

Newton, I., 1994 *Schedule Entry Copy, National Monument No: 22620*, Unpublished Document

OS., 1824 *Lincolnshire, Parts of Kesteven, Sheets LXXXIII*

OS., 1904 *Lincolnshire, Parts of Kesteven, Sheets LXXVII NW and LXXVII NE*

OS., 1918 *Lincolnshire, Parts of Kesteven, Sheets LXXVII NW and LXXVII NE*

OS., 1922 *Lincolnshire, Parts of Kesteven, Sheets 77 NW and 77 NE*

OS., 1949 *Lincolnshire, Parts of Kesteven, Sheets 77 NW and 77 NE*

OS., 1994 *Lincoln, Sheet 121*

Owen, D.M., 1981 *Church and Society in Medieval Lincolnshire, History of Lincolnshire Vol. V*

Page, W., 1988 *The Victoria History of the County of Lincoln II* (Reprint)

Pevsner, N. and Harris, J., 1989 *Lincolnshire. The Buildings of England* (2nd edition revised Antram, N.)

Platts, G., 1985 *Land and People in Medieval Lincolnshire, History of Lincolnshire Vol. IV*

RCHME., 1995 *National Mapping Programme, Sheets 86 SE and 86 NE*

Shepperd, Revd W.D., 1932 *Eagle, Lincolnshire: Ancient and Modern (1807-1932)*

Tann, G., 1997 *Archaeological Monitoring in Lincolnshire and Nottinghamshire of the Eagle to Harby Watermain Pipeline (SWS 96)*, Unpublished LAS Report

Walker, F., 1998 *Archaeological Watching Brief at the Kisimul School, Swinderby, Lincolnshire (KSS 96)*, Unpublished APS

Report No 21/98

Walter, J.E., 1938 *Plan of the Morton and Swinderby Estate in Lincolnshire*

White, W., 1856 *History, Gazetteer and Directory of Lincolnshire*

11. ABBREVIATIONS

APS	Archaeological Project Services
DoE	Department of the Environment
HMSO	Her Majesties' Stationary Office
IFA	Institute of Field Archaeologists
LAO	Lincolnshire Archive Office
LAS	Lindsey Archaeological Services
LCCAS	Lincolnshire County Council Archaeology Section
NCC	Nature Conservancy Council
NKDC	North Kesteven District Council
RCHME	Royal Commission on Historical Monuments (England)
SMR	County Sites and Monuments Record number

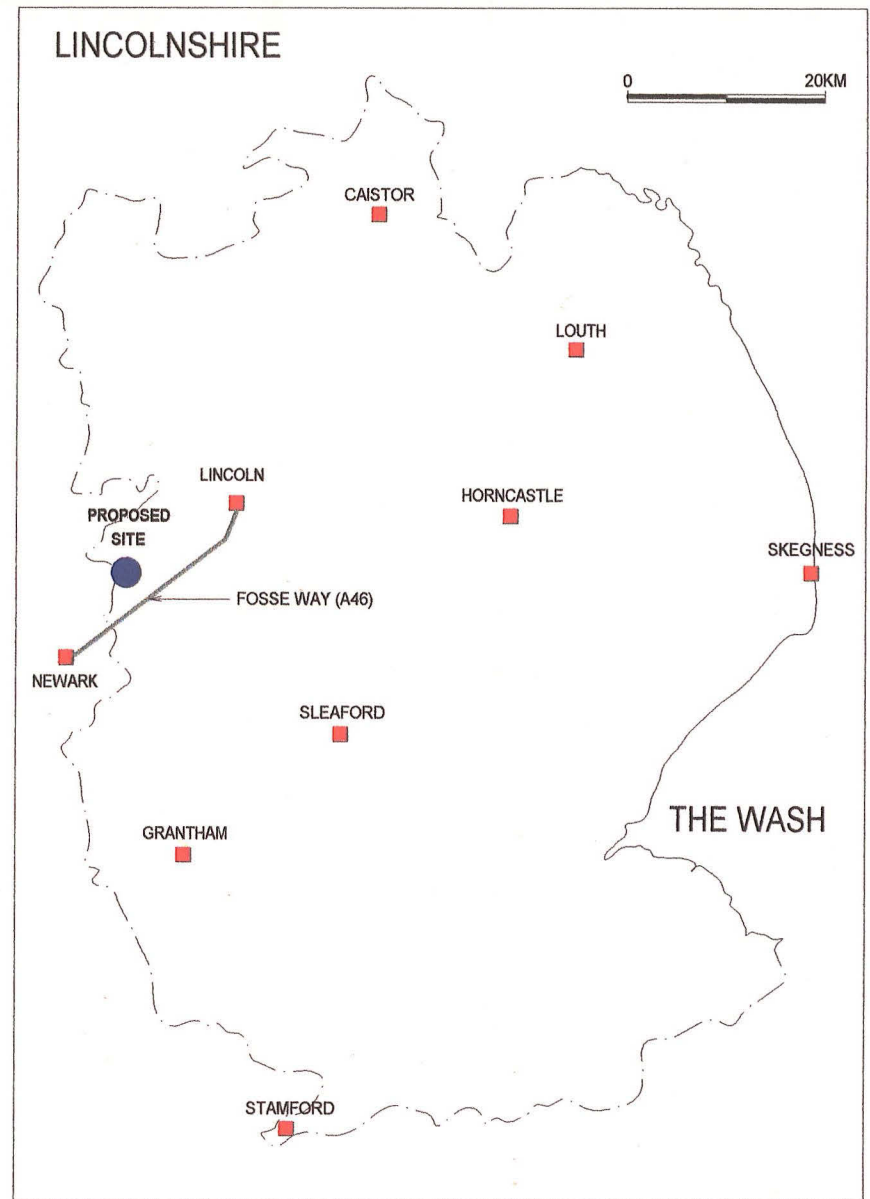
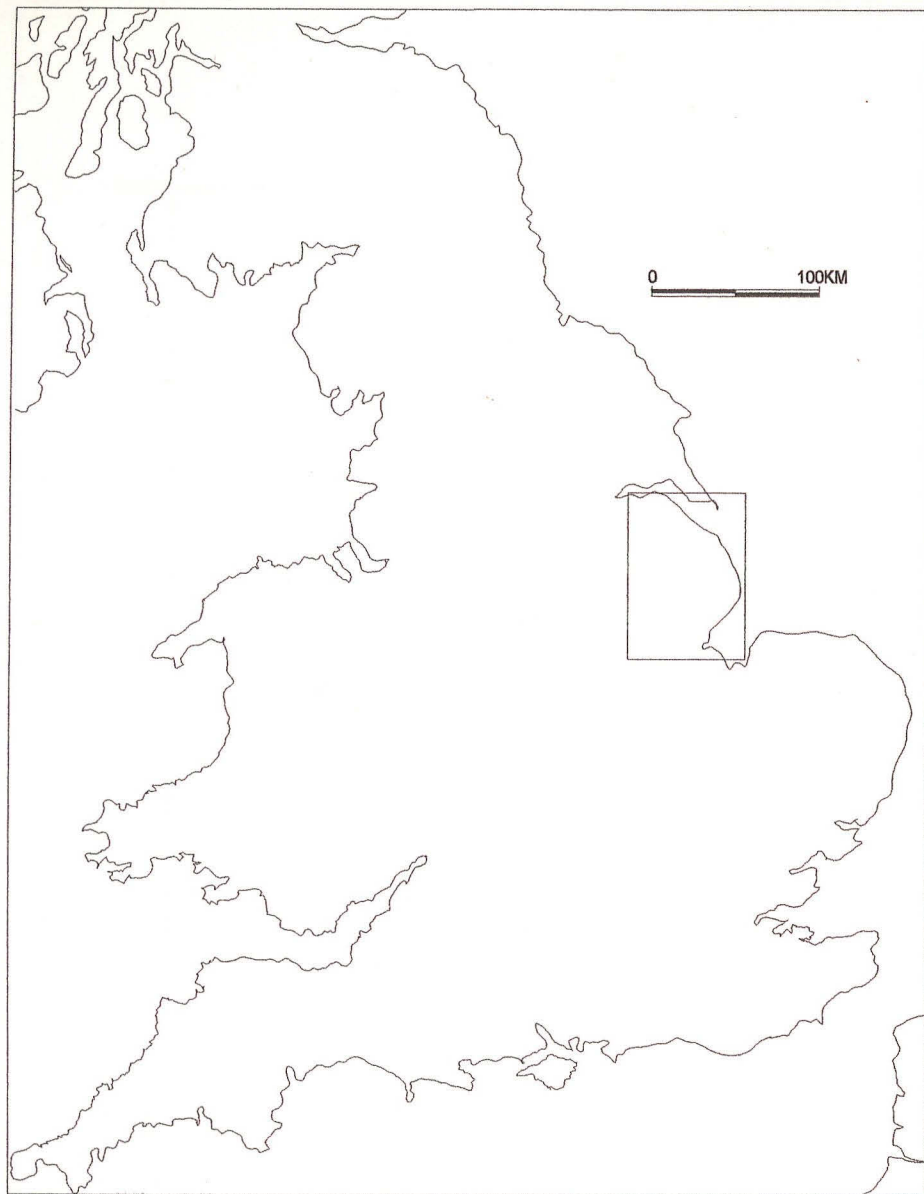


Figure 1: General location map

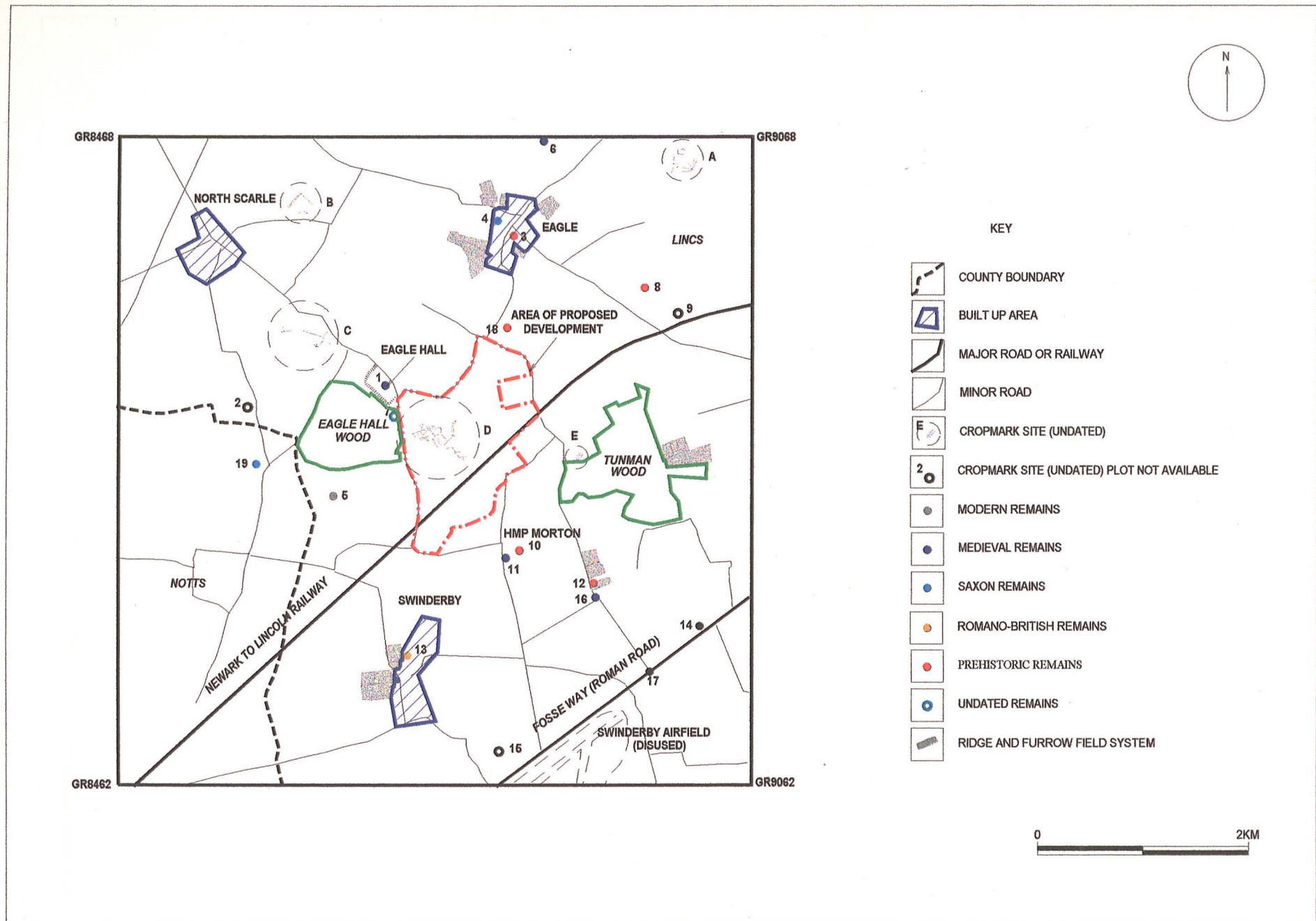
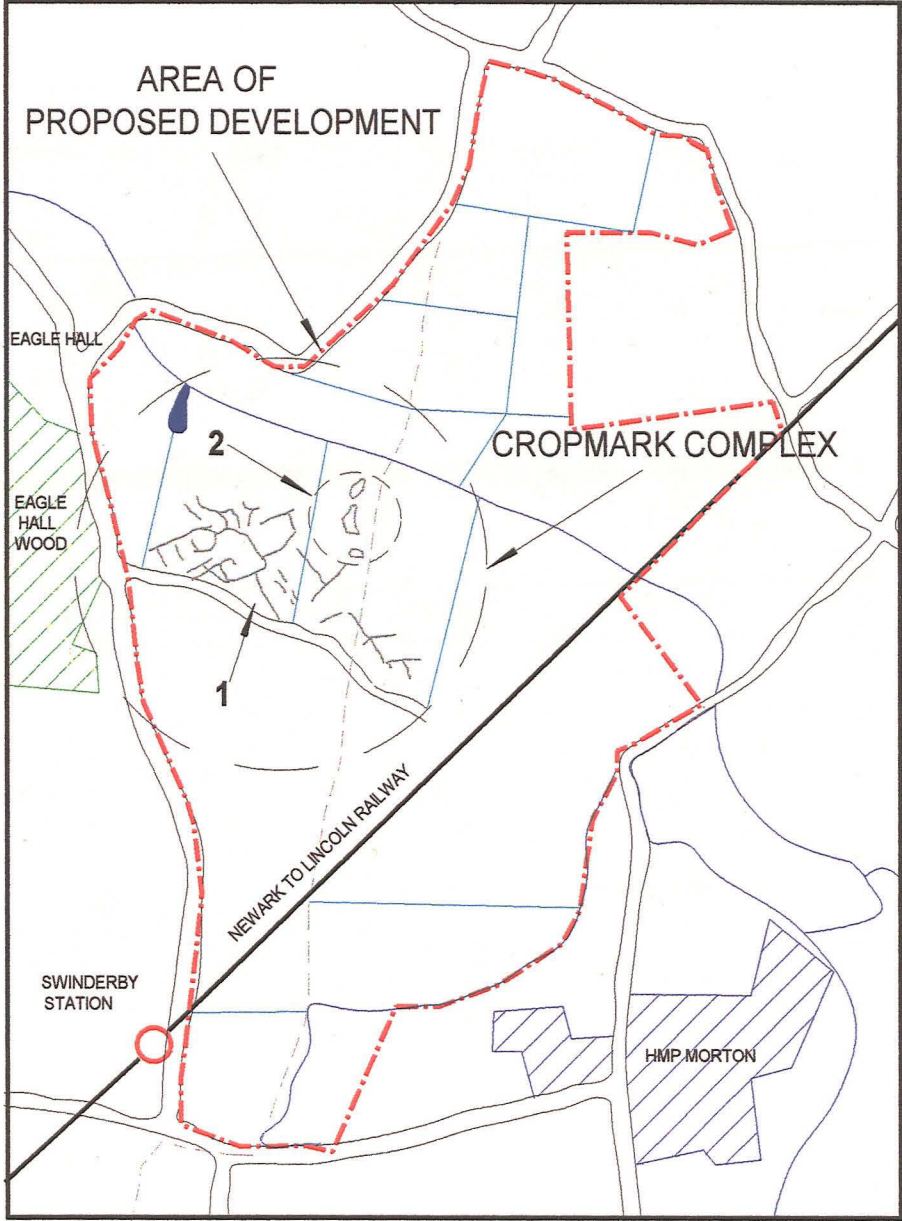


Figure 2: Area of proposed development and known archaeological sites



KEY






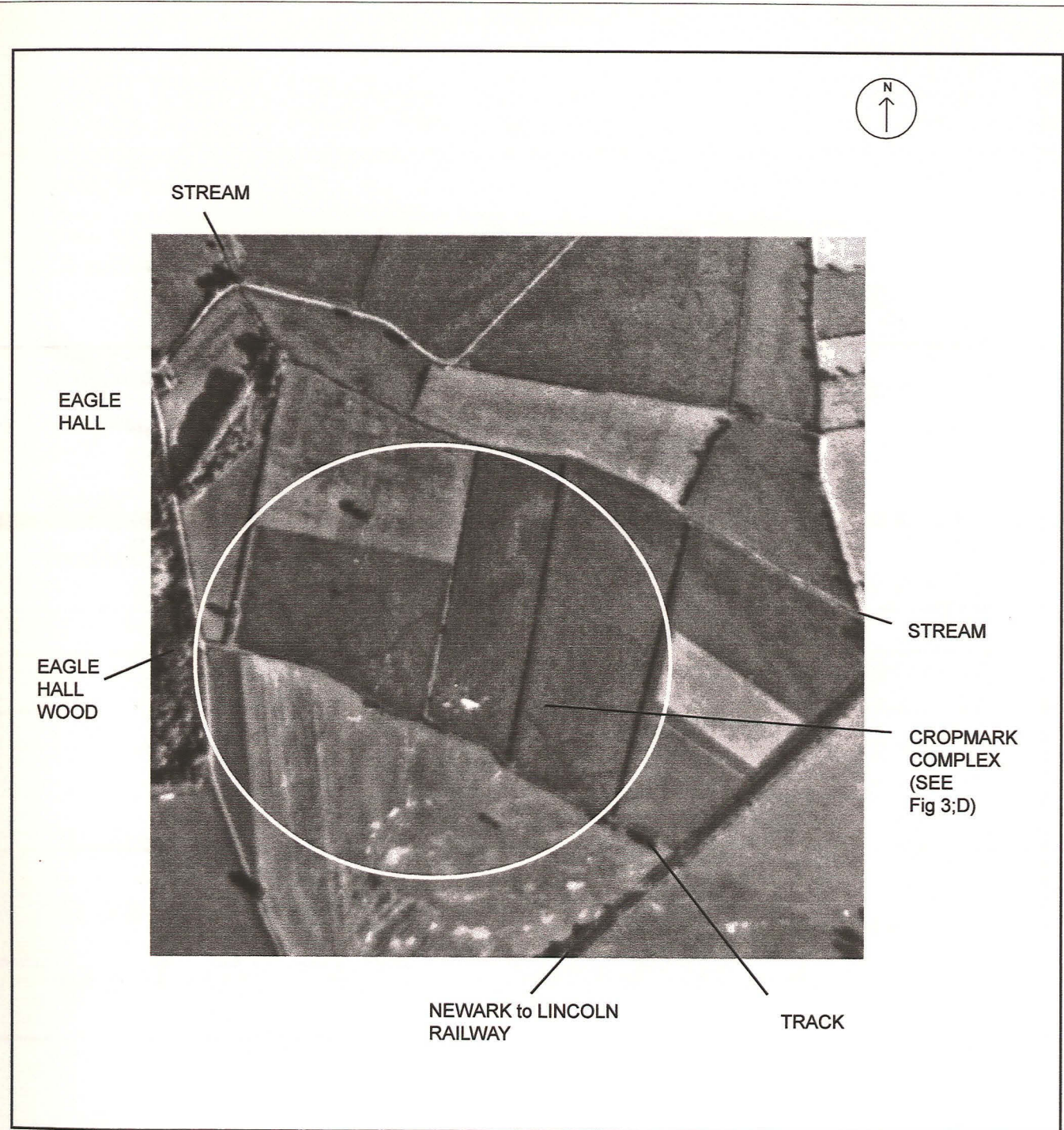
-  BUILT UP AREA
-  FOOTPATH
-  EXTANT FIELD BOUNDARY
-  WATERCOURSE
-  WOODLAND



Figure 3: Area of proposed development and main cropmark complex



NOT TO SCALE

Figure 4 : Aerial photograph showing northern extent of proposed development and rectilinear cropmark complex

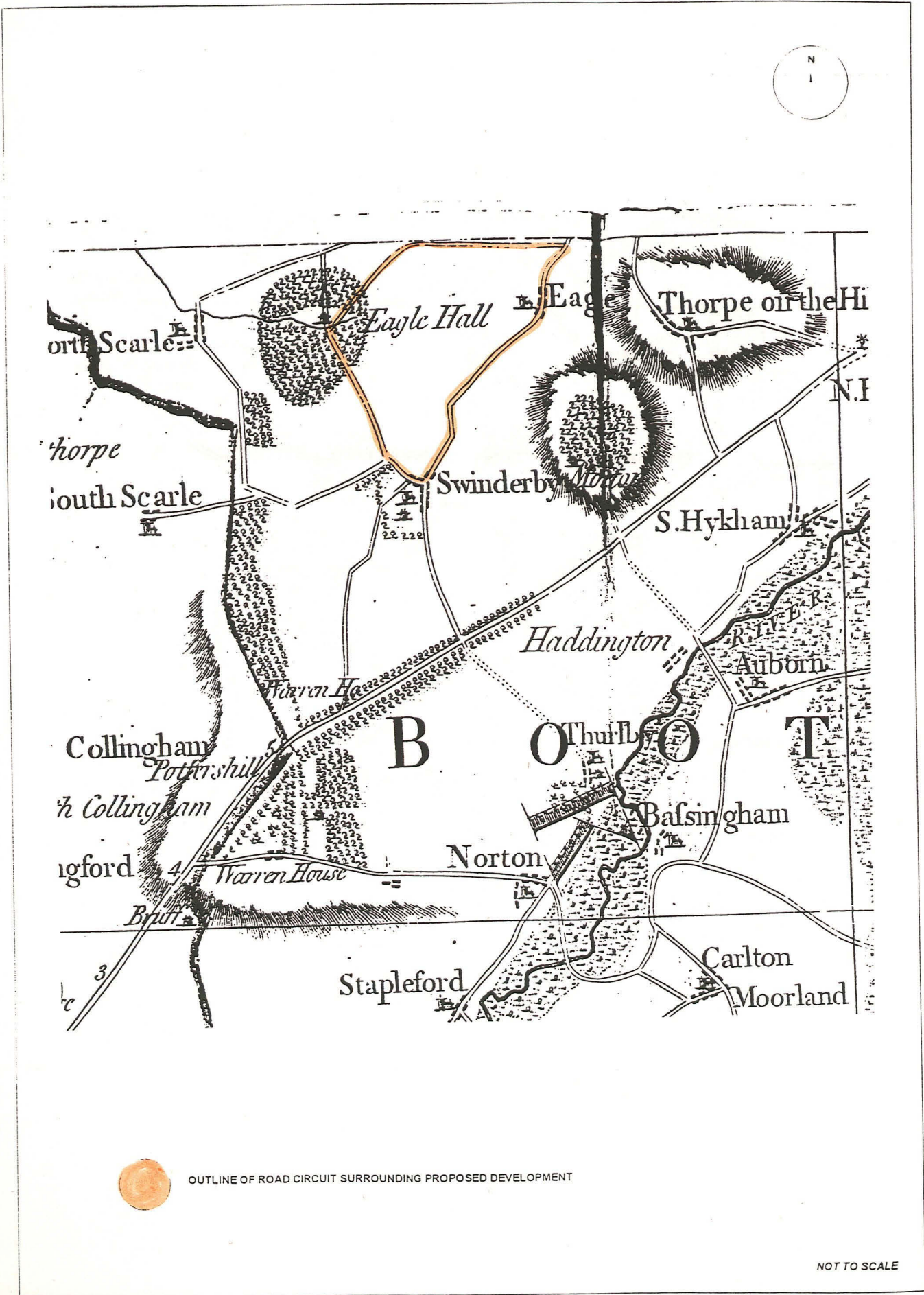
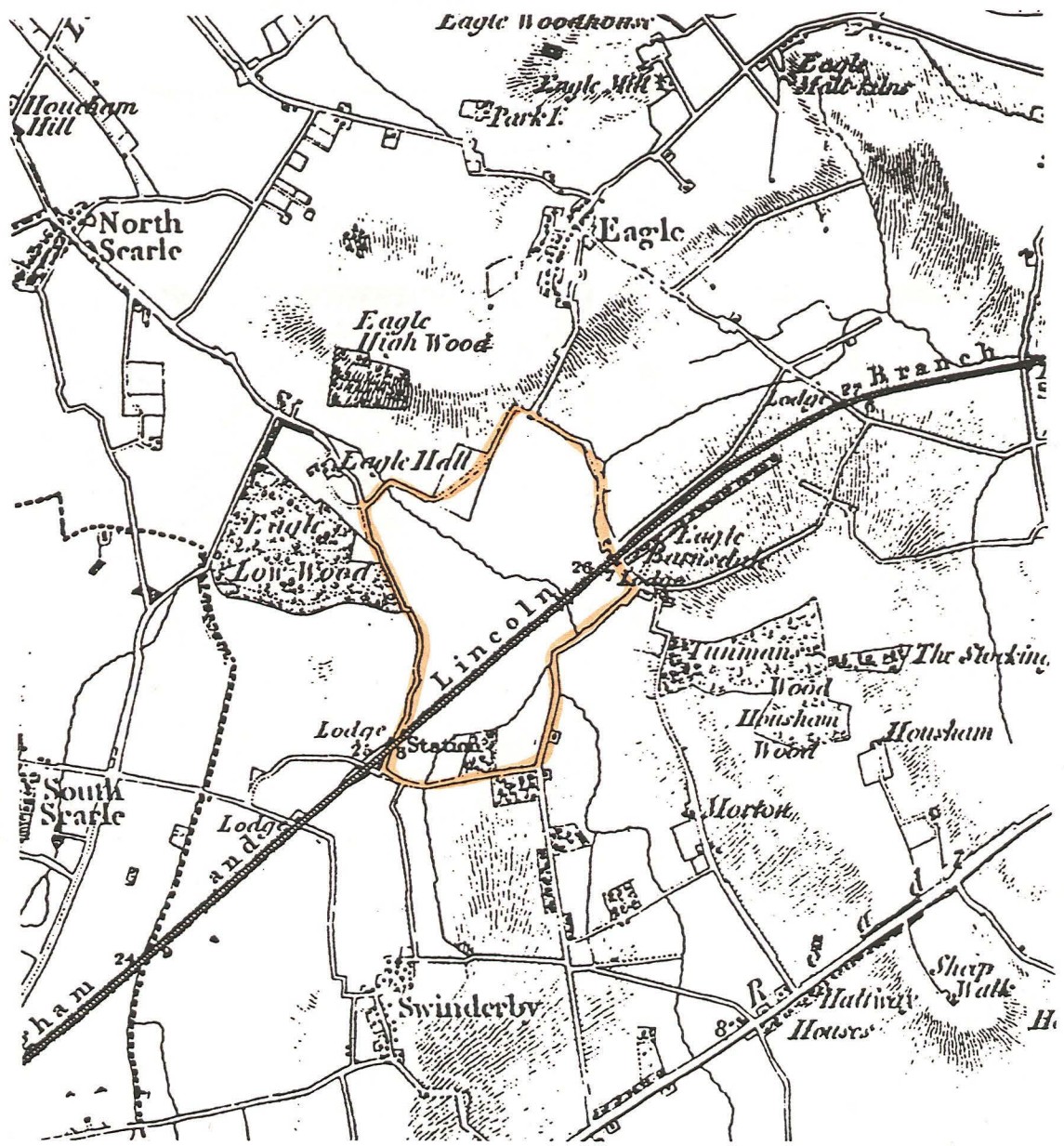


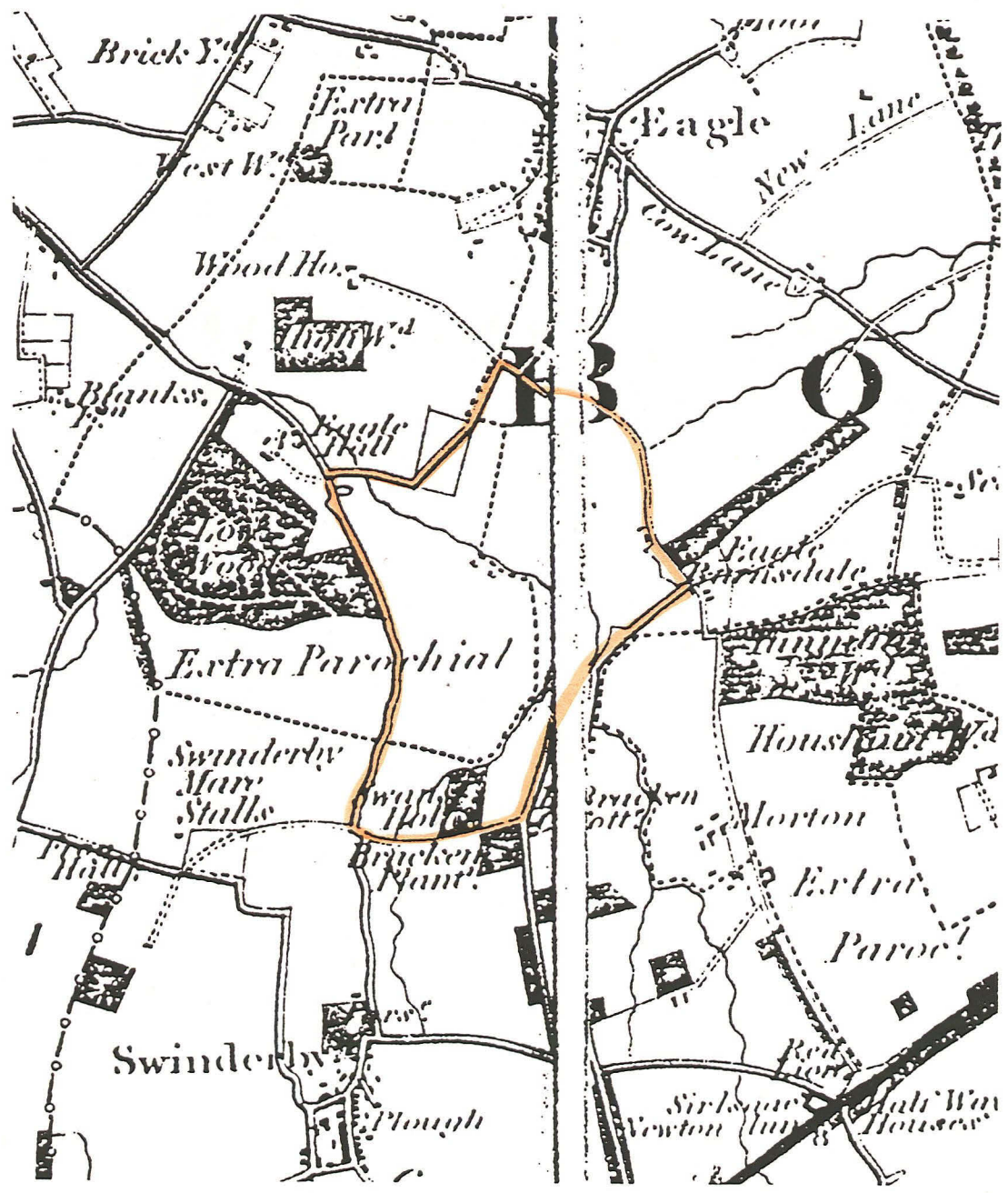
Figure 5: Extract from Armstrong's Map of Lincolnshire (1778)



OUTLINE OF ROAD CIRCUIT SURROUNDING PROPOSED DEVELOPMENT

NOT TO SCALE

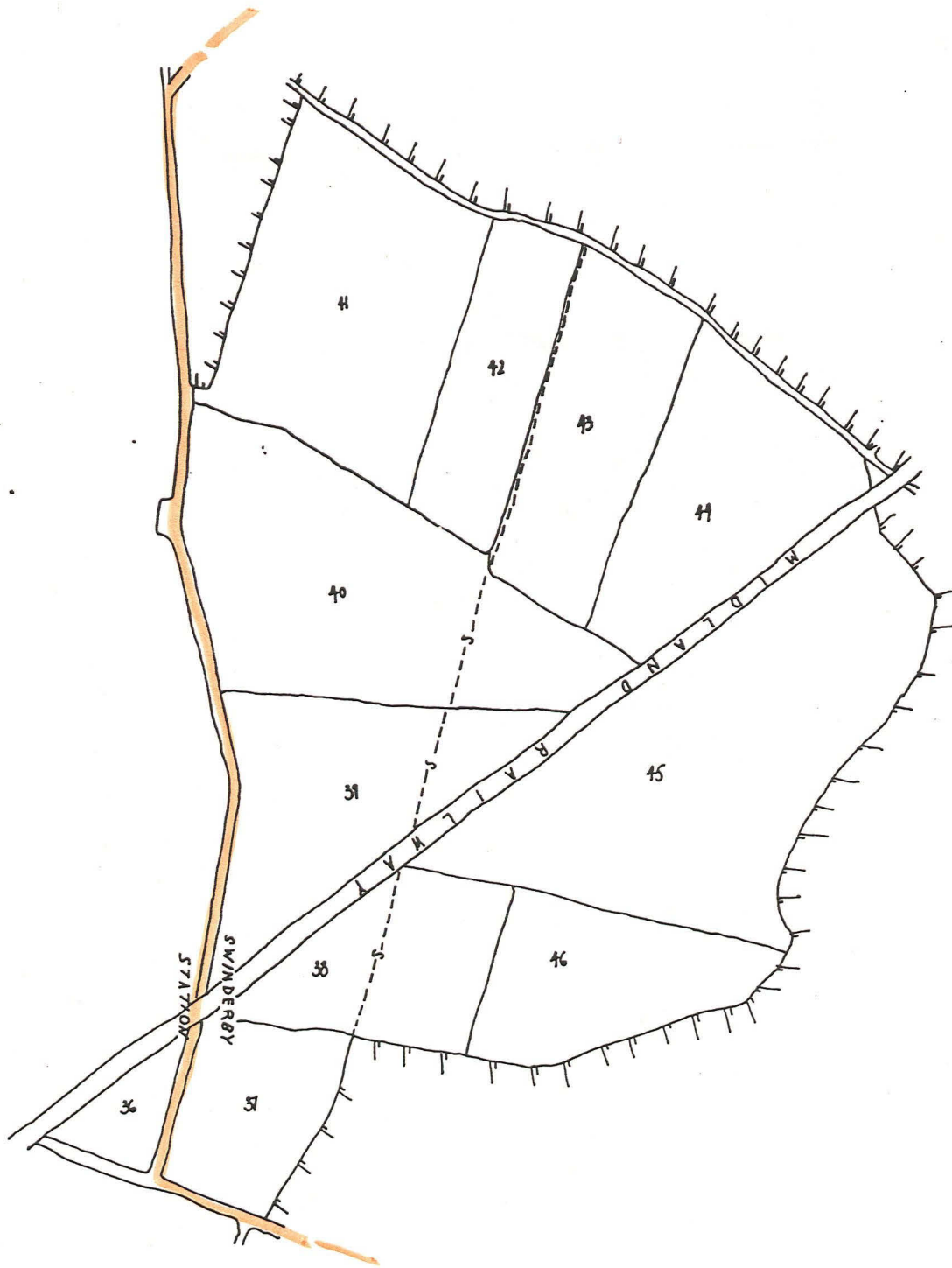
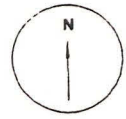
Figure 6: Extract from Ordnance Survey Map of Lincolnshire (1824)



OUTLINE OF ROAD CIRCUIT SURROUNDING PROPOSED DEVELOPMENT

NOT TO SCALE

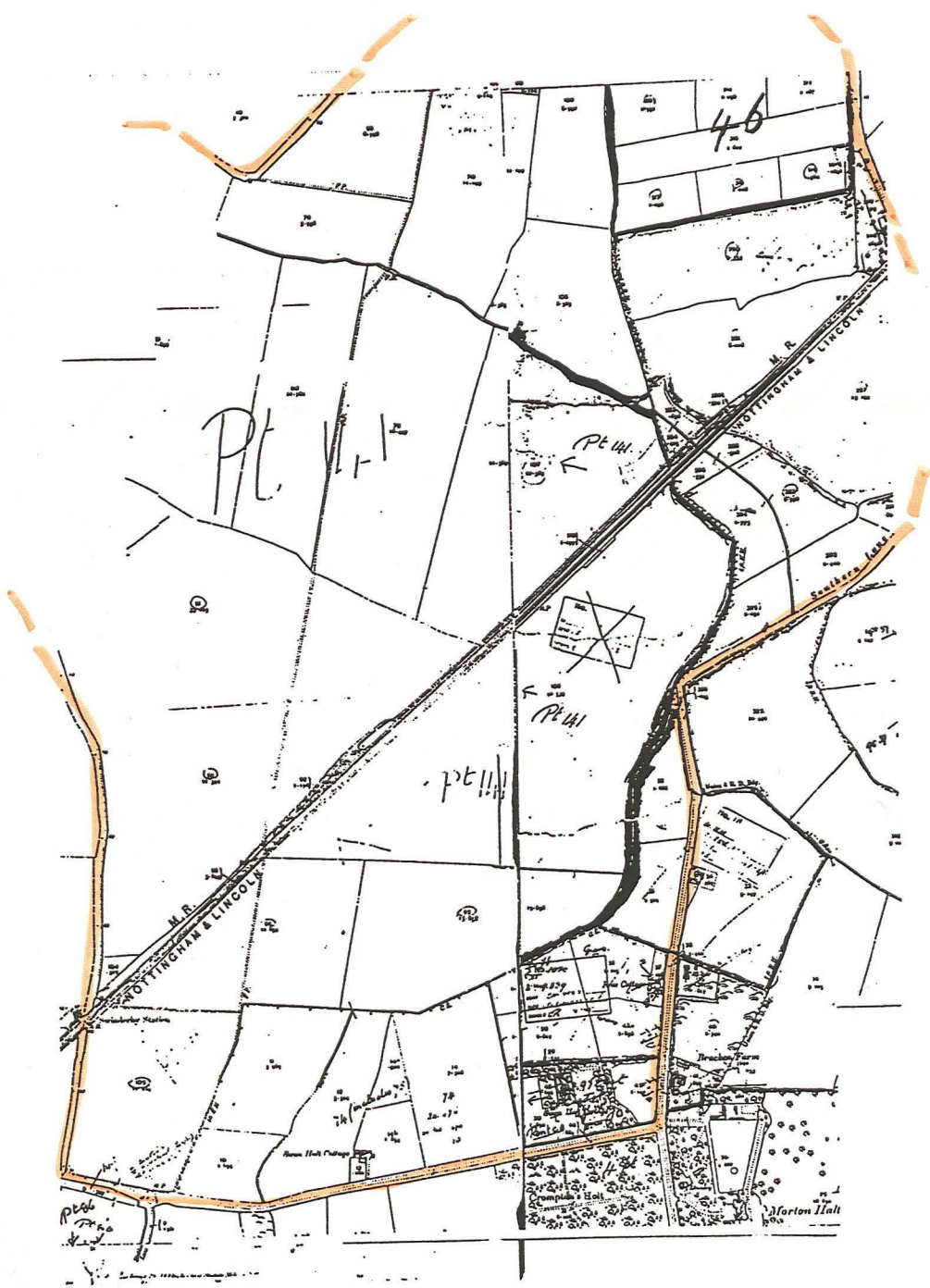
Figure 7: Extract from Bryant's Map of Lincolnshire (1828)



OUTLINE OF ROAD CIRCUIT SURROUNDING PROPOSED DEVELOPMENT

NOT TO SCALE

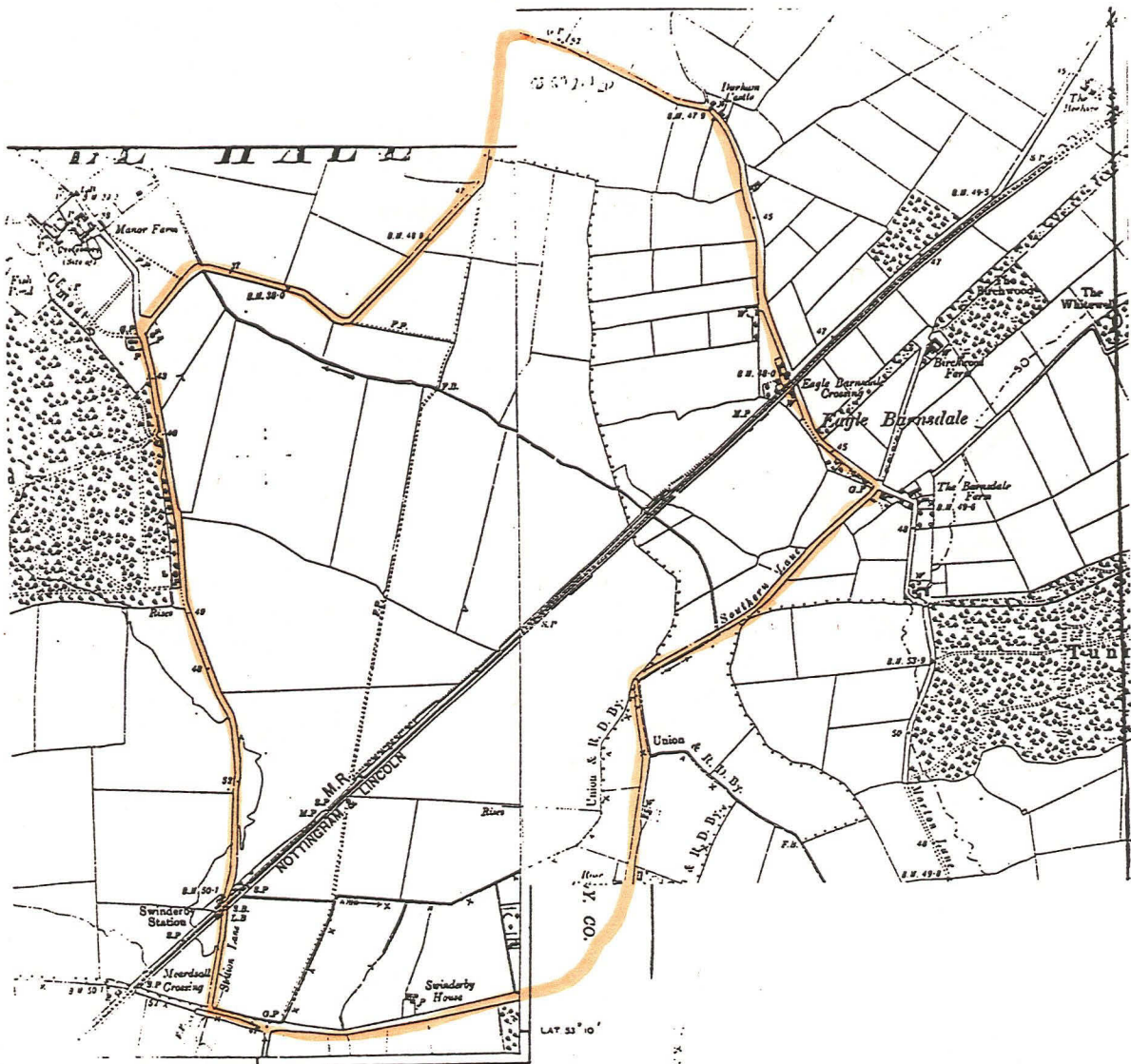
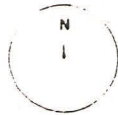
Figure 8: Extract from Estate Map of Eagle Hall and Eagle (1879)



OUTLINE OF ROAD CIRCUIT SURROUNDING PROPOSED DEVELOPMENT

NOT TO SCALE

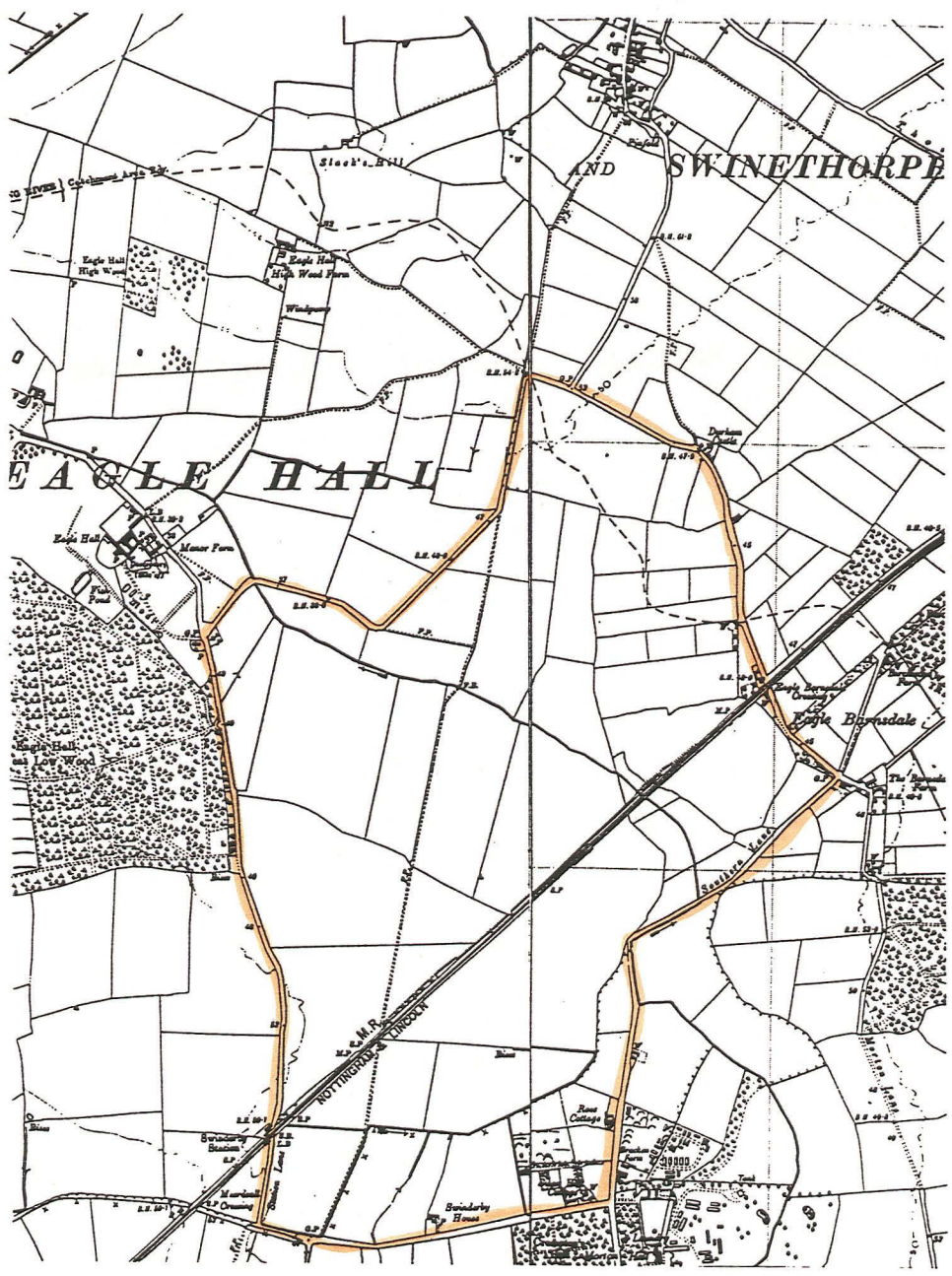
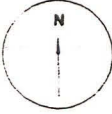
Figure 9: Extract from Ordnance Survey Map of Lincolnshire (1904)



OUTLINE OF ROAD CIRCUIT SURROUNDING PROPOSED DEVELOPMENT

NOT TO SCALE

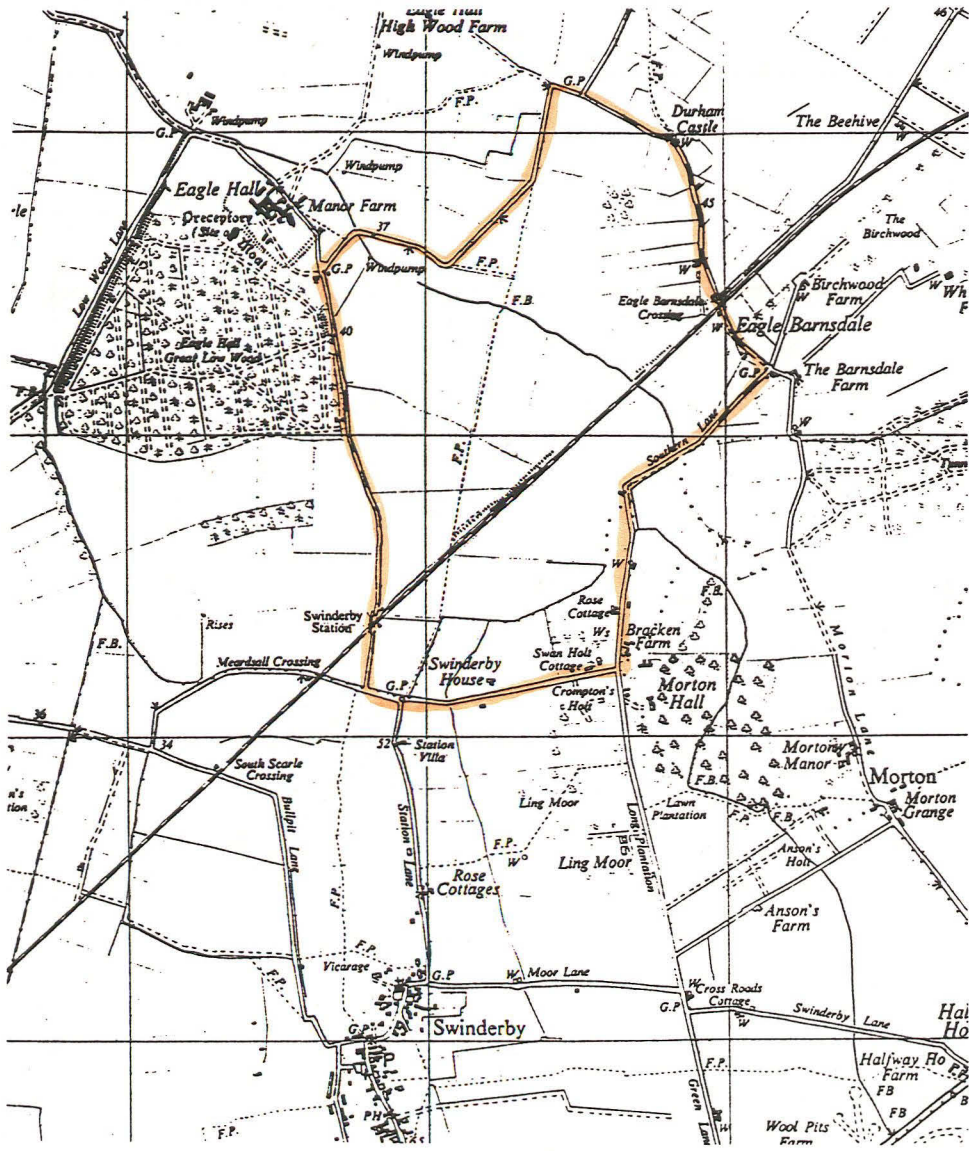
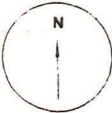
Figure 10: Extract from Ordnance Survey Map of Lincolnshire (1918)



OUTLINE OF ROAD CIRCUIT SURROUNDING PROPOSED DEVELOPMENT

NOT TO SCALE

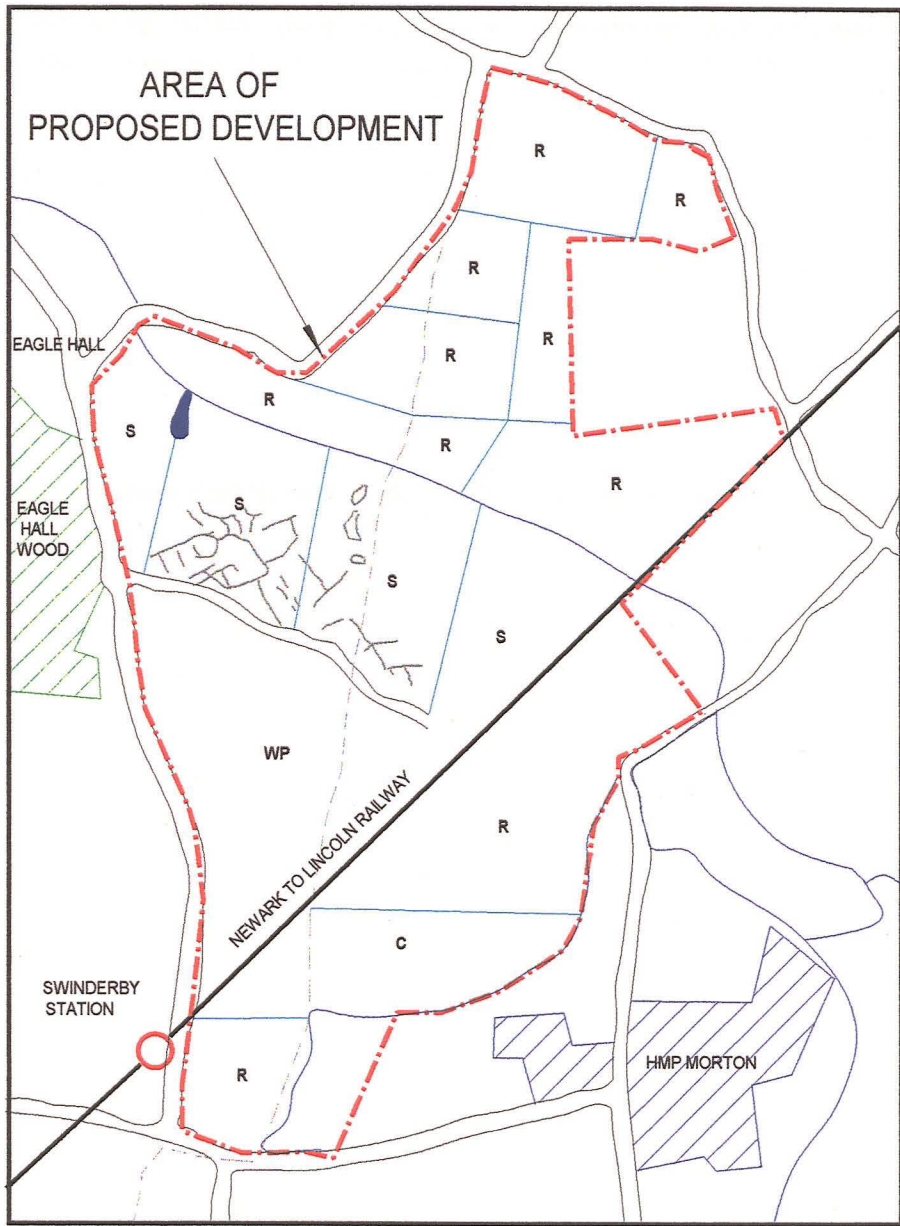
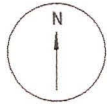
Figure 11: Extract from Ordnance Survey Map of Lincolnshire (1922 and 1949)



OUTLINE OF ROAD CIRCUIT SURROUNDING PROPOSED DEVELOPMENT

NOT TO SCALE

Figure 12: Extract from Ordnance Survey Map of Lincolnshire (1953)



KEY

	BUILT UP AREA		ROOT CROP
	FOOTPATH		CEREAL CROP
	EXTANT FIELD BOUNDARY		WEATHERED PLOUGHSOIL
	WATERCOURSE		STUBBLE
	WOODLAND		



Figure 13: Area of proposed development and current landuse

APPENDIX 1

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.