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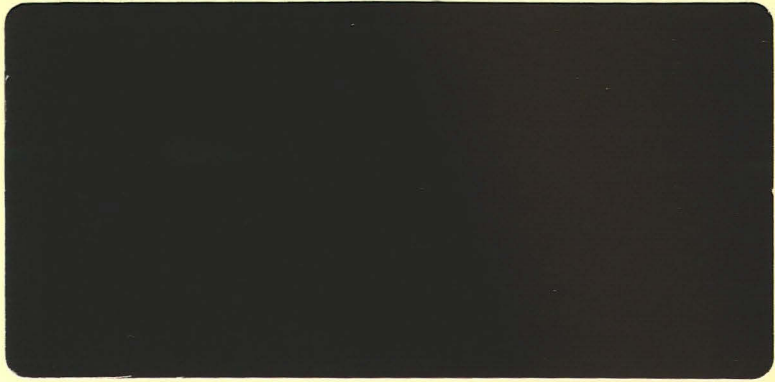
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**ARCHAEOLOGICAL EVALUATION ON  
LAND WEST OF DONINGTON ROAD AND  
SOUTH OF RED LION STREET  
BICKER,  
LINCOLNSHIRE  
(BDR96)**



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Work Undertaken For  
Broadgate Builders (Spalding) Limited

February 1996

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## 1. SUMMARY

*An evaluation was undertaken to determine the archaeological implications of proposed development of land bounded by Donington Road and Red Lion Street, Bicker, Boston District, Lincolnshire.*

*The investigation is located in proximity to sites of Romano-British (c. A.D. 50-410) occupation. It is also likely that one end of a Roman thoroughfare, the Salter's Way, originated in the vicinity of Bicker and the nearby village of Donington.*

*Bicker was probably established in the Late Saxon period (A.D. 850-1066), and pottery of this date has been found in the village. Dressed masonry from this period also indicates the existence of a church, probably that referred to in the Domesday survey of 1086, which would have served as the centre of the community. Domesday also records 20 salt making establishments in the parish and, lying as it did at the head of Bicker Haven, Bicker came to prominence as a salt making centre and even utilised the haven as a small port during the early medieval period. Possible waste material from salt making associated with 13th and 14th century pottery, pits and ditches, has been found immediately adjacent to the proposed development site. The area of investigation was probably subject to flooding prior to the construction, in the Saxon/medieval period, of the sea bank that forms the eastern boundary of the site. Further evidence of the former coastal/estuarine nature of the site is provided by deposits of sea shells, peats and alluvium encountered during trial pitting of the area.*

*Bicker Haven had silted up by the 17<sup>th</sup> century and the settlement declined economically, compared to nearby prospering villages that were located on major dry thoroughfares. To the north of*

*the site lies Morley Cottages, of 16<sup>th</sup> century date and the Red Lion Inn of 17<sup>th</sup> century date.*

*The earliest maps of Bicker date from the 18<sup>th</sup> century and show that the investigation area was undeveloped ground that had been sub-divided into small plots. Later maps show continued development of the village, especially along Drury Lane to the west, although the study area itself remained undeveloped.*

*Geophysical survey of the site recorded magnetic anomalies that probably represented buried pits, ditches, a field boundary and modern land drains. Some of the larger pits identified by the survey were tentatively interpreted as being the remains of salterns (salt processing sites). In consequence ten trenches were excavated to test for the presence of archaeological deposits.*

*Seven ditches and gullies, representing medieval and post-medieval land division, were identified. Additionally, a pit containing burnt soils from an industrial source, probably associated with salt extraction, was identified.*

*These deposits represent those features that extended below the limit of a reworked subsoil, any shallower features having been destroyed.*

*Cutting into the reworked subsoil were three features comprising two pits and a ditch, the latter representing a boundary depicted on the 1906 O.S. map.*

## 2. INTRODUCTION

### 2.1 Background

*Between the 14<sup>th</sup> and 26<sup>th</sup> January 1996, an archaeological evaluation was undertaken*



on land bounded by Donington Road to the east and Red Lion Street to the north, Bicker, Lincolnshire. This was in response to proposed development of the site, as detailed in planning applications B04/0565/95 and B04/0566/95. Previously, the site has been subject to an archaeological desk-top study that also considered the surrounding area. The present evaluation excavation was commissioned by Broadgate Builders (Spalding) Limited and carried out by Archaeological Project Services in accordance with a brief set by the Community Archaeologist for Boston Borough Council.

## 2.2 Topography and Geology

Bicker is located 12km southwest of Boston and 17km southeast of Sleaford, in Boston District, Lincolnshire (Fig. 1). Local topography is relatively flat, reflecting the fen landscape of this part of the country.

The proposed development is located c. 500m to the south of Bicker village centre as defined by the parish church of St. Swithin. Situated at a height of c. 4.5m O.D. on land to the west of Donington Road (National Grid Reference TF 2255 3735), the proposed development site covers approximately 2 hectares (Fig. 2).

Local soils are predominantly Romney Series coarse silty gleyic brown calcareous alluvial soils developed on roddons in the reclaimed marshlands (Robson 1990, 26). However, where medieval salt making has occurred the soils often become more silty and contain ash and charcoal (*ibid.*, 27). Beneath these deposits is a solid geology of Jurassic clays.

## 2.3 Archaeological Setting

Evidence for prehistoric activity in the Bicker region is likely to be scarce as it is thought that much of the area would have been covered by the sea during this period (Simmons 1977).

During the Romano-British period, however, the sea receded from the east coast and islands within the fen area began to appear. These were exploited for agricultural and salt making activities. Developing from this activity, an important Roman thoroughfare, the Salter's Way, is believed to have originated near Donington and continued west to Grantham and beyond (Margary 1973). It is likely that Bicker lay on the edge of an island within the marsh as Romano-British pottery (Fig. 3 13305) has been found within the village c. 200m northeast of the church. A settlement, probably dating to this period, has been identified from aerial photographs to the northwest of the village.

During the Saxon period (5<sup>th</sup> - 9<sup>th</sup> centuries) more land was reclaimed from the sea and by the 10<sup>th</sup> - 11<sup>th</sup> century (Saxo-Norman period) Bicker had developed into a sizeable settlement centred around a church. Anglo-Saxon worked stones have been noted in the medieval fabric of St. Swithin's church that may relate to an earlier structure. Salt-extraction began here during this period, though the location of the Saxon salterns is unknown. Other finds dating to this period include Stamford ware pottery (9<sup>th</sup> to 12<sup>th</sup> century).

Bicker is first documented in the Domesday survey of 1086. Referred to as 'Bichere' the name is probably derived from the Old Scandinavian *bij-kiarr* meaning 'the village marsh' (Ekwall 1974, 41). The Domesday Book also records



that Bicker had a church and a total of twenty salt pans (Foster and Longley 1976, 70). The land was owned by the then Archbishop of York (*ibid.*, 28), and Count Alan, Countess Judith (*ibid.*, 179) and Guy de Craon (*ibid.*, xxi, 183, 235) with smaller parcels of land owned by Colegrim and others (*ibid.*, 199).

Bicker lay at the east end of Bicker Haven, an ancient estuary that discharged into The Wash. As such, it provided an important centre for the production of salt and was utilised as a small port. Salterns comprised an important part of the local economy and were highly valued as renders to the local Lords were quite high. The industry attracted interest from as far afield as Owston Abbey in Leicestershire which owned part of the salt operation in Bicker and nearby Donington (Hallam 1960).

Efforts were made to maintain the Haven channel to the village in both 1359 and 1413 (Healey forthcoming). However, the Haven gradually silted up, leading to the eventual decline of Bicker and some of the other villages in the area. The reason for the Haven silting up is uncertain, though a reference to Alan of Craon diverting the River Witham to Boston is a possibility (Hallam 1965), but is considered unlikely. Bicker declined in importance, though the status of nearby villages became more significant due to their location on dry routes of communication.

At the centre of the village is the parish church of St. Swithin, dated to the 11<sup>th</sup> and 12<sup>th</sup> centuries (Pevsner and Harris 1989, 142). To the southeast of the village large mounds are apparent in the landscape and represent medieval salterns (Fig. 3 B04/023-026; 12523). Though not obvious today, more of these mounds exist between Bicker and the neighbouring village of Donington and were identified and

recorded when they were partially destroyed during construction of the Bicker bypass (Healey 1988).

Other medieval earthworks surviving in the area include sea banks. These linear earthworks were constructed to help prevent seawater from flooding westwards, and subsequently contaminating rich agricultural land. One of these sea banks comprises the eastern extent of the evaluation area, aligned approximately north-south. The original height of the bank is unknown as it has been reduced so as to accommodate the present Donington Road. The situation of the bank certainly implies that the proposed development site was liable to flood during the medieval period.

Pits and drainage ditches containing pottery of 13<sup>th</sup> century date have been identified adjacent to the present investigation site (B04/027). A silt deposit sealing these features was originally interpreted as a flooding episode that had occurred during the 13<sup>th</sup> century. More pits and ditches were subsequently cut into this material. After these features went out of use the site was used either as open ground, or for a crop (A.P.S. 1994).

Medieval pottery (Fig. 3 12520, 13302, 13304) and other finds have been recovered from localities around the village and may indicate the former extent of the settlement.

Post-medieval remains are also located within the vicinity of the investigation area. Immediately northeast is the Red Lion Inn established 1665 (Pevsner 1989, 143). Local tradition claims that this was once a lighthouse. However, Bicker Haven had silted up by 1665 and the reference may be mistaken for a supposed lighthouse at Wrangle (Healey *pers. comm.*). North of the site lie Morley Cottages, an



example of 16<sup>th</sup> century construction that may enclose an earlier core (DoE 1988).

Early maps show that the study area was undeveloped in 1828. Apart from the establishment of land boundaries shown on a map of 1839, which have since gone out of use and silted up, the site has remained virtually untouched since the post-medieval period (A.P.S. 1996).

Geophysical survey of the area revealed a series of ditches aligned either north-south or east-west, together with anomalies suggestive of pits. Additionally, areas of magnetic disturbance, perhaps representing burnt or fired deposits, were also identified, mostly towards the northern boundary of the site (Geophysical Surveys of Bradford 1996).

### 3. AIMS

The aims of the evaluation were to test for archaeological deposits and determine, if present, their extent, state of preservation, date, type, vulnerability, documentation, quality of setting and amenity value. The purpose of this identification and assessment of deposits was to establish their significance, in order to facilitate recommendations for an appropriate strategy that could be integrated with the proposed development programme.

### 4. METHODS

A geophysical survey (magnetometry) was undertaken of the entire study area (Fig. 4). The survey identified magnetic anomalies that appeared to represent buried pits and ditches. Furthermore, some of these anomalies were interpreted as possible salterns. A trench layout was therefore designed to investigate some of these features. In addition, trenches were

located to provide sample coverage of the whole development area in order to evaluate the potential survival of archaeological deposits across the site.

Ten trenches each 15m by 1.8m (Fig. 4) were opened by machine and selected deposits partially excavated by hand to determine their nature and to retrieve artefactual material. Each archaeological deposit or feature revealed within the trenches was allocated a unique reference number with an individual written description. A photographic record was compiled and sections were drawn at a scale of 1:10 and plans recorded at a scale of 1:20.

## 5. ANALYSIS

Finds recovered from the deposits identified in the evaluation were examined and a period date was assigned where possible (Appendix 2). Records of the deposits and features recognised during the evaluation were also examined. Phasing was assigned based on artefact dating and the nature of the deposits and recognisable relationships between them. A stratigraphic matrix of all identified deposits was created, and phased according to date criteria. Trenches 5, 7 and 9 were devoid of any archaeological features. Three phases were identified:

- Phase 1 Natural deposits
- Phase 2 Medieval and early post-medieval deposits
- Phase 3 Modern deposits

### 5.1 Phase 1 Natural Deposits

Located in the southwestern corner of the site, within trench 10, the earliest deposit encountered was a layer of grey clay (57), sealed by a thin deposit of red-brown silty sandy clay (56). This was overlaid by a



layer of light brown clayey silt (55). Each of these represent natural deposits.

The earliest deposit observed within the remainder of the trenches, except 10, was a layer of grey-brown clayey silt (16), interpreted as a subsoil.

## 5.2 Medieval and Early Post-Medieval Deposits

Overlying the natural subsoil at the southern extent of trench 2 was a layer (29) of yellow brown silt. This has been interpreted as a natural soil accumulation, although this was the only location at which this deposit was identified.

Cutting through the subsoil north of 29 was a linear feature (52), 1.8m long by 1.7m wide (as exposed), aligned east-west. Containing a fill of grey-brown slightly clayey silt (51), this feature has been interpreted as a drainage/boundary ditch.

Situated 2.6m north of 51, also truncating the subsoil, was an east-west linear feature (42), 1.8m long by 1.85m wide and 0.7 deep (as exposed). This feature (Fig. 6B) has been interpreted as a drainage/boundary ditch and contained a single fill of grey-brown silt (41), dated to the 16<sup>th</sup> century (post-medieval period).

Located 0.2m north of 41, cutting into the subsoil, was a linear east-west feature (45) 1.8m long/wide and 0.3m deep (as exposed), containing burnt mixed grey, black and yellow silt (44) containing frequent burnt clay fragments. This feature has been interpreted as a rubbish pit, and has been dated by associated pottery to the 13<sup>th</sup> century.

Placed 0.75m north of fill 44 was another linear feature (54), also cut through the subsoil, 1.8m long and 2.85m wide (as exposed). Interpreted as an east-west

drainage/boundary ditch, it contained a fill of grey-brown silt (53).

Southwest of trench 2, cut through the subsoil within trench 6, was a north-south linear feature (13) 2.4m long by 1.75m wide and 0.5m deep (Fig. 5). Interpreted as a ditch, this feature contained a primary fill of blue-grey silty clay (40) sealed by a secondary fill of brown clayey silt (39). Overlying this was a tertiary fill of grey-brown slightly clayey silt (12).

South of trench 6, truncating the natural deposit 55 in trench 10, was a broad linear feature (38), 1.8m long by 3.05m wide and 0.51m deep (as exposed). The western extent was of a uniform depth (0.41m), for a distance of 2.2m across its width. The eastern 0.85m, however, formed a gully that had been cut deeper than the remainder of the feature (Fig. 6A). Although interpreted as a gully, the function of the shelf itself was not determined. The feature was filled by a deposit of grey-brown slightly clayey silt (10).

Located 1.5m south of fill 10, cutting deposit 55 was a northeast-southwest gully (48), 1.8m long by 0.55m wide (as exposed), containing a fill of grey-brown silt (47).

Sealing layer 29 in trench 2 and fills 10, 12, 39, 41, 44, 47, 49, 51 and 53 described above, was a layer of grey-brown slightly clayey silt (2), between 0.12 - 0.45m thick, containing pottery dated to between the 13<sup>th</sup> to 17<sup>th</sup> centuries. Examination of this deposit concluded that it represents a reworked subsoil (see Appendix 4). Contained by 2 was a layer of ceramic building material c. 1m long by 3cm thick (46).



### 5.3 Modern Deposits

Located in trench 4, cutting through layer 2 was a north-south linear feature (50), 1.8m long by 4m wide (as exposed), containing a fill of dark grey silt (49). This feature has been interpreted as a boundary ditch.

Situated in the northwestern corner of the evaluation area, cutting through the deposit 2 in trench 1, was a feature (7) 8m long by 1.8m wide and 0.72m deep (as exposed). Interpreted as a pit, it contained a fill of grey-brown silty clay (3), dated by associated pottery to the 17<sup>th</sup> - 18<sup>th</sup> century.

Located in trench 3, in the northeastern corner of the site was a small pit (6) that cut through layer 2. Measuring 1.08m long by 0.68m wide and 0.2m deep, the pit contained a primary fill of brown clayey silt (11) dated by associated pottery to the 17<sup>th</sup> century, sealed by a tertiary deposit of light brown clayey silt (5).

Overlying these features and the reworked subsoil was a layer of grey-brown clayey silt (1) that constitutes the present ploughsoil.

## 6. DISCUSSION

Natural deposits are represented by layers of clay and silt (55-7) located in trench 10, and by a silty subsoil deposit (16), identified in the remaining trenches. These silts derive from marine inundation of the area and now function as a subsoil.

Overlying the silty subsoil was a natural soil accumulation. Just north of this were three east-west drainage/boundary ditches (42, 52 and 54). Although not contemporary, these features probably represent different phases of land

boundaries, enclosing agricultural plots.

Situated between ditches 42 and 54 was a pit containing burnt soil (45). Such a fill indicates that some form of industrial activity was occurring either on or in the vicinity of the study area. Previous archaeological excavations in Bicker have identified the location of medieval salterns, the burnt soils from which compare almost exactly with those from feature 45 (H. Healey, *pers. comm.*). It seems reasonable, therefore, to assume that the soils dumped into this feature derived from a salt extraction and processing activity. This interpretation can be substantiated by the recovery of many fragments of burnt clay from the fill (44), some of which bear the impressions of sticks or branches *c.* 14mm diameter (see Appendix 2 and Fig. 7). Fired clay that had been mixed with vegetable matter has been noted from previous excavations in Bicker, where this material had been used during the medieval period to construct hearths utilised as part of the salt extraction process.

Southwest of trench 2, located in trench 6 was a drainage/boundary ditch (13). This feature and ditch 38 in trench 10, are, like the ditches in trench 2, probably related to agricultural land allotment.

Extending across the entire site and effectively sealing the deposits described above was a reworked subsoil (2). This soil contained pottery dated to between the 13<sup>th</sup> - 17<sup>th</sup> centuries that has been derived from archaeological features that have cut through layer 2. Subsequent reworking of the fills of these features (and the soil through which they were cut) has removed any trace of them, but has, on the whole, left the artefactual material approximately where it was originally deposited. It is likely, therefore, that the reworking of this soil takes at most 300 years to transform



the soils to a homogeneous state. Consequently, the original Saxon/medieval land surface could not have been much lower than is seen today, which fact also means that the archaeological deposits observed during the evaluation represent only those features that extended below the level of the effects of the reworking. It is apparent, therefore, that any medieval features which did not extend below the level of reworking have been destroyed by this process.

Visibly cutting through the reworked subsoil were three features (pits 6 and 7 and ditch 50). Both of the pits have been dated to the 17<sup>th</sup> - 18<sup>th</sup> centuries, although the dating evidence from pit 7 is residual as the feature was backfilled this century (Mr. Thorlby, *pers. comm.*). The latest feature on the site was a boundary ditch (50) located in trench 4. This feature was identified by the geophysical survey and represents the boundary marked on the 1906 O.S. map.

Sealing these deposits was a layer of silt (1) that constitutes the present ground cover.

## 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 5).

### Period:

Boundary/drainage ditches and pits are not period-specific features but are found throughout all archaeological eras from the Neolithic onwards. However, activity probably associated with salterns, a port and associated settlement is a particular local characteristic of the medieval period.

### Rarity:

The archaeological features identified at the site are not rare in national or regional terms. However, the evidence for saltern activity, albeit in the form of waste materials, is nationally rare though regionally characteristic. Moreover, the high concentration of salterns in the Bicker area is rare.

### Documentation:

Records of archaeological sites and finds made in the Bicker area are kept in the Lincolnshire County Sites and Monuments Record and the files of the Boston Borough District Community Archaeologist. A brief synopsis of the archaeological background has previously been produced during the watching brief adjacent to the investigation area. A geophysical survey was undertaken and a site-specific synthesis and summary of the history and archaeology of Bicker, relative to the present investigation area, was produced prior to the examination reported here.

### Group value:

Medieval and later remains have been identified in the area. By virtue of their conjunction with the former Bicker Haven, the port, the seabank, the evidence for salt making activities and the extent of Late Saxon, medieval and post-medieval finds from the village, they have a high group value in local and regional terms.

### Survival/Condition:

Limited invasive post-medieval development has occurred on the site, consequently buried deposits are well preserved. However, natural reworking of a subsoil across the site has at least partially destroyed medieval and later



remains in the area. Palaeoenvironmental material was recorded from the trial pits and was seen to be well preserved (Foundation Investigations 1995).

#### **Fragility/Vulnerability:**

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

#### **Diversity:**

Moderate functional diversity is provided by the presence of ditches and refuse pits with occupation and industrial debris. This is emphasised by the localised grouping of (more clearly defined) medieval salterns and settlement remains, together with the Haven and a sea bank. Some period diversity is provided by the presence of both medieval and post-medieval remains on the site.

#### **Potential:**

Potential for saltern remains is high due to refuse associated with this activity being present in the evaluation area. The potential for settlement remains is also high, though it is likely that any surviving evidence will probably be restricted to the northern extent of the study area, which is set *c.* 15m back from the main medieval thoroughfare.

### **7.1 Site Importance**

In summary, the criteria for assessment have established that the medieval remains are locally and, perhaps, regionally important. As such, archaeological deposits present on the site can be expected to augment the understanding of the origins and development of Bicker within a local and regional framework.

## **8.EFFECTIVENESS OF TECHNIQUES**

The strategy of using trial trenches located over magnetic anomalies, and over 'blank' areas of the site, was on the whole, effective. Some of the anomalies identified by the geophysical survey were found to have been caused by buried pits and ditches. Archaeological deposits were also identified in the trenches designed to assess the 'blank' areas. However, some of the anomalies identified by the geophysical survey were considered to be natural in origin.

## **9. CONCLUSIONS**

Archaeological investigations on land bounded by Red Lion Street and Donington Road, Bicker have revealed undisturbed natural deposits at a depth of between 0.3m and 0.7m across the site. Deposits of medieval date developed over these.

Seven ditches and gullies (13, 38, 42, 48, 50, 52 and 54) dated to the medieval and post-medieval period were interpreted as drainage/boundary ditches and represent separate phases of land division.

One other feature (45) contained waste material from an industrial source, probably salt extraction. To the southeast and southwest of the site are a number of recorded salterns indicating specialised industrial processes near to the development area. Where archaeological examinations have taken place in the vicinity, deposits suggestive of land division and refuse waste, including 13<sup>th</sup> century pottery and saltern slag, have been recorded.

These features represent only those that extended beneath the level of reworking



that has transformed the upper subsoil. Any medieval cut archaeology that did not extend through this reworked layer has subsequently been destroyed.

Cutting into the reworked subsoil were two pits containing 17<sup>th</sup> - 18<sup>th</sup> centuries pottery, although one of these was backfilled only this century. The latest feature on the site (50) represents a land boundary depicted on the 1906 O.S. map. These deposits were sealed by the present ploughsoil.

## 10. ACKNOWLEDGEMENTS

Archaeological Project Services would like to thank Broadgate Builders (Spalding) Limited who commissioned the fieldwork and analysis. Access was kindly permitted by the land owner, Mr. Thorlby. Thanks also to Miss H. Healey who visited the site and drew attention to comparable excavations. The work was coordinated by Steve Haynes and this report was edited by Gary Taylor and Dave Start. Jim Bonnor, the Community Archaeologist for Boston Borough Council permitted examination of the relevant files.

## 11. PERSONNEL

Project Manager: Steve Haynes  
Research: Paul Cope-Faulkner  
Supervisor: Mark Dymond  
Site Assistants: Robert Ashford, Christine Bloor, Ben Chan and Helen Moore  
Finds Processing and illustration: Denise Buckley  
Post-excavation analyst: Mark Dymond

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### 13. ABBREVIATIONS

Numbers prefixed by 'B' are the reference codes used by the Community Archaeologist for Boston Borough District Council.

Department of the Environment publications are abbreviated to the initials 'DoE'

Reports by Archaeological Project Services are abbreviated to 'A.P.S.'



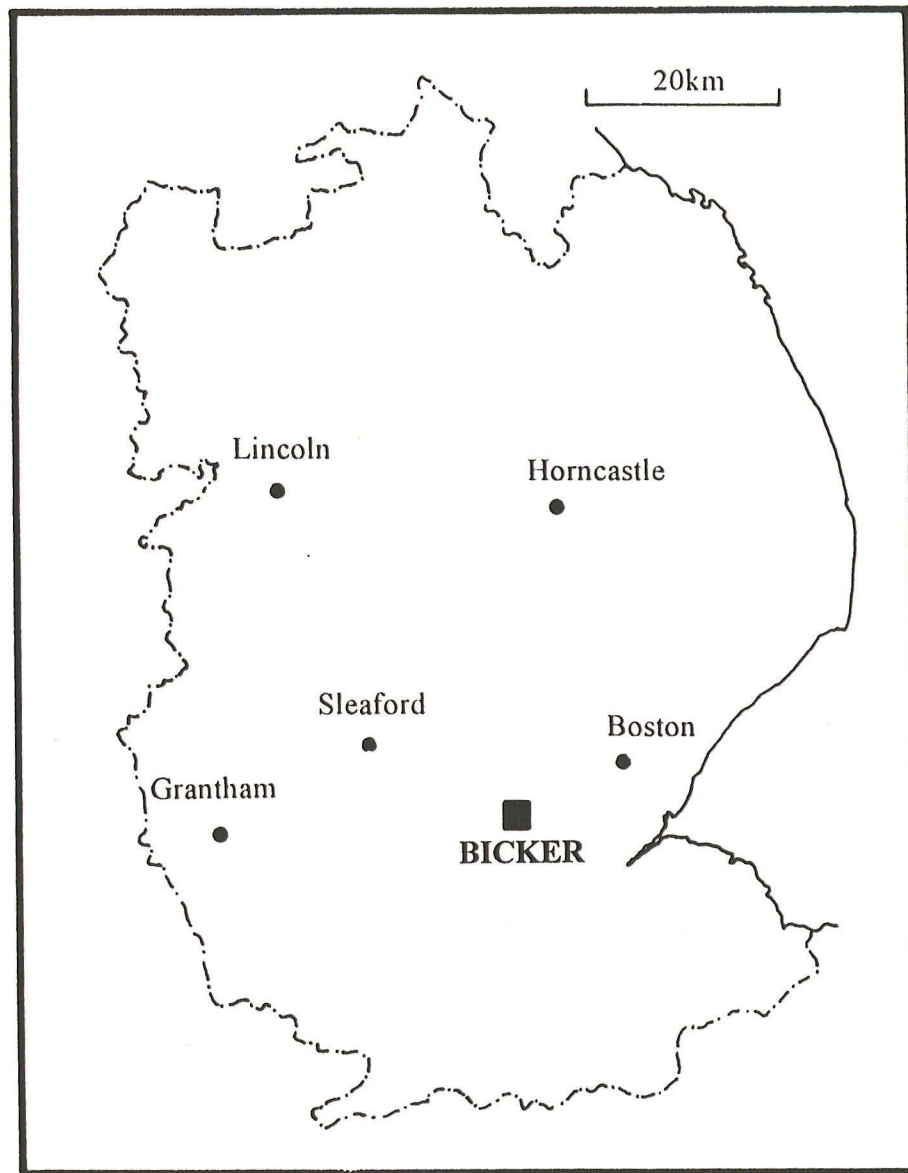
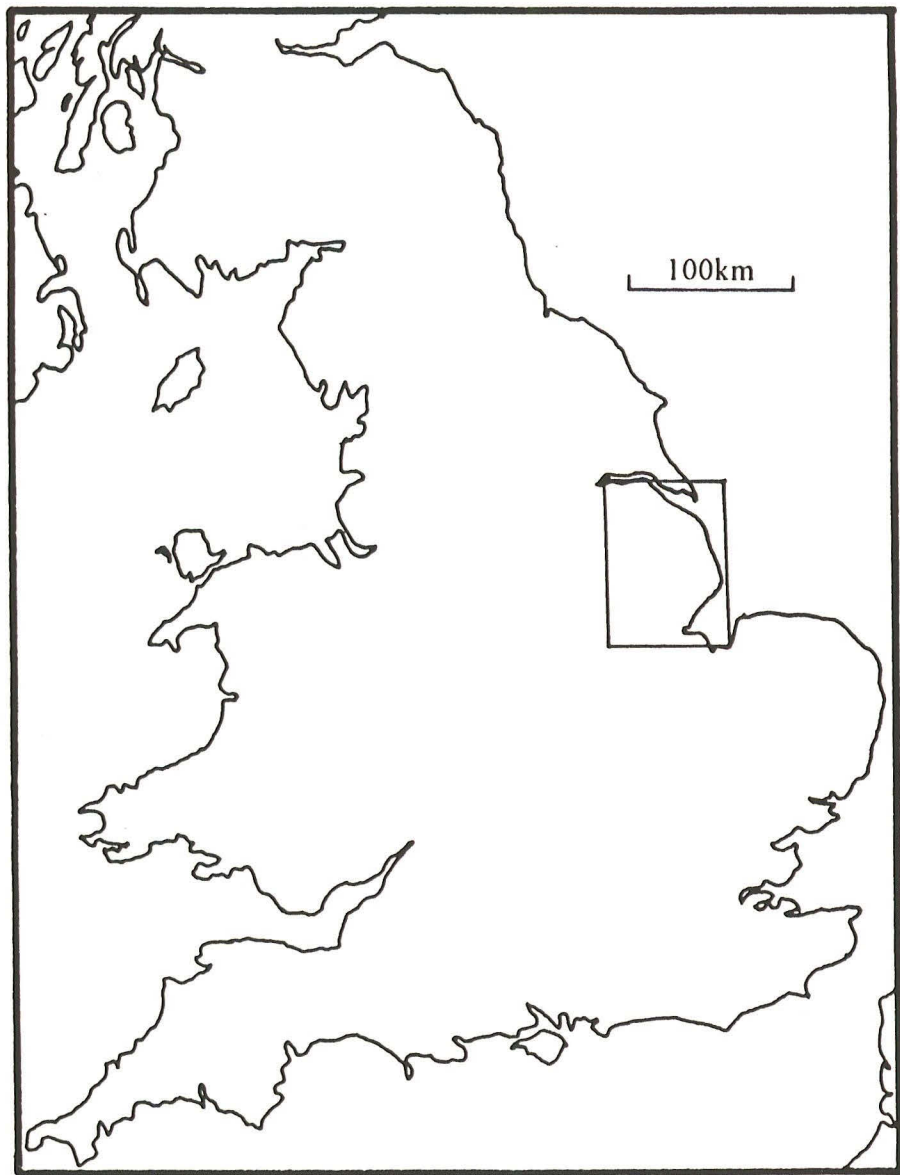
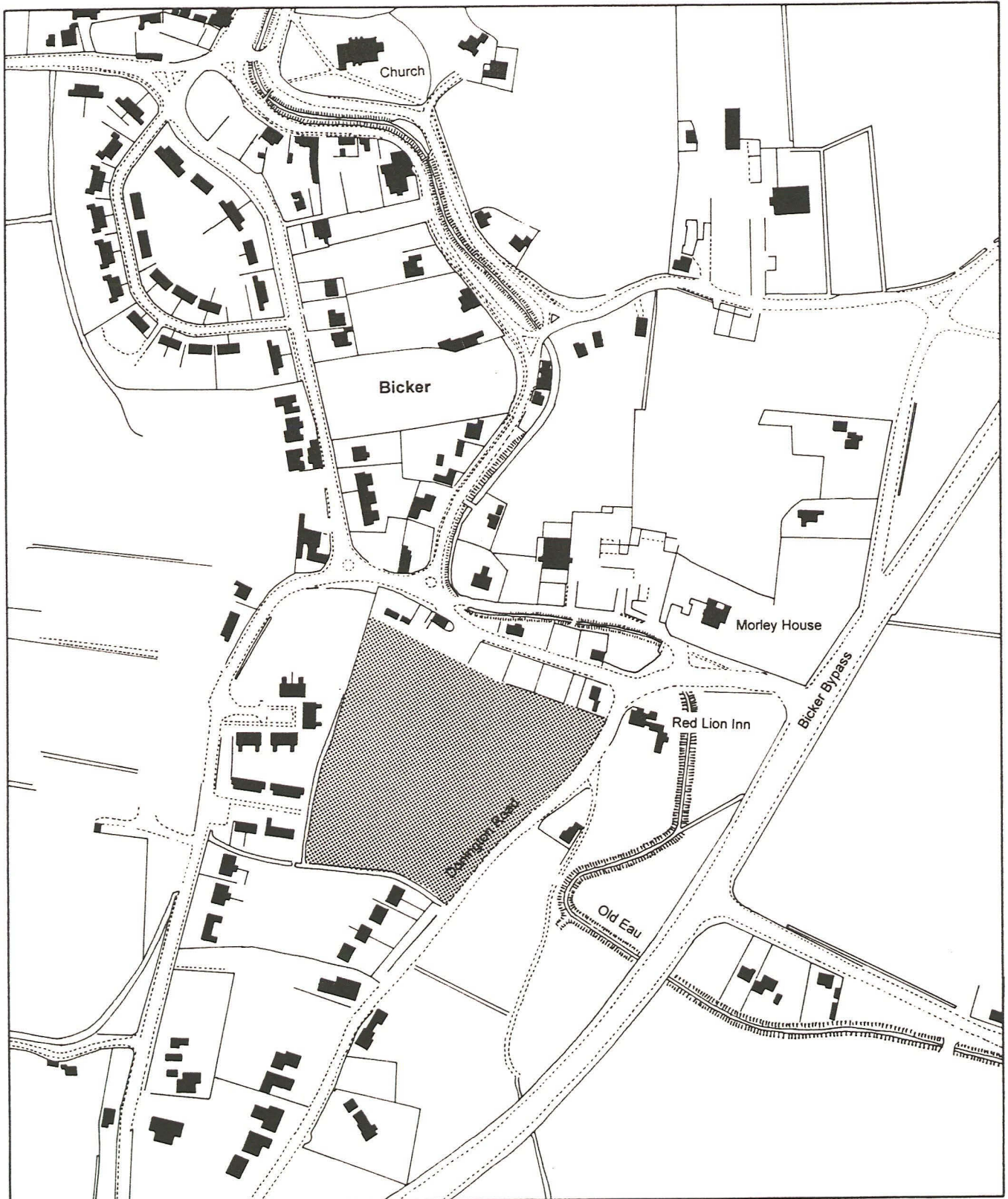


Fig. 1 General Location Plan

Fig. 2 Site Location Plan




 Area of Proposed Development



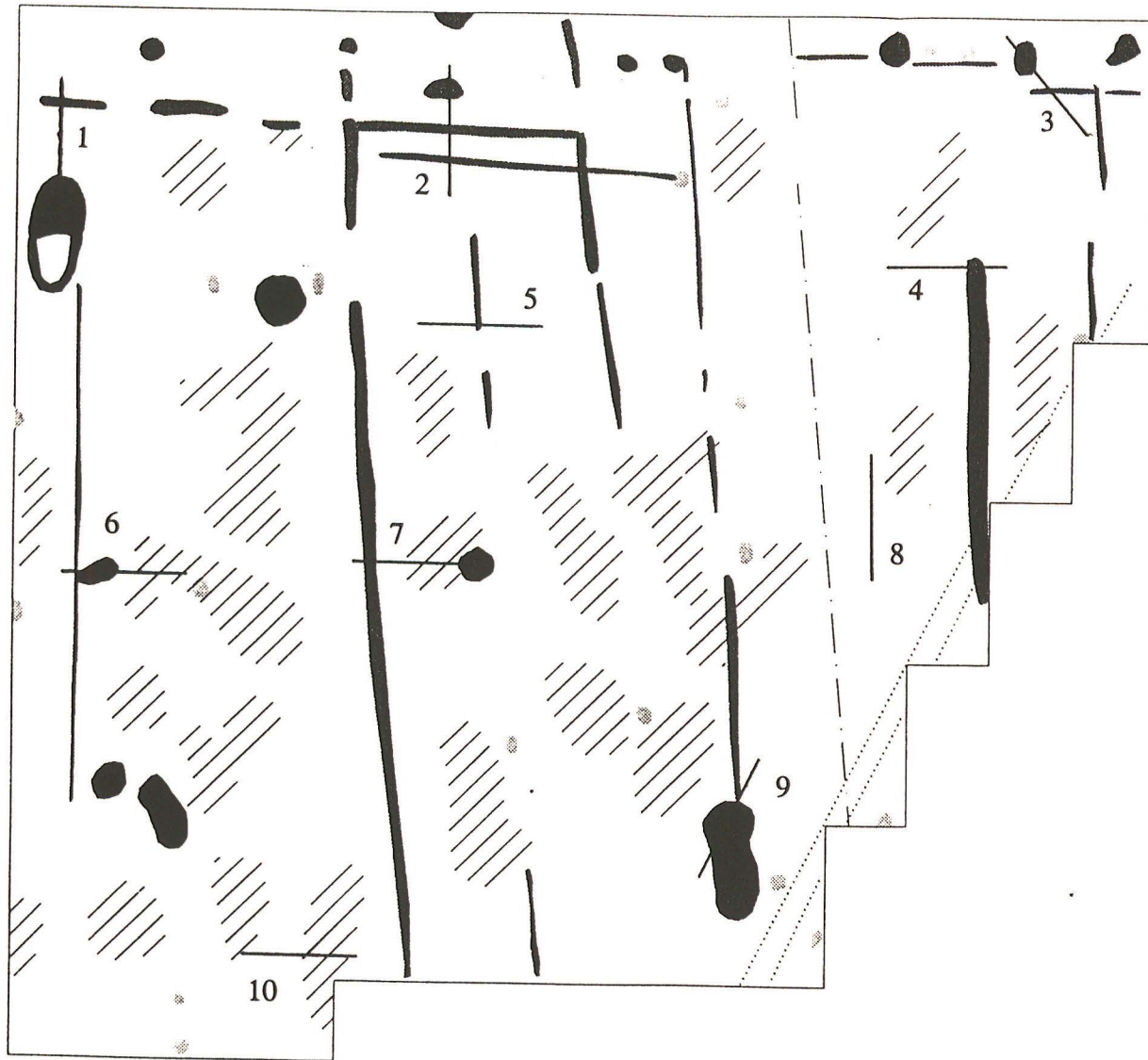
Fig. 3 Plan of Known Archaeological Sites









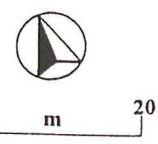
Area of Proposed Development

Fig. 4 Geophysical Survey Results and Trench Location Plan

Donington Road  
Bicker



-  ?Salterns/Pits
-  ?Ditches/Channels
-  ?Natural/Alluvial
-  Ferrous
-  ?Drains
-  ?Old Field Boundary



(After Geophysical Surveys of Bradford 1996)



Fig. 5 South Facing Section Through Ditch 13 Trench 6

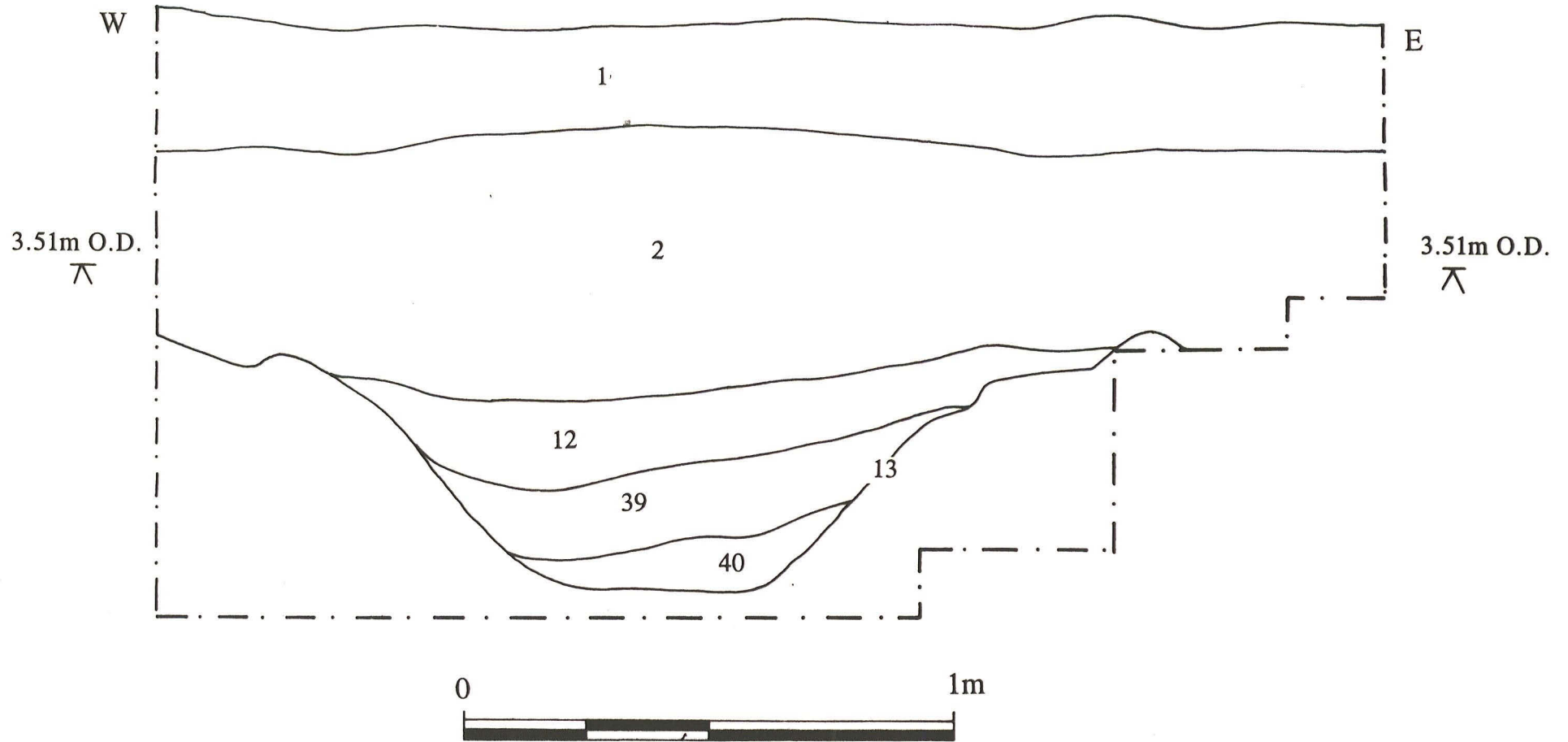


Fig. 6a

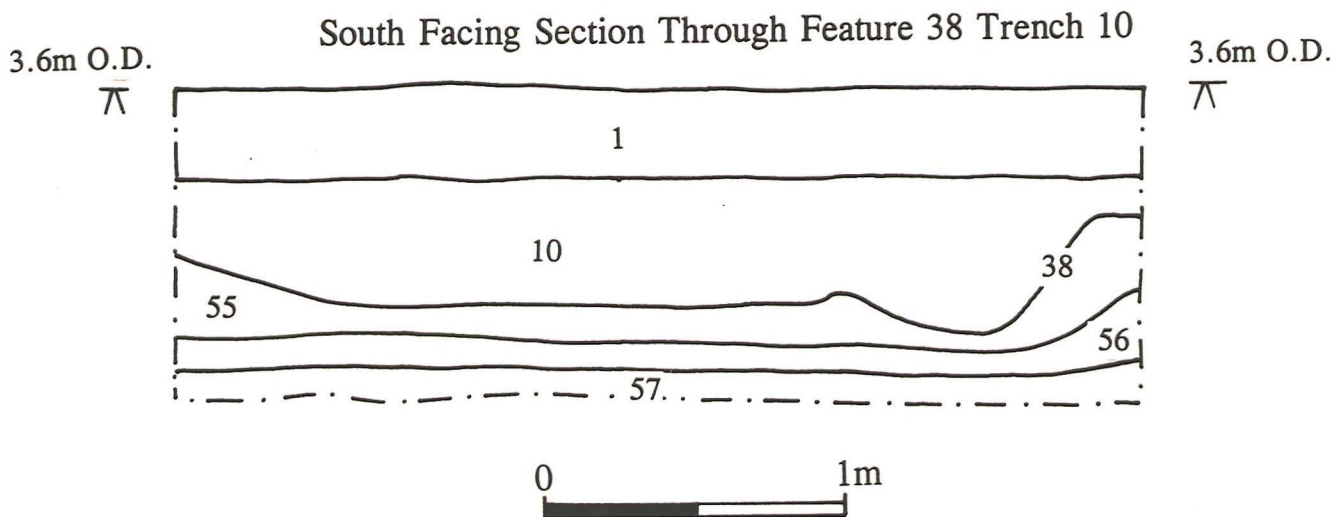


Fig. 6b

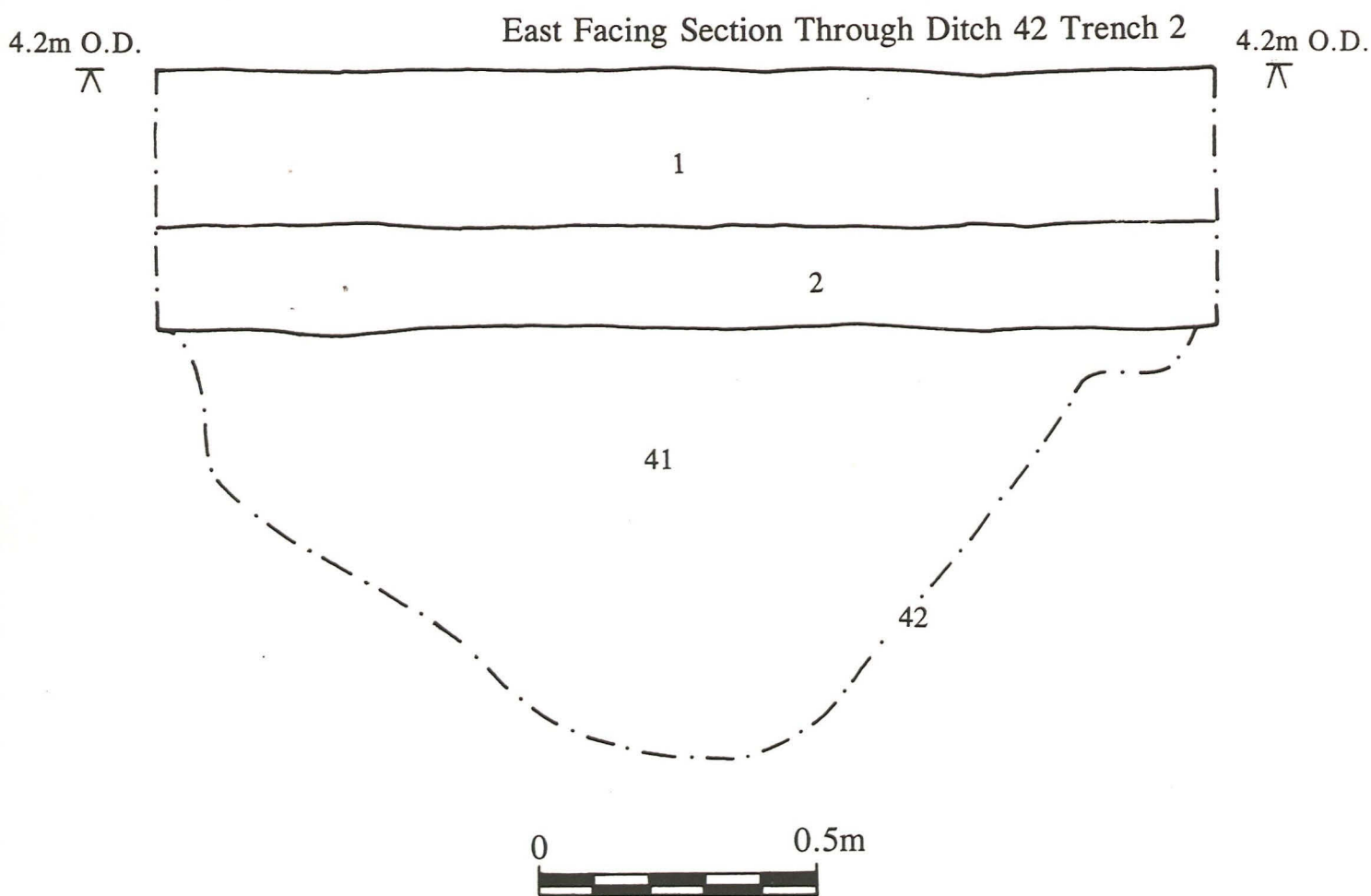




Plate 1 View of Medieval Sea Bank (looking south)



Photo: M. Dymond



Plate 2 Boundary Ditch 13 (looking north)

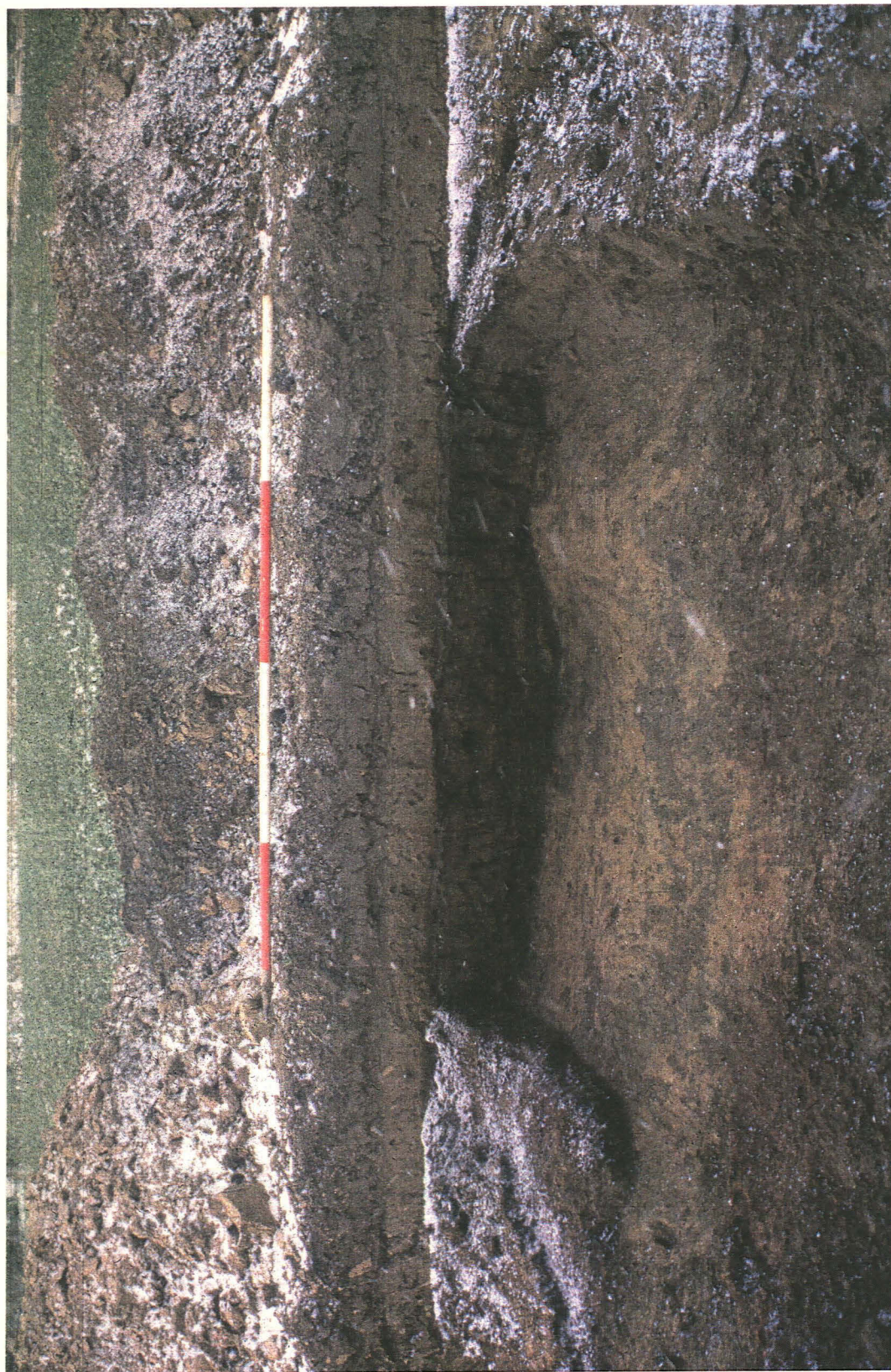


Scale: 1m

(Photo: R. Ashford)



Plate 3 Rubbish Pit/Ditch 45 (looking west)



Scale: 2m

(Photo: M. Dymond)



## Appendix 1 Context Summary

<b>Context</b>	<b>Description</b>	<b>Interpretation</b>
1	Grey-brown clayey silt	Ploughsoil
2	Grey-brown clayey silt	Reworked subsoil
3	Brown silty clay	Fill of 7
4	Same as 2	
5	Brown clayey silt	Tertiary fill of 6
6	Cut feature	Pit
7	Cut feature	Pit
8	Brown silt	Animal disturbance
9	Same as 11	
10	Brown silt	Fill of 38
11	Brown silt	Primary fill of 6
12	Brown clayey silt	Tertiary fill of 13
13	Cut feature	Ditch
14	Same as 1	
15	Same as 2	
16	Brown clayey silt	Natural
17	Same as 1	
18	Same as 2	
19	Same as 2	
20	Same as 1	
21	Same as 2	
22	Same as 1	
23	Same as 2	
24	Same as 1	
25	Same as 2	
26	Same as 16	
27	Same as 1	
28	Same as 2	



<b>Context</b>	<b>Description</b>	<b>Interpretation</b>
29	Brown silt	Natural soil accumulation
30	Same as 16	
31	Same as 1	
32	Same as 2	
33	Same as 16	
34	Same as 1	
35	Same as 2	
36	Same as 1	
37	Same as 2	
38	Cut feature	Gully
39	Brown clayey silt	Secondary fill of 13
40	Grey silty clay	Primary fill of 13
41	Grey-brown silt	Fill of 42
42	Cut feature	Ditch
43	Cut feature	Pit
44	Mixed black, grey and yellow silt	Fill of 45
45	Cut feature	Pit
46	Red ceramic building material	Dump?
47	Grey-brown silt	Fill of 48
48	Cut feature	Gully
49	Grey silt	Fill of 50
50	Cut feature	Ditch
51	Grey-brown silt	Fill of 52
52	Cut feature	Ditch
53	Grey-brown silt	Fill of 54
54	Cut feature	Ditch
55	Brown clayey silt	Natural
56	Red-brown silty sandy clay	Natural
57	Grey clay	Natural

## **Appendix 2**

### **Pottery Assessment**

By Hilary Healey

A total of 82 sherds was examined from four of the trenches, trench 1, trench 2, trench 3 and trench 7. There is one large post-medieval assemblage from context 003 in trench 1 and six clay pipe stems which occur in contexts 003, 005 and 009. The remainder of the pottery is of Late Saxon to medieval date. In most instances the finds are restricted to fewer than ten sherds. Details are given in the accompanying table.

#### **Late Saxon**

Contexts where Late Saxon pottery has been recorded that have no later material present are Trench 1 002 and Trench 1 044 (a single sherd).

#### **Medieval**

Contexts where the latest sherds seen are medieval are Trench 1 002, Trench 3 002, Trench 7 002, Trench 1 012 (here unidentified pottery). In Trench 3 context 008, one tiny sherd of eighteenth century pottery could easily have slipped in down a rodent hole to contaminate.

#### **Post-medieval**

The late group of pottery (trench 1 003) although including eight medieval sherds, consists of eleven sherds dating between the sixteenth and early nineteenth century; amongst these are Bourne D ware (generally of sixteenth to seventeenth century date), yellow glazed wares of the seventeenth century, black glazed ware, three types of Staffordshire pottery and one fragment of Dutch type glazed red earthenware. There is a clay pipe stem with a large bore that may also date to the seventeenth century. In contexts 005 and 009 there are similar clay pipe stems, and in trench 3 001 (which is topsoil). Trench 2 context 002 is largely medieval with 3 sherds of fifteenth to sixteenth century date.

#### **Fired clay and brick**

Pieces of handmade brick containing some vegetation were found in Trench 1 in contexts 003 and 041, and flakes of the same recovered from 009. These pieces, up to *c.* 110mm x 57mm x 220mm, are not precisely datable.

In context 044, twenty-seven fragments of fired clay were found together with a single sherd of shelly fabric pottery of probable thirteenth century date. One piece of fired clay in 009 may just be brick. The brick and fired clay are similar, both with vegetation impressions, but the fired clay also has impressions from sticks or branches of *c.* 14mm diameter. This looks as if either daub that has been in a fire (though this is not a convincing interpretation because the colour is so evenly distributed), or part of a construction such as a hearth or kiln where the clay shape has originally formed around a stick. The material is a slightly different colour to the bricks, being a duller red. This is consistent with a hearth of some kind, but of unknown function though salt-making using hearths constructed of clay mixed with vegetable matter is known in the vicinity (Healey 1969, 110).



## Reference

Healey, H., 1969 Quading TF 253334, in Whitwell, J. B., and Wilson, C. M., *Archaeological Notes*, 1968, *Lincolnshire History and Archaeology* 4

Context	Finds	Comments
002	11 STAM; 3 SH; 1 EM	
003	8 TAS; 5 BD; 2 MY; 1 SLIP; 1 DU; 1 STAFFS SALT; 1 STAFFS; 1 BLACK MOD; 1 CP; 4 BRICK; 1 GLASS	Glass is 17th century wine bottle; clay pipe large bore, c. 17th century
005	1 STAM; 2 UK; 1 MY; 1 CP	clay pipe large bore, c. 17th century
008	1 TAS; 1 STAFFS	
009	1 STAM; 1 TAS; 1 MY; 2 CP; 1 FC; 2 BRICK	clay pipe large bore, c. 17th century
012	3 STAM; 2 SH; 1 EM; 1 UK	
041	2 STAM; 2 TAS; 1 BD; 9 BRICK	
044	1 SH; 27 FC	
Tr. 2 002	5 STAM; 1 THET; 4 BA; 3 BB; 1 CIST. TYPE; 2 BD	
Tr. 3 001	1 TAS; 2 CP	clay pipe large bore, c. 17th century
Tr. 3 002	3 TAS;	
Tr. 7 002	1 NOTT	

## KEY:

Fabric		Date	TOTAL
STAM	= Stamford ware	c. 850-1150	23
THET	= Thetford ware	c. 850-1150	1
SH	= Shelly ware	c. 850-1150	6
EM	= Early medieval pottery	1150-1250	2
BA	= Bourne A ware	13th century	4
BB	= Bourne B ware	14th century	3
TAS	= Toynton All Saints ware	13th-15th century	16
NOTT	= Nottingham green glazed ware	13th-14th century	1
UK	= Unknown medieval pottery	c. 14th century	3
CIST. TYPE	= Cistercian type ware	15th-16th century	3
BD	= Bourne D ware	16th-17th century	8

MY	= Midland Yellow	17th century	4
SLIP	= Slipware	17th-18th century	1
DU	= Dutch red glazed ware	17th century	1
STAFFS SALT	= Staffordshire salt glazed ware	17th-18th century	1
STAFFS	= Staffordshire earthenware	18th century	2
BLACK MOD	= Black glazed ware, modern	18-20th century	8
CP	= Clay pipe	17th century	6
FC	= Fired clay		28
BRICK			15
GLASS			1



### **Appendix 3**

#### **Bone Assessment**

By Paul Cope-Faulkner

A total of 96 bones were retrieved from an evaluation at Donington Road, Bicker. The bones were in generally good condition, though most were fragmentary. Of 45 contexts assigned only 8 produced skeletal material.

Medieval contexts 012 and 044, fills of a ditch and pit respectively, produced a few cattle bones, a single sheep fragment and an unidentifiable bird, most likely chicken or goose species. No butchery marks were apparent.

An undated gully fill (010) produced 17 bones, all of cattle species. This included two interlocking vertebrae with their detached epiphyses. These unfused epiphyses indicate that a young animal is represented (Cornwall 1974). A single bird bone was also recovered, comparable in size to a chicken.

The largest assemblage came from the reworked subsoil (002). Sheep and cattle are primarily represented with a few pig bones. Butchery marks were apparent on a large percentage of this material, though gnawing was restricted to a very few fragments. A fragment of sheep bone with a cut rectangular notch may once have been a whistle (Fig. 7). A skull of a mole was retrieved from this context and may indicate later animal intrusion into this deposit.

Post-medieval deposits across the site produced no noticeable change with sheep and cattle species represented with a single bird bone also present.

Though the species represented reflect the nature of the economy of the site, the size of the assemblage is considered to be too small for detailed analysis.

#### **Reference**

Cornwall, I.W., 1974, *Bones for the Archaeologist* (2nd edition)

## Appendix 4

### Environmental Assessment

By James Rackham

The last major depositional period represented on the site is likely to have been the marine transgression during and after the late Roman period which deposited marine alluvium over much of this area. Waller (1994) notes a return to marine conditions at Swineshead, 2km to the northeast, which is dated to 315-425 cal. AD (Q-2556) and 395-535 cal. AD (Q-2558) and deposition of a blue-grey silty clay and then a yellow-brown silty fine sand over the humified peat from which the dates were obtained. These post-Roman deposits attain a thickness of 1.5m at Swineshead and although the sequence at Bicker need not be identical an extensive deposit of post-Roman marine alluvium can be assumed at the latter site overlying earlier silts. The yellow-brown silty fine sand subsoil exposed in the excavation trenches at Bicker is consistent with the upper deposit described at Swineshead and Roman land surfaces are recorded buried beneath deposits of this age to the south at Pinchbeck (Hall and Coles 1994). These authors have also suggested that this episode of 'flooding' was over by the sixth century. Reclamation of the marine alluvium in this area presumably post-dates this and the settlement at Bicker was of sufficient size for a stone church to be built in the 12th century (Pevsner and Harris 1989, 142). The bank running along the east of the site may well be a sea bank whose date is likely to be Saxon since pre-conquest dates have been attributed to banks seaward of around Bicker Haven (Hallam 1965; Hall and Coles 1994). The fact that the ground level to the east of the bank is higher than that to the west could reflect the pattern found elsewhere where the sea continued to deposit silts on the seaward side of the bank as the sea level rose, raising the ground level above that of the land protected by the bank.

It seems, therefore, that the land was reclaimed and the ground level established in the Saxon period. The recently reclaimed land would undergo soil development that would have obliterated and laminate deposits and agricultural activity is likely to have further accelerated the development of a soil. These silts and silty sands are very porous (Hodge *et al.* 1984) with numerous root channels and burrows formed by vegetation and saltmarsh invertebrates before reclamation and a blocky soil structure develops to a depth of 50-60cms. Post-medieval ploughing, and cultivation of deep rooting crops such as sugar beet is likely to have extended the active soil layer below 60cms and it is unlikely that anything except substantial stone or brick features will have survived as stratigraphy within this top 60cms. It is characteristic in these circumstances to identify archaeological remains as negative features (pits, ditches, *etc.*) in the subsoil beneath this upper band of homogenous soil which has been worked by worms, other soil fauna and plant roots, although the soil will contain ceramics and other finds associated with the periods of occupation on it. This is a very similar situation to the circumstances normally found on the thin cultivated soils over river gravels. The typical sequence is a modern ploughsoil normally up to 30cms deep (depending upon the type of plough being used), beneath which is the lower part of the active soil which has been subject to soil formation processes since its reclamation in the Saxon period. Beneath this horizon is a relatively undisturbed subsoil which has seen little working although vertical root and worm holes testify to both plants and invertebrates burrowing deep during periods of drought in the surface layers. It is generally only in this layer that archaeological features will be observed, although some of the more substantial features may retain sufficient form to be visible in the upper layers of the soil.



The lighter colour of the soil beneath the ploughsoil reflects a lower humic content at these levels from which organic matter and mineral salts have been leached. With ancient cut features the fills derive from the contemporary topsoil and have undergone leaching since burial resulting in deposits of similar colour and texture to the soils below the ploughsoil. Recent cuts are filled with darker soil since much less time has elapsed since their formation so the leaching is not so far advanced. This would give the appearance of the subsoil infilling the cut features as if it was a single deposit and the original cut through it would no longer be visible. The sharpness of a boundary in soil is often dependent upon moisture levels or water table. Little or no biological activity occurs within saturated levels of a soil and the sharpness of the lower horizon probably marks the level at which the soil is normally saturated, or the level to which worms and other soil fauna penetrate. Where the silt layer, 29, occurs this may have been sufficiently low for it to have been below the influence of major soil processes, leading to little disturbance.

Several pieces of evidence contribute to identifying layer 2 as worked subsoil rather than a flood horizon. If it was a flood event and had sealed the medieval features then there would be no medieval pottery in the surface soils since all deposits containing such material would be still be buried beneath 60-70cms of topsoil and flood deposit. As sherds were found in the topsoil and layer 2 these layers must either have been deposited on the topsoil or dragged up by the plough from layer 2, which would not be possible if layer 2 was a flood horizon. Recent investigations at Sutterton afford an excellent example of this. In the southeastern part of that site, where the silts into which Roman features were cut were covered by later alluvial deposits, no Roman pottery was found during fieldwalking because this alluvium had covered the levels contemporary with the Roman occupation on the site. Where the Roman levels were at the surface and not covered by later 'flood' deposits Roman pottery was common. If a serious flood event had covered the Bicker medieval levels no medieval pottery would have been found in the topsoil. Furthermore, if layer 2 was a flood horizon it would seal a ground surface or palaeosol. This was not the case and no buried soil was visible below layer 2 or its equivalents in any of the trenches.

The apparent contradiction with ditch 42 serves to confirm this conclusion. Although ditch 42 postdates the features assumed to have been open when layer 2 was deposited it apparently predates layer 2 since there is a sharp boundary between it and layer 2. If this sharp boundary is a result of post-burial soil processes and not a stratigraphic relationship then ditch 42 could have been cut from the level of the present ground surface. It is unlikely that the early medieval ground surface was significantly lower than the present surface and it is probable that all the features were cut from the topsoil and the visible evidence for these cuts has been lost as a result of ploughing and soil processes over the last 600 years.

## References

Hallam, H. E., 1965 *Settlement and Society in South Lincolnshire*

Hall, D., and Coles, J., 1994 *Fenland Survey An essay in landscape and persistence*, English Heritage Archaeological Report 1

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 (Harpenden)

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



## Appendix 5

### Secretary of State's criteria for scheduling Ancient Monuments - Extract from *Archaeology and Planning* DoE Planning Policy Guidance note 16, November 1990

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

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

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

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

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

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

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

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

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

## Appendix 6

### The Archive

The archive consists of:

57	Context records
144	Photographic records
23	Scale drawings
1	Stratigraphic matrix
2	Boxes of finds

All primary records are currently kept at:

Archaeological Project Services  
The Old School  
Cameron Street  
Heckington  
Lincolnshire  
NG34 9RW

City and County Museum, Lincoln, Accession Number: 212.95  
Archaeological Project Services project code: BDR96