

**ARCHAEOLOGICAL WATCHING BRIEF  
OF IMPROVEMENTS TO A15  
BISHOP NORTON/NORTON LANE  
(BNNL06)**

**Work Undertaken For  
LINCOLNSHIRE COUNTY COUNCIL**



November 2006

Report Compiled by  
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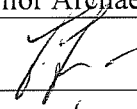
**ARCHAEOLOGICAL PROJECT SERVICES**



APS Report No. 174/06

**Quality Control  
A15 Bishop Norton/  
Norton Lane  
Improvements  
(BNNL06)**

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Date: 5th DECEMBER 2006	Date: 5 <sup>th</sup> December 2006

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## 1. SUMMARY

*A watching brief was undertaken during groundworks relating to improvements to the Norton Lane junction of the A15 at Bishop Norton, West Lindsey, Lincolnshire. These works were located in an area held to be of significant archaeological potential. The A15 follows the line of the major Roman thoroughfare Ermine Street, alongside which a number of sites of archaeological interest are recorded in the vicinity.*

*The watching brief monitored the reduction of the modern road surface and underlying deposits to a depth of up to 1.2m. In addition, the excavation of trenches to accommodate drainage pipes and manholes to the east and west of the road were monitored during the course of the watching brief.*

*The watching brief revealed a sequence of geological, undated and post-medieval deposits. Undated contexts included a linear feature underlying the sandstone hardcore of the modern road.*

## 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 Jacobs, acting for Lincolnshire County Council, to undertake an archaeological watching brief during

groundworks associated with improvements to the Norton Lane junction of the A15 at Bishop Norton, West Lindsey, Lincolnshire. The watching brief was carried out between the 2<sup>nd</sup> and 16<sup>th</sup> October 2006.

### 2.3 Topography and Geology

The A15 is located on the Lincoln Edge Plateau, formed by a ridge of Jurassic limestone that runs north – south the length of the county. The local topography is of a largely arable landscape, slightly undulating, which falls gently to the Clay Vale that lies to the east. Local soils represent the interface between the Aswarby Association, fine loamy-gley brown calcareous earths with fine loamy brown rendzinas, and Elmton 1 Association, shallow, well drained, brashy, calcareous, fine loamy soils over limestone (Hodge *et al*, 1984).

### 2.4 Archaeological Setting

The modern A15 follows the line of Ermine Street, a major Roman route which connected London with the Humber, via Lincoln. This road continued to be an important route throughout the medieval period and is still used today as a major link between London, Lincoln and the Humber.

Numerous archaeological sites are known in the vicinity of the Norton Lane junction of the A15. These range from Bronze Age barrows and find spots to modern listed buildings. The Medieval period is particularly well represented in the area, with a cluster of medieval remains and archaeological sites known around Spital in the Street to the south, whilst Bishop Norton, to the west, is thought to be an example of a medieval planned village which is still evident in the grid system of streets (Everson *et al*. 1991, 9).

In closer association to the construction works lie three sites registered on the

Historic Environment Record (Fig. 4). Adjoining the A15 just to the north of the works, on the western edge, is Atterby Beck Roman Road (HER MLI50576). This is thought to be a Roman road branching off Ermine Street, running northeast-southwest. An area approximately 500m to the west of the works is designated as Norton Lane crop marks (HER MLI50832). These are of unknown age but are likely to be of significant archaeological potential. The third site, located to the southwest of the investigation area, is Norton Place ring ditch (HER MLI50852). This is also an undated feature, but it is likely to be of prehistoric origin, with significant archaeological potential.

### 3. AIMS

The aim of the archaeological watching brief was to ensure that any archaeological features exposed during the groundworks should be recorded and, if present, to determine their date, function and origin.

### 4. METHODS

Removal of the modern road surface was monitored during the course of the watching brief, alongside the reduction of underlying material to the level required for the works (Figs 3 and 5, Plates 1 and 2). Excavations for drainage pipes and associated manholes to either side of the road were also monitored (Fig. 5, Plates 3 and 4). All deposits encountered were assigned 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 1:20. Recording was undertaken according to standard Archaeological Project Services practice.

Following excavation, all records were checked and ordered to ensure that they

constituted a complete Level II archive and a stratigraphic matrix of all identified deposits was produced. A list of all contexts and interpretations appears as Appendix 2. Context numbers are identified in the text by brackets. Square brackets, [ ], signify cut features, whereas rounded brackets, ( ), indicate deposits. An equals sign between context numbers indicates that the contexts once formed a single layer or feature. Phasing was based on the nature of the deposits and recognisable relationships between them.

### 5. RESULTS

Following post-excavation analysis three phases were identified;

Phase 1	Natural
Phase 2	Undated
Phase 3	Modern

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

#### Phase 1 Natural

The earliest deposit encountered at the base of the road strip was (1019), a compact yellow-orange, sandy-silt with occasional manganese and mudstone inclusions. This was sealed by a layer of stiff blue-grey clay, (1001) = (1009) = (1012).

This was, in turn, overlain by (1002) and (1010). Deposit (1002) was a moderate-loosely compacted mid grey silty-clay with orange laminations, (1010) a moderate-compact mid orange silty-clay with frequent limestone fragments.

Two layers sealed (1002). One, (1021), was a compact yellow-grey chalky clay with frequent chalk fragments. The other, (1003) = (1013), was a moderate-loosely compacted mid yellow-orange silty-sand.

Deposit (1003) = (1013) was overlain by (1014), mid-dark red-brown silty-clay with occasional ironstone staining (Fig. 6, Plate 10).

All of the above deposits were identified as being part of the natural geological sequence of the area.

**Phase 2 Undated**

An undated linear, [1015], was identified underlying the modern road surface and hardcore deposits of the modern road (Figs. 6 and 7, Plates 6 and 7). This feature was c.5m wide (maximum) x 0.5m deep x c.20m long. Filled by (1016) and (1017), grey silty-clays with occasional flecks of charcoal or rotten organic material, this linear was truncated to the south, at which point it appeared to turn from being aligned north-south to east-west through a fairly steep angle. Truncation was, however, fairly severe at this point, making any conclusions regarding the trajectory and dimensions of the feature beyond this point tentative at best. No dateable artefacts were recovered from this feature.

**Phase 3 Modern**

A modern dyke, [1004], was noted running along the eastern edge of the A15 (Plate 9). This was disturbed by excavations for manholes along this edge of the road, as well as by the general stripping of the area (Plate 8). The dyke was around 1.5m deep and c.2m wide running for >100m along the side of the road. This was identified as being a post-Medieval/modern drainage channel relating to agricultural land on the east of the road. An organic silty clay topsoil (1005) = (1020) filled this feature and extended onto the agricultural land and verges adjacent to the A15.

Within the main part of the area, underlying the road, a number of hardcore layers were uncovered. Deposit (1006) was 0.2m thick, mid light yellow compact

sand and sandstone rubble mix (Fig. 6, Plate 5). This appeared to be stratigraphically contemporary to (1018), a compact dark grey layer composed of asphalt and small stones (Fig. 6, Plates 9 and 11). This deposit contained re-used dressed stone, possibly derived from a post-Medieval/modern building and was largely confined to the field access on the western side of the A15 (Figs. 5 and 6, Section 2).

Both of the above deposits were sealed by (1007) = (1011), a layer of mid-light grey sandstone and gravel mix which was probably used as a bedding layer for (1008), the compact asphalt/tarmac surface of the modern road (Fig. 6, Plates 5 and 9).

**6. DISCUSSION**

The earliest deposits encountered were underlying natural silt and clay deposits.

The undated linear, [1015], was the only feature recorded of archaeological origin and may represent the remains of a hollow way or ditch predating the modern road. However, the lack of stratigraphic evidence relating to the Roman thoroughfare, Ermine Street, makes it impossible to place this feature into any phase more specific than ‘undated’.

Evidence relating to the construction of the modern road surface was plentiful and included a number of layers of hardcore underlying the asphalt surface.

**7. CONCLUSION**

An archaeological watching brief was undertaken during ground works associated with improvements to the Norton Lane junction of the A15 at Bishop Norton, West Lindsey, Lincolnshire. The works had the potential to disturb remains relating to the Roman road thought to run along the same line as the A15, Ermine

Street, and any associated archaeological features. The area was also generally held to have high potential for the survival of multi-phase archaeological remains, spanning the prehistoric to modern periods.

Only one feature of possible archaeological significance was identified beneath the modern road. This was an undated linear of uncertain function. No further archaeological deposits were encountered. It is likely that the area had been reduced prior to the current construction works, probably removing any remains relating to the Roman road and associated features.

Modern hardcore layers were observed lying directly upon natural deposits of silt and clay. This indicated that any intervening deposits of subsoil or archaeological remains had been stripped away prior to the construction of this section of the A15.

## 8. PERSONNEL

Project Coordinator: Dale Trimble  
 Site Supervisors: Katie Murphy and Mike Wood  
 Photographic reproduction: Sue Unsworth  
 Illustration: Katie Murphy  
 Post-excavation analysis: Katie Murphy

## 9. BIBLIOGRAPHY

Everson, P.L., Taylor, C.C. and Dunn, C.J., 1991, *Change and Continuity: Rural Settlement in North-West Lincolnshire*, RCHME

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 Bulletin No. 13 (Harpenden)

IFA, 1999, *Standard and Guidance for Archaeological Watching Briefs*

Margary, I.D., 1973, *Roman Roads in Britain*

## 10. ABBREVIATIONS

APS Archaeological Project Services  
 GSGB Geological Survey of Great Britain  
 IFA Institute of Field Archaeologists



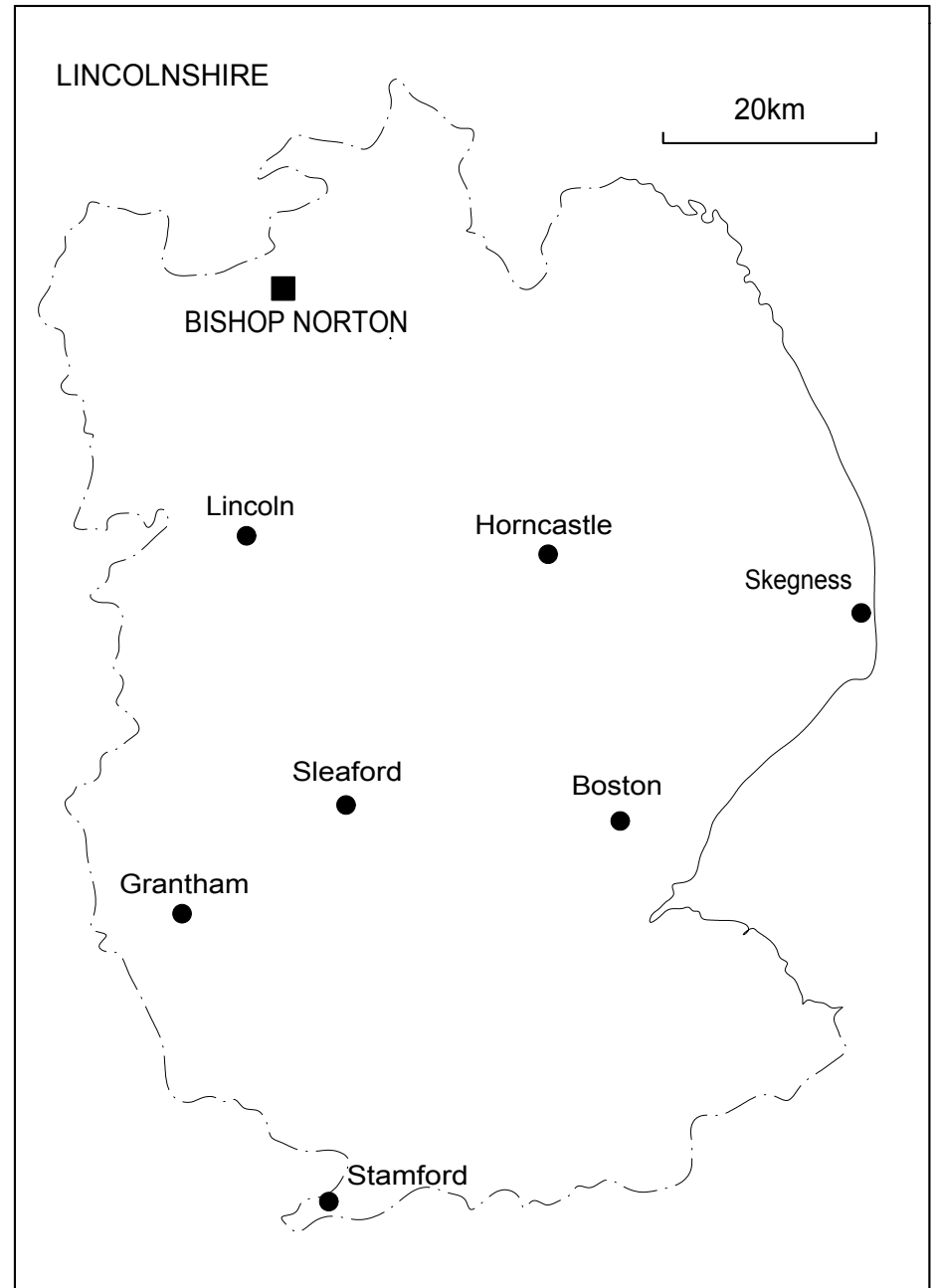
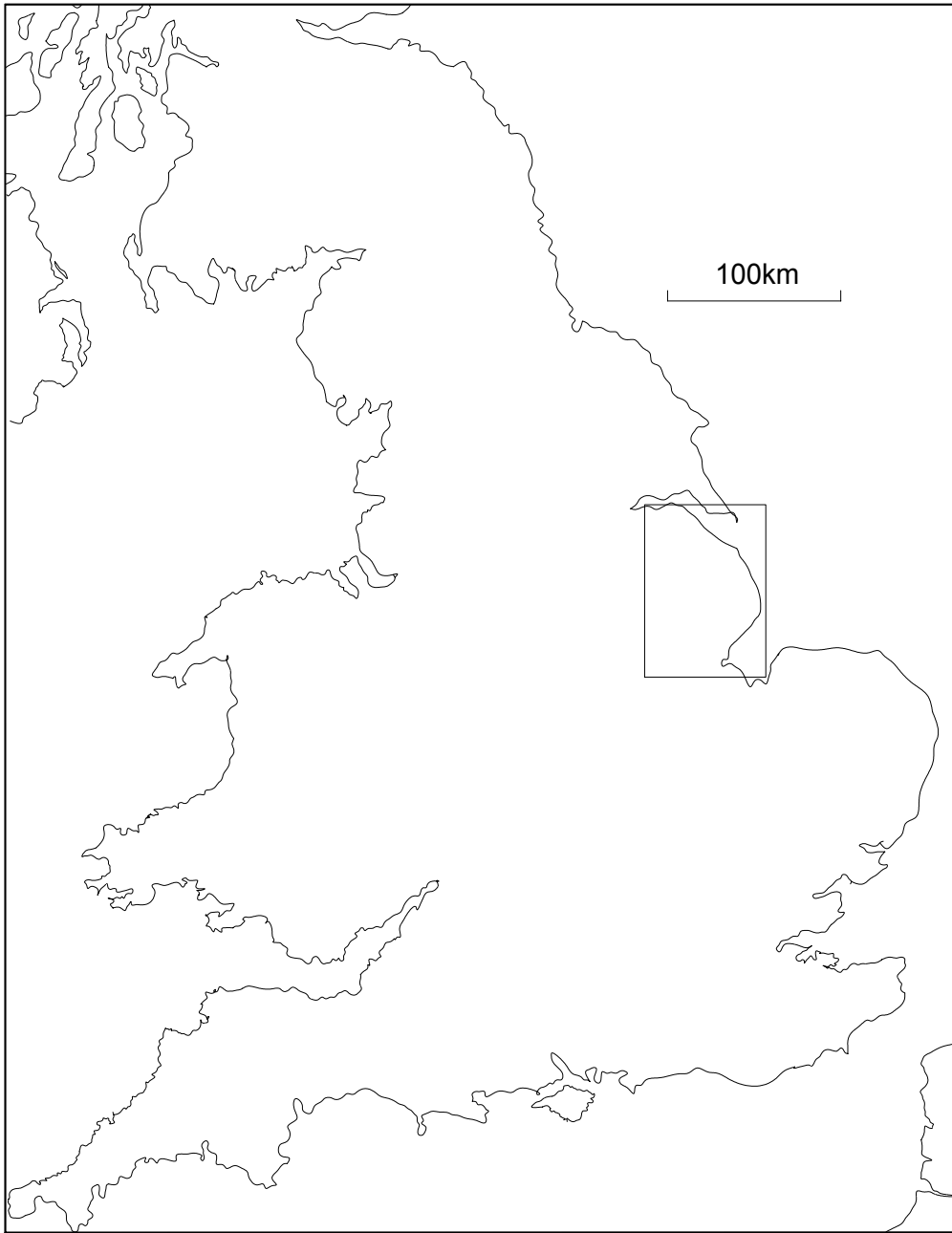
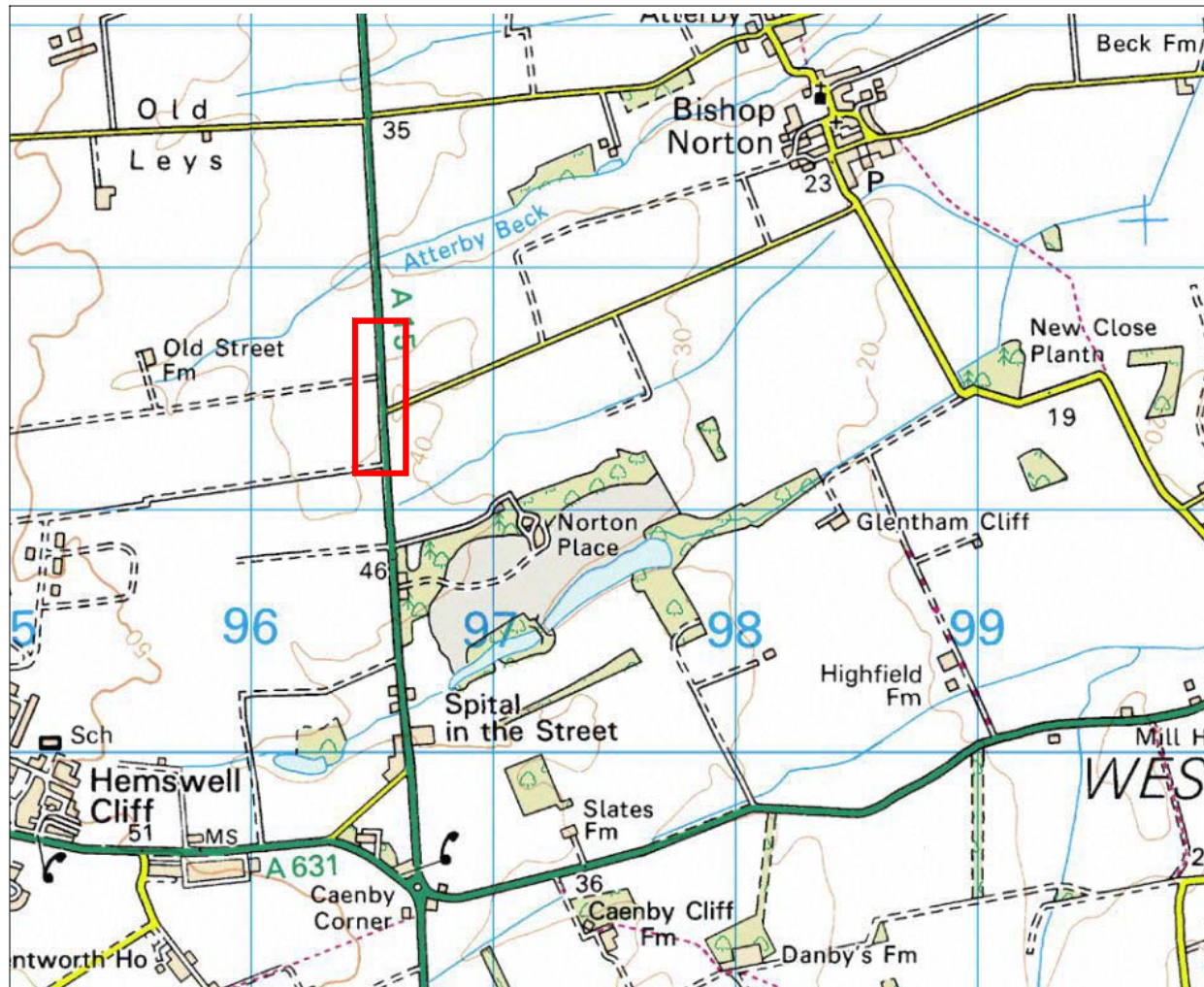


Figure 1 - General location plan



Area of Investigation




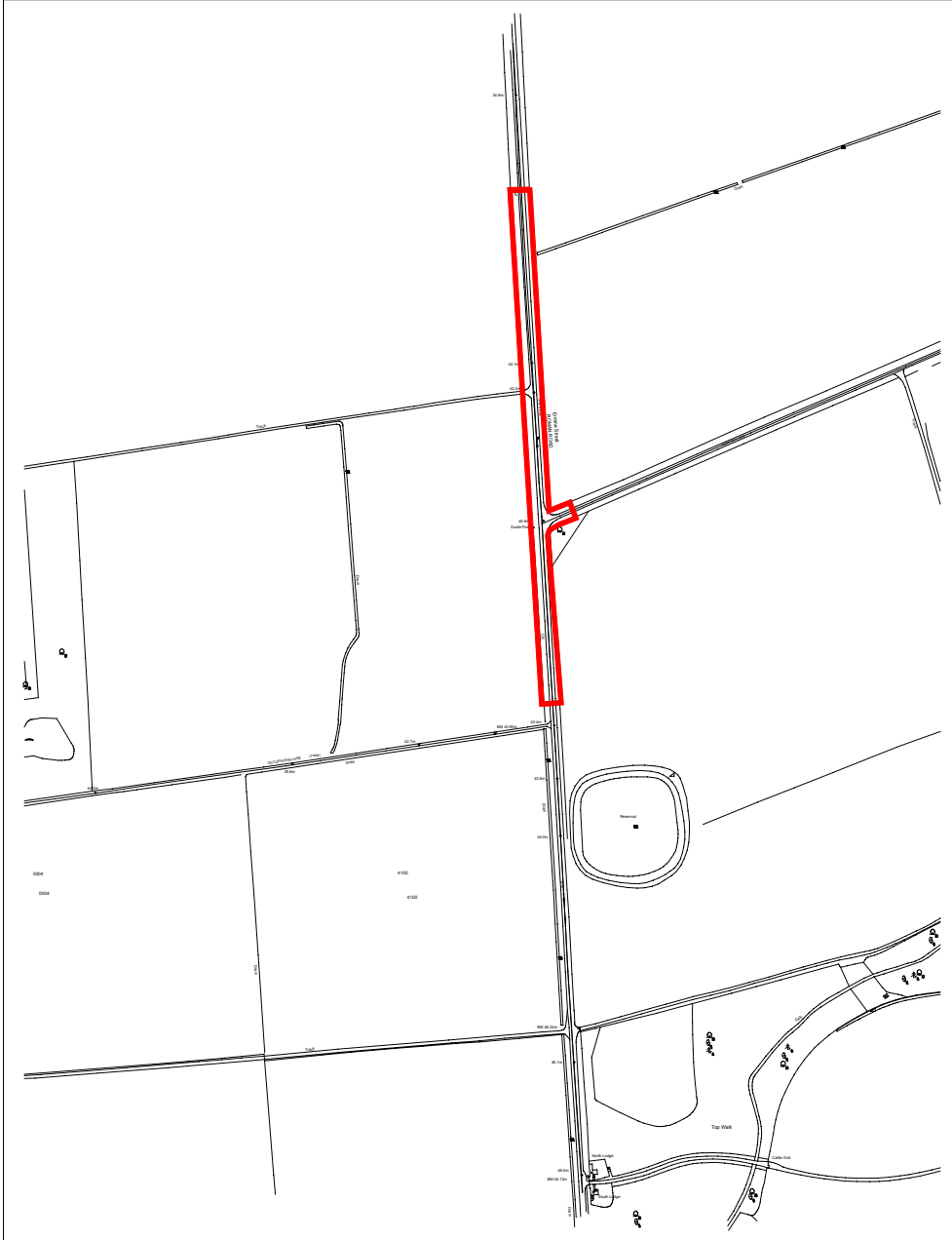
 <b>Archaeological Project Services</b>		
Project Name: A15 Bishop Norton Improvements (BNNL06)		
Scale 1:30,000	Drawn by: KM	Report No: 174/06

Figure 2 - Site location plan



— Area of improvement works



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Archaeological Project Services

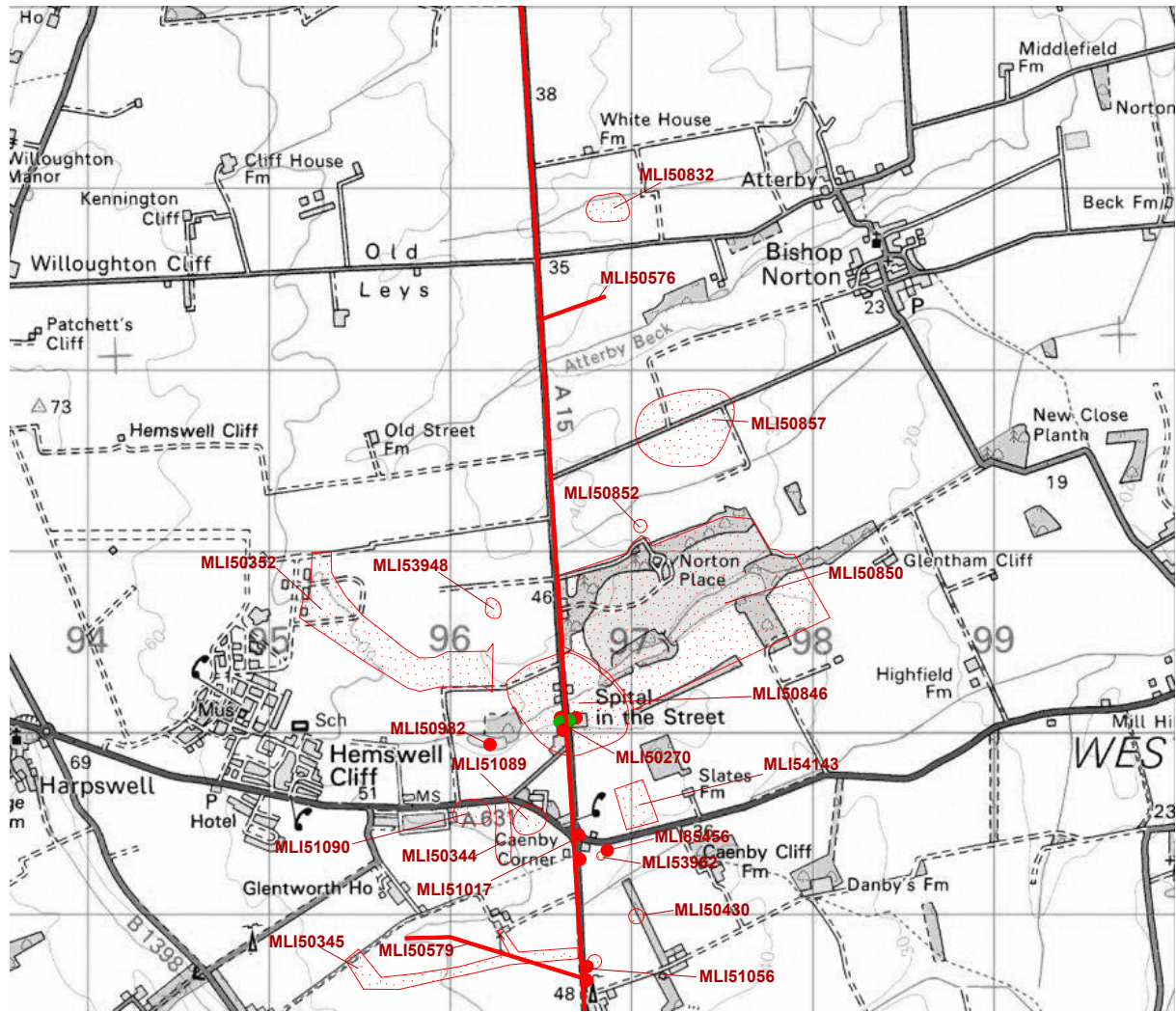
Project Name: A15 Bishop Norton Improvements (BNNL06)

Scale 1:8000

Drawn by: KM

Report No: 174/06

Figure 3 - Area of improvement works



Key:

- Archaeological sites (area)
- Archaeological sites (linear)
- /  Archaeological sites (point)

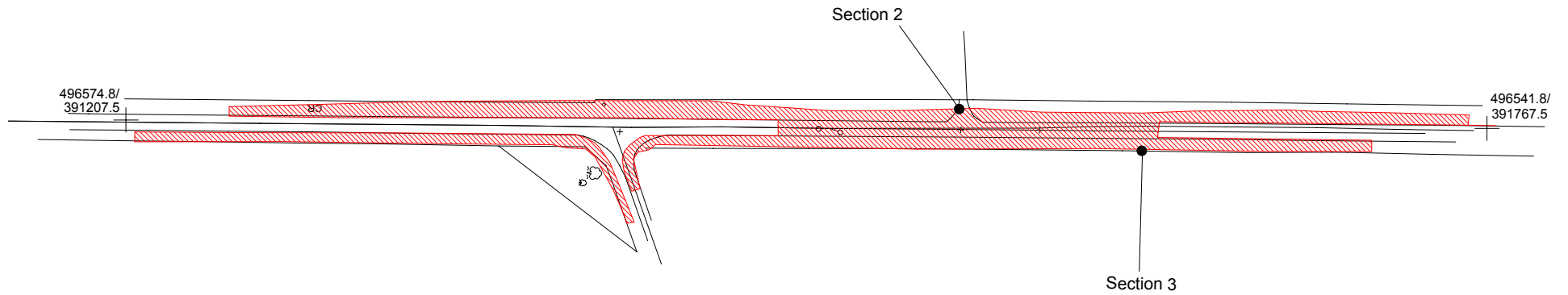
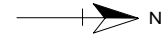


Archaeological Project Services		
Project Name: A15 Bishop Norton Improvements (BNNL06)		
Scale 1:40,000	Drawn by: KM	Report No: 174/06

Figure 4 - Plan of area showing HER sites

KEY:

 Excavation area



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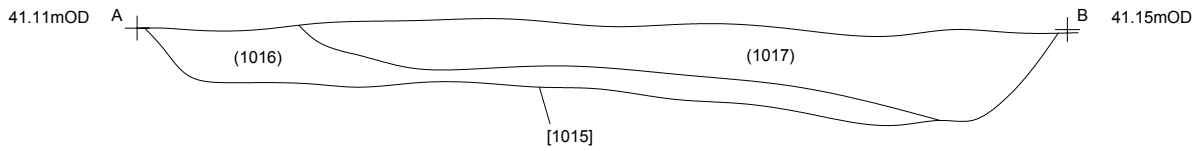
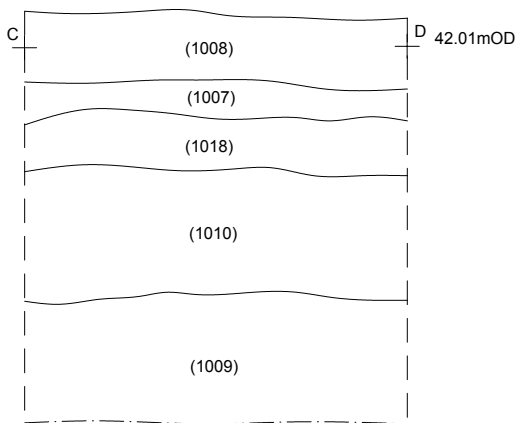
	<b>Archaeological Project Services</b>	
Project Name: A15 Bishop Norton Improvements (BNNL06)		
Scale 1:2500	Drawn by: KM	Report No: 174/06

Figure 5 - Plan of excavation area

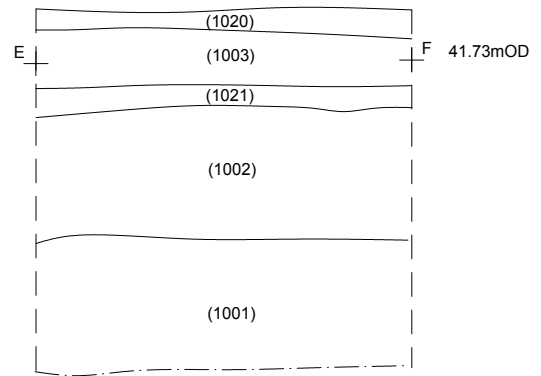
Section 1



Section 2



Section 3



Co-ordinates:

A - 496557.6/391613.8  
 B - 496552.5/391613.1  
 C - 496549.8/391547.3

D - 496549.8/391548.3  
 E - 496561.9/391624.8  
 F - 496561.9/391623.8



Archaeological Project Services

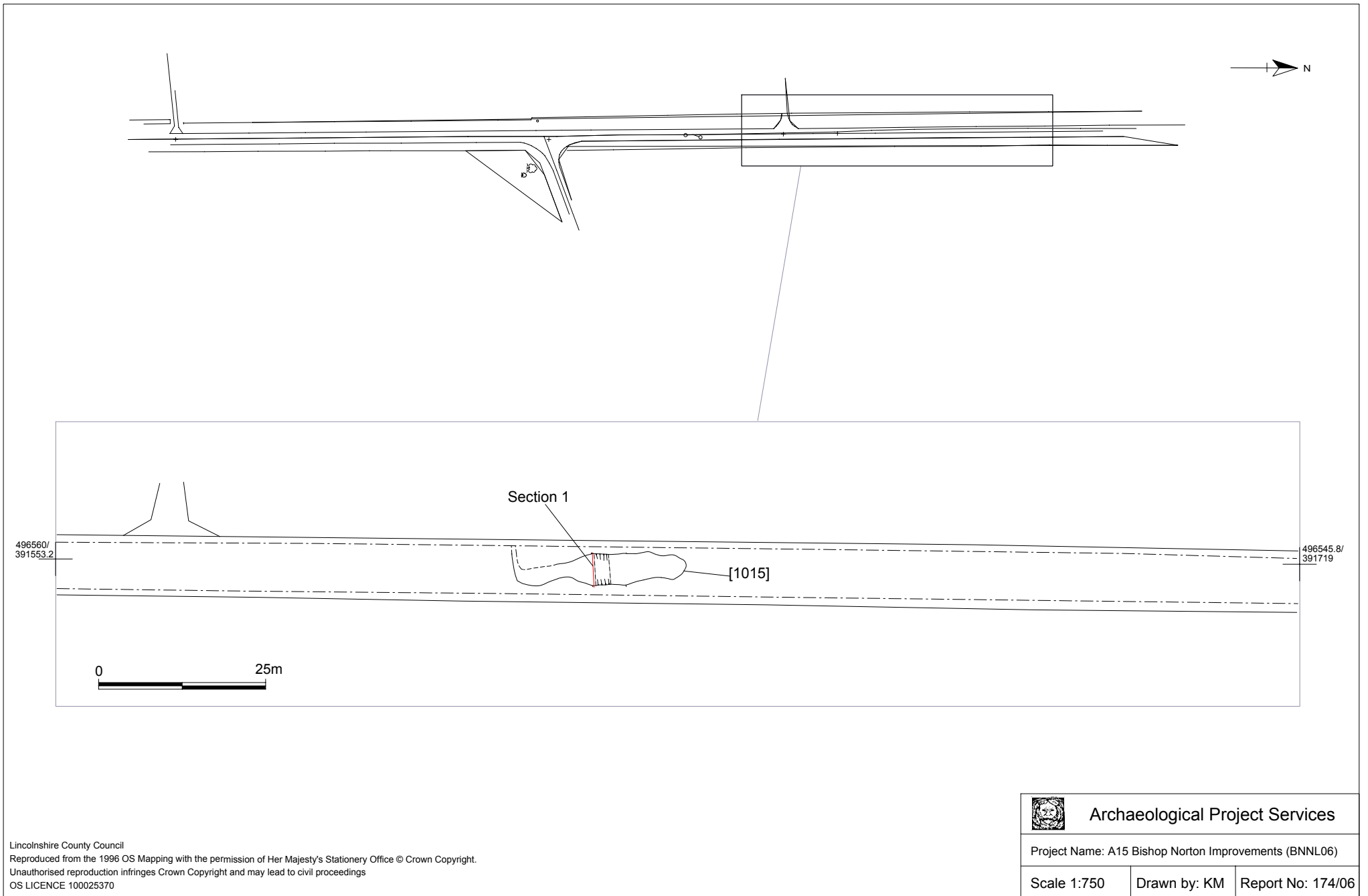
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Scale 1:40/1:20

Drawn by: KM

Report No: 174/06

Figure 6 - Sections



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Project Name: A15 Bishop Norton Improvements (BNNL06)		
Scale 1:750	Drawn by: KM	Report No: 174/06

Figure 7 - Plan of feature [1015]





Plate 1 - General view of area prior to works, looking north



Plate 2 - General view of road planing, looking south



Plate 3 - General view of drainage channels, looking north





Plate 4 - Excavation of drainage channels,  
looking north



Plate 5 - Section through  
planed road surface,  
looking west



Plate 6 - Stripped area showing linear [1015], looking south



Plate 7 - Section through linear [1015], looking south



Plate 8 - Manhole through dyke [1004], looking northwest





Plate 9 - Section of stripped road showing dressed stone rubble (1018), looking west



Plate 10 - Section through stripped road looking west



Plate 11 - Section 2, looking west

## Appendix 1

### SPECIFICATION FOR WATCHING BRIEF A15 BISHOP NORTON, NORTON LANE IMPROVEMENTS

#### 1 SUMMARY

- 1.1 *A watching brief is required during groundworks associated with improvements to the Norton Lane junction of the A15 at Bishop Norton, West Lindsey, Lincolnshire.*
- 1.2 *The site is within an area of archaeological potential with archaeological find spots dating from the prehistoric to the mediaeval periods recorded in the vicinity. The A15 follows the line of the Roman Road known as Ermine Street, a major route which linked London to the Humber via Lincoln.*
- 1.3 *The watching brief will be undertaken during all phases of earthmoving undertaken as part of the project which may impact on buried archaeological remains.*
- 1.4 *On completion of the fieldwork a report will be prepared detailing the results of the investigation. The report will consist of a narrative supported by illustrations and photographs.*

#### 2 INTRODUCTION

- 2.1 This document comprises a specification for an archaeological watching brief during works undertaken as part of improvements to the Norton Lane Junction on the A15 at Bishop Norton on the A15, in West Lindsey District, Lincolnshire.
- 2.2 This document contains the following parts:
  - 2.2.1 Overview.
  - 2.2.2 Stages of work and methodologies.
  - 2.2.3 List of specialists.
  - 2.2.4 Programme of works and staffing structure of the project

#### 3 SITE LOCATION

- 3.1 Bishop Norton is located approximately 15 miles north of Lincoln just east of the A15. The proposed works will be undertaken on an approximately 250m long section north and south of the junction of the A15 and Norton Lane, and will entail the removal of a substandard crest north of the junction. The site is centred on NGR SK965914.

#### 4 PLANNING BACKGROUND

- 4.1 A requirement for an archaeological watching brief was identified by the Principal Archaeologist, Historic Environment Team, Lincolnshire County Council. Lincolnshire County Council commissioned Jacobs Babtie to procure and manage the watching brief.

#### 5 SOILS AND TOPOGRAPHY

- 5.1 The A15 is located on the Lincoln Edge Plateau, formed by a ridge of Jurassic Limestone which runs north to south the length of the county. The local topography is gently undulating and falls gently eastward to the Clay Vale. Local soils are of the Elmton 1 Association, shallow well drained brashy calcareous fine loamy soils over limestone (Hodge *et al*, 1984).

#### 6 ARCHAEOLOGICAL OVERVIEW

- 6.1 Excavation works undertaken as part of the improvement scheme are most likely to impact deposits associated with the roman road known as Ermine Street, the line of which is followed by the modern A15. Ermine street was a major Roman routeway and connected London with the Humber via Lincoln an important Roman town
- 6.2 Ermine street continued as an important routeway into the medieval period although most villages do not lie along the road and are located east or west of the road..
- 6.3 Cultural remains of a variety of periods are known in the area and these have been plotted in Figure 1 of the Written Scheme of Investigation written by Jacobs Babtie, upon which this specification is based (Jacobs Babtie, 2006) .

## Appendix 1

### SPECIFICATION FOR WATCHING BRIEF A15 BISHOP NORTON, NORTON LANE IMPROVEMENTS

#### 7 AIMS AND OBJECTIVES

- 7.1 The aims of the watching brief will be:
  - 7.1.1 To record and interpret the deposits and any archaeological features exposed during the groundwork for the scheme.
- 7.2 The objectives of the watching brief will be to:
  - 7.2.1 Determine the form and function of the archaeological features encountered;
  - 7.2.2 Determine the spatial arrangement of the archaeological features encountered;
  - 7.2.3 As far as practicable, recover dating evidence from the archaeological features, and
  - 7.2.4 Establish the sequence of the archaeological remains present on the site.

#### 8 SITE OPERATIONS

- 8.1 General considerations
  - 8.1.1 All work will be undertaken following statutory Health and Safety requirements in operation at the time of the watching brief.
  - 8.1.2 The work will be undertaken according to the relevant codes of practise issued by the Institute of Field Archaeologists (IFA), under the management of a Member of the institute (MIFA). Archaeological Project Services is IFA registered organisation no. 21.
  - 8.1.3 Any and all artefacts found during the investigation and thought to be ‘treasure’, as defined by the Treasure Act 1996, will be removed from site to a secure store and promptly reported to the appropriate coroner’s office.
- 8.2 Methodology
  - 8.2.1 The watching brief will be undertaken during the ground works phase of development, and includes the archaeological monitoring of all phases of soil movement.
  - 8.2.2 Stripped areas and excavated sections will be observed regularly to identify and record archaeological features that are exposed and to record changes in the geological conditions. The section drawings of the excavations will be recorded at a scale of 1:10, or more appropriate scale if necessary. Should features be recorded in plan these will be drawn at a scale of 1:20. Written descriptions detailing the nature of the deposits, features and fills encountered will be compiled on Archaeological Project Services pro-forma record sheets.
  - 8.2.3 Any finds recovered will be bagged and labelled for later analysis.
  - 8.2.4 Throughout the watching brief a photographic record will be compiled. The photographic record will consist of:
    - 8.2.4.1 the site during work to show specific stages, and the layout of the archaeology within the area.
    - 8.2.4.2 groups of features where their relationship is important
  - 8.2.5 Should human remains be located they will be left *in situ* and only excavated if absolutely necessary. Should removal be required the appropriate Home Office licence will be obtained before the exhumation of the remains. In addition, the Local Environmental Health Department, coroner and the police will be informed, where appropriate.

#### 9 POST-EXCAVATION

- 9.1 Stage 1
  - 9.1.1 On completion of site operations, the records and schedules produced during the watching brief will be checked and ordered to ensure that they form a uniform sequence

## Appendix 1

### SPECIFICATION FOR WATCHING BRIEF A15 BISHOP NORTON, NORTON LANE IMPROVEMENTS

forming a level II archive. A stratigraphic matrix of the archaeological deposits and features present on the site will be prepared. All photographic material will be catalogued and labelled, the labelling referring to schedules identifying the subject/s photographed.

- 9.1.2 All finds recovered during the fieldwork will be washed, marked and packaged according to the deposit from which they were recovered. Any finds requiring specialist treatment and conservation will be sent to the Conservation Laboratory at the City and County Museum, Lincoln.

#### 9.2 Stage 2

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

- 9.2.2 Finds will be sent to specialists for identification and dating.

#### 9.3 Stage 3

- 9.3.1 On completion of stage 2, a report detailing the findings of the watching brief will be prepared.

- 9.3.2 This will consist of:

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

9.3.2.2 A description of the archaeological setting of the watching brief.

9.3.2.3 Description of the topography of the site.

9.3.2.4 Description of the methodologies used during the watching brief.

9.3.2.5 A text describing the findings of the watching brief.

9.3.2.6 A consideration of the local, regional and national context of the watching brief findings.

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

9.3.2.8 Sections of the excavations and archaeological features.

9.3.2.9 Interpretation of the archaeological features exposed, and their chronology and setting within the surrounding landscape.

9.3.2.10 Specialist reports on the finds from the site.

9.3.2.11 Appropriate photographs of the site and specific archaeological features.

## 10 **REPORT DEPOSITION**

- 10.1 Copies of the report will be sent to the client and the County Council Archaeological Sites and Monuments Record.

## 11 **ARCHIVE**

- 11.1 The documentation and records generated during the watching brief will be sorted and ordered into the format acceptable to The Collection, Lincoln. This will be undertaken following the requirements of the document titled *Conditions for the Acceptance of Project Archives* for long-term storage and curation.

## 12 **PUBLICATION**

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

- 12.2 If appropriate, notes on the findings will be submitted to the appropriate national journals:

## Appendix 1

### SPECIFICATION FOR WATCHING BRIEF A15 BISHOP NORTON, NORTON LANE IMPROVEMENTS

*Britannia* for discoveries of Roman date, and *Medieval Archaeology* and the *Journal of the Medieval Settlement Research Group* for findings of medieval or later date.

#### 13 CURATORIAL RESPONSIBILITY

- 13.1 Curatorial responsibility for the archaeological work undertaken on the site lies with the Principal Archaeologist, Lincolnshire County Council. They will be given written notice of the commencement of the project.

#### 14 VARIATIONS AND CONTINGENCIES

- 14.1 Variations to the proposed scheme of works will only be made following written confirmation of acceptance from the archaeological curator.
- 14.2 In the event of the discovery of any unexpected remains of archaeological importance, or of any changed circumstances, it is the responsibility of the archaeological contractor to inform the archaeological curator (*Lincolnshire Archaeological Handbook* 1998, Sections 5.7 and 18).
- 14.3 Where important archaeological remains are discovered and deemed to merit further investigation additional resources may be required to provide an appropriate level of investigation, recording and analysis.
- 14.4 Any contingency requirement for additional fieldwork or post-excavation analysis outside the scope of the proposed scheme of works will only be activated following full consultation with the archaeological curator and the client.

#### 15 PROGRAMME OF WORKS AND STAFFING LEVELS

- 15.1 The watching brief will be integrated with the programme of construction and is dependent on the developers' work programme. It is therefore not possible to specify the person-hours for the archaeological site work.
- 15.2 An archaeological supervisor with experience of watching briefs will undertake the work.
- 15.3 Post-excavation analysis and report production will be undertaken by the archaeological supervisor, or a post-excavation analyst as appropriate, with assistance from a finds supervisor, illustrator and external specialists. It is expected that each fieldwork day (equal to one person-day) will require a post- excavation day (equal to one-and-a-half person-days) for completion of the analysis and report. If the fieldwork lasts longer than about four days then there will be an economy of scale with the post-excavation analysis.

#### 16 SPECIALISTS TO BE USED DURING THE PROJECT

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

##### Task

##### Body to be undertaking the work

Conservation  
Pottery Analysis

Conservation Laboratory, City and County Museum, Lincoln  
Prehistoric - Trent & Peak Archaeological Trust  
Roman - B Precious, Independent Specialist  
Anglo-Saxon –medieval - J Young,  
Independent Specialist/A Boyle, APS  
Post-medieval and later - G Taylor/A Boyle, APS

## Appendix 1

### SPECIFICATION FOR WATCHING BRIEF A15 BISHOP NORTON, NORTON LANE IMPROVEMENTS

Non-pottery Artefacts	J Cowgill, Independent Specialist, or G Taylor, APS
Animal Bones	J Kitch, APS
Environmental Analysis	J Rackham, Independent Specialist
Human Remains Analysis	Dr R Gowland, Independent Specialist

#### 17 INSURANCES

17.1 Archaeological Project Services, as part of the Heritage Trust of Lincolnshire, maintains Employers Liability Insurance of £10,000,000, together with Public and Products Liability insurances, each with indemnity of £5,000,000. Copies of insurance documentation can be supplied on request.

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#### 19 BIBLIOGRAPHY

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

Jacobs Babbie, 2006, *A15 Bishop Norton, Norton Lane Improvements, Written Scheme of Investigation for Archaeological Watching Brief*

Specification: Version 1, 28<sup>th</sup> September 2006

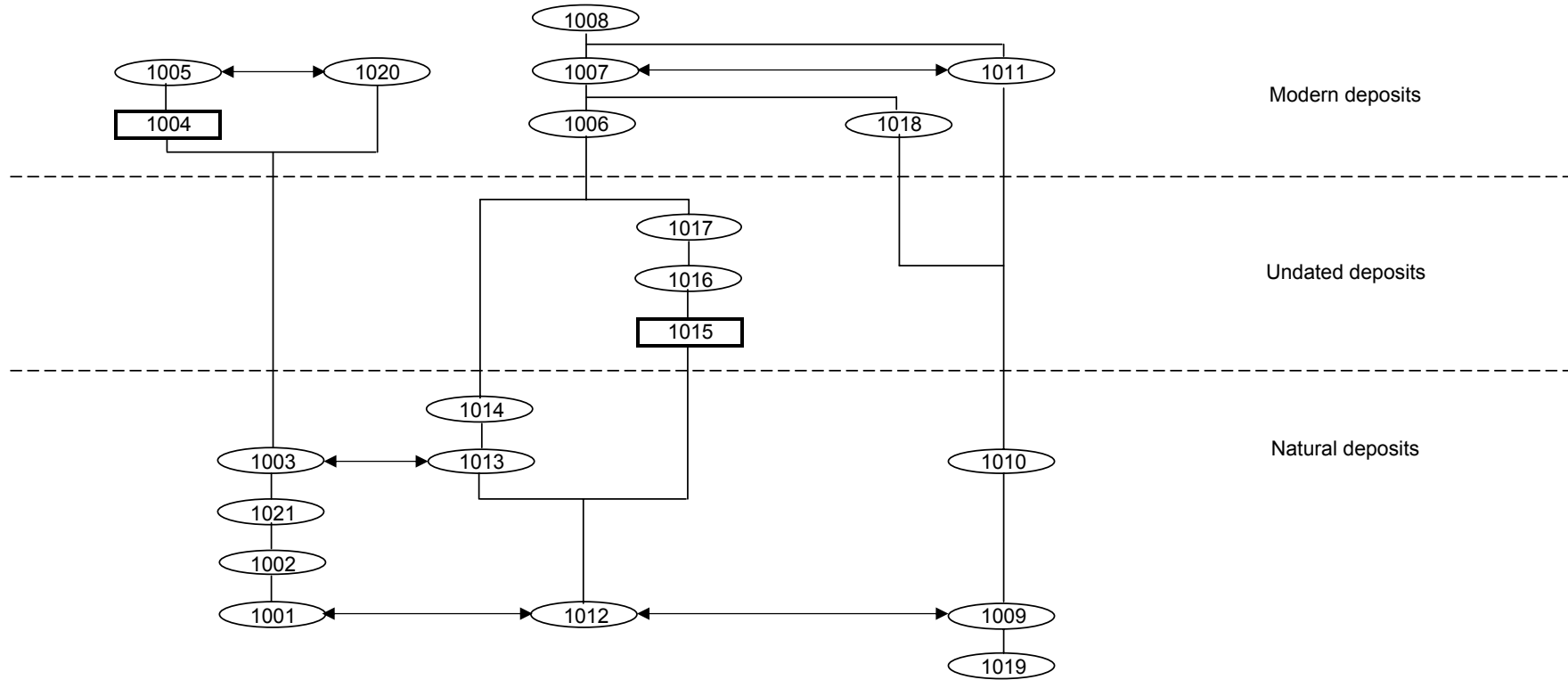


## Appendix 2

### Context Summary

Context	Description	Interpretation
1001	Stiff light blue grey silty clay	Natural
1002	Moderate/loose mid grey silty clay with orange laminations, some sand included within matrix	Natural
1003	Moderate silty sand, mid yellow-orange, no inclusions	Natural/subsoil
1004	Cut of dyke running N-S along eastern edge of A15	Post-medieval drainage channel
1005	Dark organic silting of material within dyke and on ground surface	Topsoil
1006	Sand and sandstone rubble mix, compact, mid-light yellow	Hardcore for modern road
1007	Mid-light grey sandstone and gravel mix	Hardcore
1008	Compact black asphalt/tarmac	Modern road surface
1009	Stiff blue grey clay	Natural – same as (1001)
1010	Moderate/compact mid orange silty clay with frequent limestone fragments	Natural/re-deposited natural – possibly made-ground
1011	Compact mid-dark grey silty clay with frequent limestone/sandstone rubble and gravel	Made-ground/hardcore base for modern road – same as (1007)? – sub-base for tarmac surface
1012	Compact blue-grey clay	Natural – same as (1001)
1013	Moderate-loose mid-light orange/yellow silty sand	Natural – same as (1003)
1014	Mid-dark red brown silty clay with occasional ironstone staining	Natural
1015	N-S aligned linear, possibly turning to west at southern extent (feature truncated at this point) c5m w x >20m l x 0.5m d, with flattened base	Cut of linear – possible ditch/droeway or hollow way lying beneath hardcore of modern road
1016	Compact/stiff mid-light silty clay with very occasional small fragments of sandstone, up to 0.4m thick	Lower fill of ditch/droeway [1015]
1017	Stiff/firm mid-dark grey silty clay with very occasional inclusions of small stones and occasional flecks of charcoal/rotten plant material, 0.5m thick at greatest	Upper fill of feature [1015] underlying sandstone rubble of modern road
1018	Compact dark grey asphalt and stone, 0.41m thick	Hardcore layer acting as bedding for (1007) – reusing dressed stone from possible med/post-med structure
1019	Compact yellow orange sandy silt with occasional manganese and mudstone inclusions	Jurassic/cretaceous sands – Natural horizon
1020	Friable grey brown silty clay, up to 0.07m thick	Topsoil visible in overcut e. dyke
1021	Compact yellow grey chalky clay with frequent chalk fragments	Natural calcareous layer visible along northern edge of east dyke

### Appendix 3 The Matrix



## Appendix 4

### GLOSSARY

<b>Alluvium</b>	Deposits laid down by water. Marine alluvium is deposited by the sea, and fresh water alluvium is laid down by rivers and in lakes.
<b>Anglo-Saxon</b>	Pertaining to the period when Britain was occupied by peoples from northern Germany, Denmark and adjacent areas. The period dates from approximately AD 450-1066.
<b>Bronze Age</b>	A period characterised by the introduction of bronze into the country for tools, between 2250 and 800 BC.
<b>Context</b>	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 interpretation of the context (the context sheet) is created and placed in the site archive. Context numbers are identified within the report text by brackets, e.g. [004].
<b>Cropmark</b>	A mark that is produced by the effect of underlying archaeological or geological features influencing the growth of a particular crop.
<b>Cut</b>	A cut refers to the physical action of digging a posthole, pit, ditch, foundation trench, etc. Once the fills of these features are removed during an archaeological investigation the original 'cut' is therefore exposed and subsequently recorded.
<b>Domesday Survey</b>	A survey of property ownership in England compiled on the instruction of William I for taxation purposes in 1086 AD.
<b>Fill</b>	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) that become contained by the 'cut' are referred to as its fill(s).
<b>Geophysical Survey</b>	Essentially non-invasive methods of examining below the ground surface by measuring deviations in the physical properties and characteristics of the earth. Techniques include magnetometry and resistivity survey.
<b>Iron Age</b>	A period characterised by the introduction of Iron into the country for tools, between 800 BC and AD 50.
<b>Layer</b>	A layer is a term used to describe an accumulation of soil or other material that is not contained within a cut.
<b>Medieval</b>	The Middle Ages, dating from approximately AD 1066-1500.
<b>Natural</b>	Undisturbed deposit(s) of soil or rock which have accumulated without the influence of human activity
<b>Post-medieval</b>	The period following the Middle Ages, dating from approximately AD 1500-1800.
<b>Prehistoric</b>	The period of human history prior to the introduction of writing. In Britain the prehistoric period lasts from the first evidence of human occupation about 500,000 BC, until the Roman invasion in the middle of the 1st century AD.

<b>Ridge and Furrow</b>	The remains of arable cultivation consisting of raised rounded strips separated by furrows. It is characteristic of open field agriculture.
<b>Romano-British</b>	Pertaining to the period dating from AD 43-410 when the Romans occupied Britain.
<b>Saxon</b>	Pertaining to the period dating from AD 410-1066 when England was largely settled by tribes from northern Germany

## Appendix 5

### THE ARCHIVE

The archive consists of:

21	Context records
1	Photographic record sheet
1	Section record sheet
1	Plan record sheet
12	Daily record sheet
9	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: 2006.238

Archaeological Project Services Site Code: BNNL06

Oasis Reference: archaeo11-20555

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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