



## HATTON TO SILK WILLOUGHBY 1050mm GAS PIPELINE

### ARCHAEOLOGICAL EVALUATION, EXCAVATION & WATCHING BRIEF

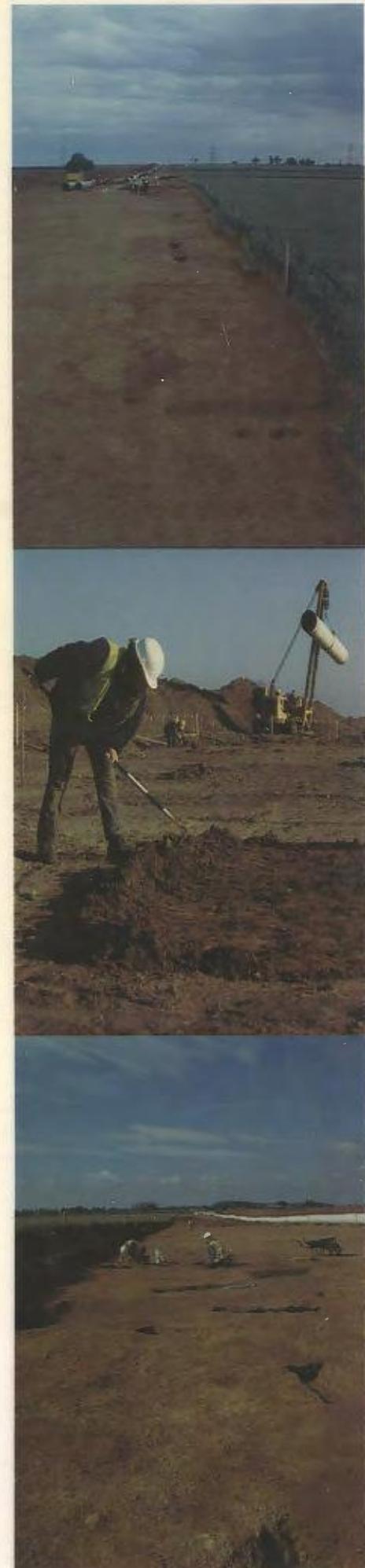
#### Volume 1: Report

Prepared by

NETWORK ARCHAEOLOGY Ltd

For

TRANSCO



EVENTS  
W.B - L12220

SOURCE  
L16925  
W17370

MON  
L162545 44345  
L182546 44346  
L182547 44347  
L182548 44348  
L142957 42957  
L182549 44349  
L180879 60949  
L182550 62050  
L182551 62051  
L1803918 60979

PEN  
L180430 61011  
L182553 62052  
L182554 62053  
L182555 62054  
L182556 62055  
L182557 62056  
L182558 62057  
L182559 62058  
L182560 62059  
L182561 62060

TT - L12745

L17371  
L17372

EX L12746

L17373  
L17374

GEO L12747

L17375  
L17376

99/17

## HATTON TO SILK WILLOUGHBY 1050mm NATURAL GAS PIPELINE

### ARCHAEOLOGICAL EVALUATION, EXCAVATION AND WATCHING BRIEF 1998

Volume 1 : Report

Prepared by

Network Archaeology Ltd

For

Transco

Report No. 134  
August 1999

Lincolnshire County Council  
Archaeology Section

28. SEP 99  
acc 28/9/99

# CONTENTS

<i>List of Figures</i>	<i>iv</i>
<i>List of Tables</i>	<i>v</i>
<i>List of Plates</i>	<i>v</i>
<b>1 SUMMARY</b>	<b>1</b>
1.1 General	1
1.2 Results	1
<b>2 INTRODUCTION</b>	<b>4</b>
2.1 Requirements of the Brief	4
2.2 Project Background	4
2.2.1 Results of the 1993 - 1994 Investigations	4
2.2.2 Results of the 1997 Desk-Based Assessment	4
2.2.3 Results of the 1997 Fieldwalking and Field Reconnaissance Surveys	4
2.2.4 Results of the 1998 Geophysical Survey	4
2.2.5 Results of the 1998 Evaluation Trenches	5
2.2.6 Results of Investigations at Car Dyke (SAM. 314)	5
2.3 Objectives of the Evaluations, Excavations and Watching Brief	5
<b>3 DESCRIPTION OF THE PIPELINE CORRIDOR</b>	<b>6</b>
3.1 General	6
3.2 Topography and Geology	6
3.3 Soils and Landuse	7
<b>4 METHODOLOGY</b>	<b>7</b>
4.1 Pipeline Construction	7
4.2 Archaeological Methods and Mitigation Strategies	12
4.3 Archaeological Visibility within the Construction Environment	13
4.4 Field Records	13
<b>5 RESULTS</b>	<b>15</b>
5.1 Introduction	15
<b>6 MESOLITHIC, NEOLITHIC AND BRONZE AGE</b>	<b>15</b>
6.1 Archaeological Background	15
6.2 Pipeline Results - Mesolithic to Early/Middle Neolithic	16
6.3 Site 18 Flint Scatter	16
6.4 Discussion	16
6.5 Pipeline Results - Late Neolithic/Bronze Age	17
6.6 Site 10 Late Neolithic/Bronze Age Artefact Scatter and Buried Soil	17
6.7 Site 12 Late Neolithic/Bronze Age Artefact Scatter	20
6.8 Site 18 Late Neolithic/Bronze Age Artefact Scatter	21
6.9 Site 19 Late Neolithic/Bronze Age Artefact Scatter	22
6.10 Discussion	22
<b>7 IRON AGE</b>	<b>24</b>
7.1 Archaeological Background	24
7.2 Pipeline Results	24
7.3 Site 6 Iron Age/Romano-British Settlement	25
7.4 Site 13 ?Iron Age Ditch	25
7.5 Site 15 Iron Age Settlement	26

7.6	<i>Site 16</i> Iron Age settlement	28
7.7	<i>Site 17</i> Iron Age Settlement	34
7.8	<i>Site 18</i> ?Iron Age Barrow Cemetery	40
7.9	<i>Site 19</i> Iron Age settlement	41
7.10	<i>Site 22</i> Iron Age Enclosure and Settlement Debris	48
7.11	Discussion	55
<b>8</b>	<b>ROMANO-BRITISH</b>	<b>57</b>
8.1	Archaeological Background	57
8.2	Pipeline Results	57
8.3	<i>Site 2</i> Field System, Pits and Well	58
8.4	<i>Site 6</i> Settlement and Field System	63
8.5	<i>Site 9</i> Field System	99
8.6	<i>Site 11</i> Pottery Scatter, Ditch and Posthole	105
8.7	<i>Site 18</i> Pottery	106
8.8	<i>Site 21</i> Field System and Pits	106
8.9	Discussion	112
<b>9</b>	<b>ANGLO-SAXON</b>	<b>113</b>
9.1	Archaeological Background	113
9.2	Pipeline Results	113
9.3	<i>Site 18</i> Cemetery	113
9.4	Discussion	128
9.5	Conclusion	129
<b>10</b>	<b>MEDIEVAL</b>	<b>130</b>
10.1	Archaeological Background	130
10.2	Pipeline Results	130
10.3	<i>Site 1</i> Ridge and Furrow Earthworks and Pottery	131
10.4	<i>Site 3</i> Ridge and Furrow, Pottery and Field Boundary Ditch	132
10.5	<i>Sites 4 and 5</i> Ridge and Furrow Earthworks and Pottery	133
10.6	<i>Site 7</i> Roadway	134
10.7	<i>Site 8</i> Pottery Scatter and Furrow Remains	138
10.8	<i>Site 14</i> Pottery Scatter and Furrow Remains	139
10.9	<i>Site 20</i> Pottery Scatter and Furrow Remains	140
10.10	Discussion	140
<b>11</b>	<b>UNDATED</b>	<b>142</b>
11.1	Pipeline Results	142
<b>12</b>	<b>OVERALL CONCLUSION</b>	<b>144</b>
<b>13</b>	<b>REPORT, FINDS AND ARCHIVE DEPOSITION</b>	<b>144</b>
<b>14</b>	<b>ACKNOWLEDGEMENTS &amp; CONTRIBUTORS</b>	<b>144</b>
14.1	Acknowledgements	144
14.2	Specialist Contributors	145
14.3	NAL Personnel	146
<b>15</b>	<b>REFERENCES</b>	<b>147</b>
<b>16</b>	<b>PLATES</b>	<b>150</b>

## **APPENDICES - VOLUME 2**

### *Introduction*

- 1 Flint
- 2 Bronze Age Pottery
- 3 Iron Age & Romano-British Pottery
- 4 Anglo-Saxon and Medieval Pottery
- 5 Brick and Tile
- 6 Burnt and Fired Clay
- 7 Animal Bone
- 8 Shell
- 9 Human Bone
- 10 Anglo-Saxon Artefacts
- 11 Registered and Bulk Finds
- 12 Environmental Archaeology
- 13 1998 Evaluations
- 14 Gazetteer of Archaeological Features

## LIST OF FIGURES

Figure 1	Location of the Pipeline	3-4
Figure 2	Location of Archaeological Sites 1-22	3-4
Figure 3	Surface Geology of the Pipeline Route	7-8
Figure 4	Site 10, Location of Late Neolithic / Bronze Age Artefact Scatter	17-18
Figure 5	Site 12, Location of Late Neolithic / Bronze Age Artefact Scatter	20-21
Figure 6	Sites 18 and 19, Locations of Multi-period and Iron Age Settlement Sites	21-22
Figure 7	Sites 13, 15, 16 and 17, Locations of Iron Age Settlements and isolated features	25-26
Figure 8	Site 15, Locations and Plan of Iron Age Features	26-27
Figure 9	Site 15, Section Drawings	26-27
Figure 10	Site 16, Plan of Iron Age Settlement	28-29
Figure 11	Site 16, Section Drawings	29-30
Figure 12	Site 17, Plan and Phase Plan of Iron Age Settlement	34-35
Figure 13	Site 17, Section Drawings	34-35
Figure 14	Site 18, Location of multi-period, and Site 19, Iron Age Settlement	41-42
Figure 15	Site 19, Plan and Phase Plan of Iron Age Settlement	41-42
Figure 16	Site 19, Section Drawings	42-43
Figure 17	Site 22, Location of Iron Age Enclosures	48-49
Figure 18	Site 22, Plan of Iron Age Enclosures	49-50
Figure 19	Site 22, Phase Plan	49-50
Figure 20	Site 22, Section Drawings	50-51
Figure 21	Site 2, Location of Romano-British Field System, Pits and Well	58-59
Figure 22	Site 2, Plan of Romano-British Field System, Pits and Well	58-59
Figure 23	Site 2, Section Drawings	58-59
Figure 24	Site 2, Section Drawings	59-60
Figure 25	Site 6, Location of Late Iron Age/Romano-British Settlement	63-64
Figure 26	Site 6, Plan and Phase Plan of Late Iron Age/Romano-British Settlement	63-64
Figure 27	Site 6, Detailed Plan of Area 1	64-65
Figure 28	Site 6, Section Drawings of Area 1	64-65
Figure 29	Site 6, Detailed Plan of Area 2	70-71
Figure 30	Site 6, Section Drawings of Area 2	70-71
Figure 31	Site 6, Detailed Plan of Area 3	75-76
Figure 32	Site 6, Section Drawings of Areas 3 and 4	75-76
Figure 33	Site 6, Detailed Plan of Area 4	79-80
Figure 34	Site 9, Location of Romano-British Field System	99-100
Figure 35	Site 9, Plan of Romano-British Field System	99-100
Figure 36	Site 9, Section Drawings	100-101
Figure 37	Site 9, Section Drawings	103-104
Figure 38	Site 11, Location and Plan of Romano-British Pottery Scatter, Ditch and Posthole	105-106
Figure 39	Site 21, Location of Romano-British Field System and Pits	107-108
Figure 40	Site 21, Plan of Evaluation Trench 02	107-108
Figure 41	Site 21, Plan of Romano-British Field System and Pits	107-108
Figure 42	Site 21, Section Drawings	107-108
Figure 43	Site 18, Plan of Multi-Period Site	114-115
Figure 44	Site 18, Section Drawings (a)-(m)	114-115
Figure 45	Site 18, Section Drawings (n)-(t)	121-122
Figure 46	Site 18, Plans of Inhumations	123-124
Figure 47	Site 1, Location of Ridge and Furrow and Topographical Survey	131-132
Figure 48	Site 3, Ridge and Furrow	132-133
Figure 49	Site 4 and 5, Medieval Landscape and Location of Topographical Survey	133-134
Figure 50	Site 7, Location of ?Medieval Road	135-136

Figure 51	Site 7, Section Drawing of ?Medieval Road	135-136
Figure 52	Site 8, Location of Medieval Pottery Scatter and Remains of Furrows	138-139
Figure 53	Site 14, Medieval Pottery Scatter and Remains of Furrows	139-140
Figure 54	Site 20, Medieval pottery Scatter and Ridge and Furrow	140-141

## LIST OF TABLES

Table 1	Summary of Archaeological Sites	2
Table 2	Location of Pipeline Construction Plots	8
Table 3	Undated Linear Features	143

## LIST OF PLATES

Plate 1	Iron Age enclosure cropmark at Site 22	150
Plate 2	Romano-British well [2029], Site 2	
Plate 3	Waterlogged conditions at Romano-British, Site 2	
Plate 4	Late? Iron Age ring gully, Site 6A	
Plate 5	Romano-British stock enclosure, Site 9	
Plate 6	Cropmarks of Romano-British and Medieval features in the vicinity of Site 21	
Plate 7	Late Iron Age ring ditch [1990], Site 18	
Plate 8	Section (a) through Late Iron Age ring ditch [1990], Site 18	
Plate 9	Late Iron Age ring ditch [1993], Site 18	
Plate 10	Anglo-Saxon Skeleton 1989, Grave cut [1987], Site 18	
Plate 11	Anglo-Saxon Seax from grave [1981], Site 18	
Plate 12	View south from ring ditch [1993], Site 18	
Plate 13	View north from rectangular ditch [2332], Site 18	
Plate 14	Cropmark showing roadway, Site 7	
Plate 15	Trench through ?Medieval road, Site 7	
Plate 16	Evaluation trench to the north of Car Dyke in Plot 68	
Plate 17	Construction of thrust pit to the north of Car Dyke in Plot 68	

## 1 SUMMARY

### 1.1 General

This report presents the results of the archaeological evaluations, excavations and watching brief along the Transco *Hatton to Silk Willoughby* Gas Pipeline. The route is some 38km long and connects the existing Above Ground Installations (AGIs) at Hatton (TF 173762) and Silk Willoughby (TF 084436) in Lincolnshire. The route runs roughly north to south through the central part of the county, its middle section crossing the Witham Fens (Figure 1).

Following several preliminary archaeological surveys, Network Archaeology Ltd (NAL) was commissioned by Laing Engineering Ltd, on behalf of Transco, to carry out archaeological fieldwork both prior to and during pipeline construction, in order to locate and record any archaeological remains along the route.

### 1.2 Results

Archaeological pre-construction survey prior to 1994 (the original pipeline construction date), and throughout 1997 and 1998, highlighted several areas of archaeological potential along the route. Mitigation at this early stage meant that the line could be moved away from, or strategies implemented to avoid, *known* sites. Previously unknown sites were discovered during the construction phase, when a permanent-presence watching brief was carried out between March and July 1998. This report details the results of all these works.

A total of twenty-two sites of varying date and form were recorded along the pipeline, a 'site' in this instance being a definable area of activity evinced by a significant concentration of artefactual and/or feature remains. These included significant Mesolithic/early Neolithic flint scatters, late Neolithic/Bronze Age flint and pottery scatters, possible Bronze Age settlement sites, Iron Age ritual and settlement sites, Romano-British settlements and field systems, an Anglo-Saxon cemetery, a medieval roadway and numerous medieval furrow and pottery concentrations. The report has allocated these sites to their respective archaeological periods, which will be discussed in chronological order.

A further eleven isolated linear features were recorded. All of these were undatable (but probably modern) ditches and will be discussed as a separate category following the main period discussions.

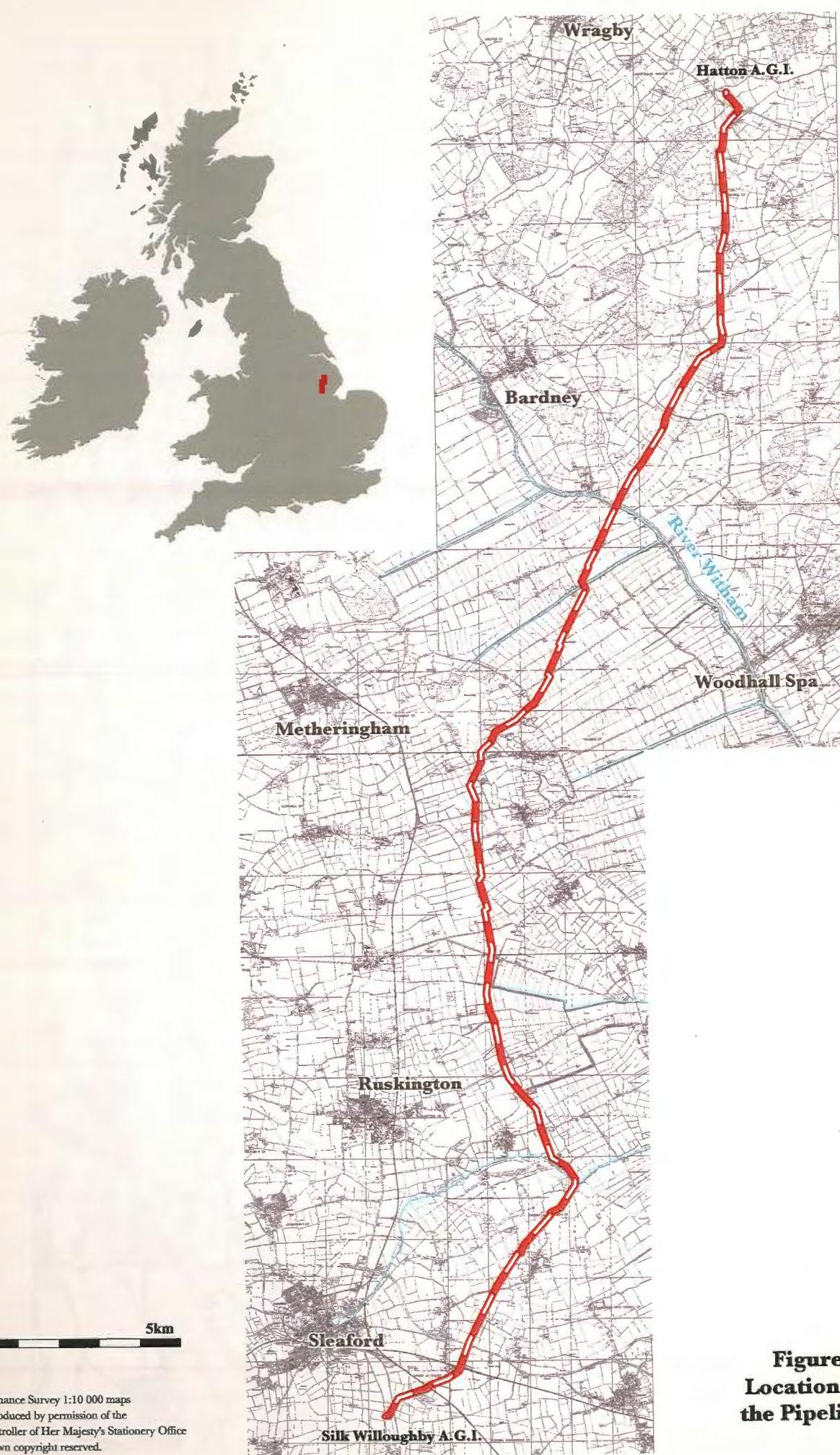
Fieldwalking, geophysical and evaluation surveys were carried out adjacent to Scheduled Ancient Monument (SAM) No.314, a well-preserved portion of the Roman waterway Car Dyke, below which the pipeline passed. These surveys took place prior to the excavation of thrust and reception pits either side of the monument. No archaeological remains were detected during these surveys.

Table 1 below provides a brief description of each site to accompany the site location map (Figure 2). The eleven undatable, isolated features are listed in italics but are not allocated a 'site' number and are not shown on the site location map.

SITE NO.	PLOT NO.	NGR (TF)	DESCRIPTION	PERIOD	LOCATION
1	3	17590 75796	Ridge and furrow earthworks and pottery	Medieval	Hatton
2	8	17176 74842	Field system, pits and well	Romano-British	Greenfield Farm, Minting
3 & <i>Isolated feature</i>	8 - 9	17146 75012- 17169 74280	Ridge and furrow field system, pottery; <i>Field Boundary Ditch [2142]</i>	Medieval; <i>Undated</i> (?Post-Med/Mod)	Greenfield Farm, Minting
4	12	17220 72964	Ridge and furrow earthworks and pottery	Medieval	Home Farm, Gautby
5	17	17090 72280	Ridge and furrow earthworks and pottery	Medieval	Great Park, Gautby
<i>Isolated Feature</i>	19	17077 71886	<i>Field Boundary Ditch [4403]</i>	<i>Undated</i> (?Post-Med/Mod)	<i>Moor Farm, Bucknall</i>
6	20	17064 70624	Settlement and field system	Late Iron Age-Romano-British	Moor Farm, Bucknall
<i>Isolated Feature</i>	42	14162 65490	<i>Field Boundary Ditch [7018]</i>	<i>Undated</i> (?Post-Med/Mod)	<i>Hare Booth Farm, Metheringham Delph</i>
<i>Isolated Feature</i>	43	14110 65348	<i>Field Boundary Ditch [7014]</i>	<i>Undated</i> (?Post-Med/Mod)	<i>Duns Dike Bridge, Metheringham Delph</i>
<i>Isolated Feature</i>	44	13940 65033	<i>Field Boundary Ditch [7003]</i>	<i>Undated</i> (?Post-Med/Mod)	<i>Duns Dike Bridge, Metheringham Delph</i>
<i>Isolated Feature</i>	46	13777 64713	<i>Field Boundary Ditch [8006]</i>	<i>Undated</i> (?Post-Med/Mod)	<i>Duns Dike Bridge, Metheringham Delph</i>
<i>Isolated Feature</i>	61	12834 62238	<i>Field Boundary Ditch [8003]</i>	<i>Undated</i> (?Post-Med/Mod)	<i>Blankney Fen Farm, Blankney Farm</i>
7	71	12042 60950	Roadway	?Medieval	Linwood Moor
<i>Isolated Feature</i>	74	11771 60707	<i>Field Boundary Ditch [911]</i>	<i>Undated</i> (?Post-Med/Mod)	<i>Linwood Moor</i>
<i>Isolated Feature</i>	74	11792 60713	<i>Field Boundary Ditch [914]</i>	<i>Undated</i> (?Post-Med/Mod)	<i>Linwood Moor</i>
<i>Isolated Feature</i>	75	11434 60536	Ditch [923], probably associated with nearby farm building	<i>Undated</i> (?Post-Med/Mod)	<i>Linwood Moor</i>
8	76 - 81	11338 60470- 11040 59812	Pottery scatter and remnant furrows	Medieval	Martin
9	88	10770 58928	Field system	Romano-British	Bogle Holt, Martin
10	109	11050 54120	Artefact scatter and buried Bronze Age soil	Late Neolithic to Bronze Age	Dorrington Fen
11	125	12600 49974	Pottery scatter, ditch and posthole	?Romano-British	Anwick Fen

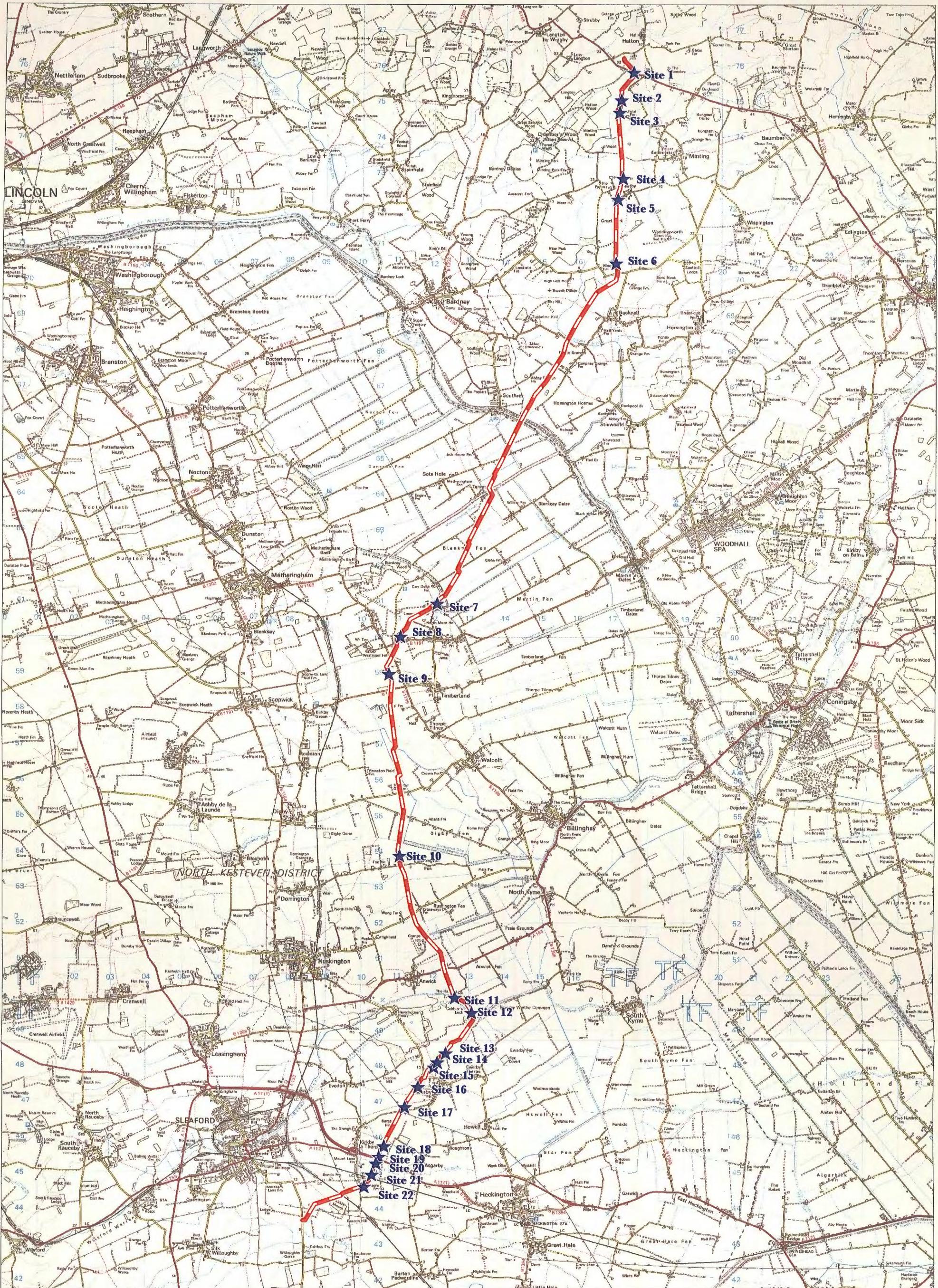
SITE NO.	PLOT NO.	NGR (TF)	DESCRIPTION	PERIOD	LOCATION
12	125 - 128	12538 50138- 13150 49310	Flint scatter, Bronze Age pottery and possible blade fragment	Late Neolithic to Bronze Age	Cobbler's Lock, Anwick Fen
<i>Isolated Feature</i>	128	13125 49259	<i>Field Boundary Ditch [1715]</i>	<i>Undated (?Post-Med/Mod)</i>	<i>Cobbler's Lock, Anwick Fen</i>
<i>Isolated Feature</i>	128	12992 49068	<i>Field Boundary Ditch [1719]</i>	<i>Undated (?Post-Med/Mod)</i>	<i>Cobbler's Lock, Anwick Fen</i>
13	131	12518 48551	Ditch [1729]	Pre-13th/14th century; ?Iron Age	Ewerby
14	131- 136	12510 48542- 11464 47242	Pottery scatter and furrow remains	Medieval	Ewerby
<i>Isolated Feature</i>	132	12322 48336 & 11999 47982	<i>Two field boundary ditches [1727], [1733]. Cut into alluvium subsoil (1732)</i>	<i>Undated (?Post-Med/Mod)</i>	<i>Ewerby</i>
15	132	11900 47884	Two substantial ditches and gully	Iron Age	Ewerby
16	135	11612 47472	Settlement : ditches, pits and postholes, five roundhouse gullies	Iron Age	Ewerby
17	139	11320 47018	Settlement : ditches, gullies, pits	Iron Age	Ewerby
18	145	10647 45772	Multi-period site including Mesolithic/Neolithic/Bronze Age artefacts, Iron Age round and square barrows, Romano-British artefacts, Anglo-Saxon burials and Medieval furrow remains	Mesolithic; Neolithic; Bronze Age; Iron Age; Romano-British; Anglo-Saxon; Medieval	Kirkby la Thorpe
19	146	10526 45538	Iron Age settlement remains: ring ditch, boundary ditches, gullies and pits. Re-deposited Bronze Age pottery	Bronze Age; Iron Age	Kirkby la Thorpe
20	145 - 151	10718 45908- 09545 44428	Pottery scatter and furrow remains	Medieval	Kirkby la Thorpe
21	147 - 149	10440 45320- 10356 45090	Field system and pits	Romano-British	Kirkby la Thorpe
22	150	10200 44734	Rectilinear enclosures with settlement debris	Iron Age	Kirkby la Thorpe

*Table 1. Summary of Archaeological Sites*



**Figure 1:**  
**Location of**  
**the Pipeline**

Ordnance Survey 1:10 000 maps  
reproduced by permission of the  
Controller of Her Majesty's Stationery Office  
Crown copyright reserved.



Scale 1:100 000

Figure 2: Location of Sites 1 - 22

## 2 INTRODUCTION

### 2.1 Requirements of the Brief

All archaeological work was undertaken in accordance with Transco's general briefs for Field Evaluation, Excavation, Watching Brief and Archive and Publication (1997). In response to these briefs, NAL produced detailed Method Statements. The work conformed to the Institute of Field Archaeologist's (IFA) *Code of Conduct* (1997), and the IFA's *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology* (1997) and *Standard and Guidance for Archaeological Watching Briefs*, (1994). The work was managed in accordance with the methods and practice described in *The Management of Archaeological Projects, second edition* (English Heritage, 1991) and also adhered to the requirements set down in the *Lincolnshire Archaeological Handbook* (Lincolnshire County Council Archaeology Section, 1998.)

All comments regarding the need for further archaeological investigation are intended only as a guideline for future work, by any party, beyond the limits of the pipeline easement. Transco have satisfied all archaeological requirements, as set out in their general brief, within the limits of the construction site.

### 2.2 Project Background

#### 2.2.1 Results of 1993 - 1994 Investigations

The original construction date for the pipeline was Summer 1994. Prior to this, an archaeological appraisal was carried out, followed by fieldwalking (Brookes *et al*, 1993). The fieldwalking produced no archaeological sites, although an isolated geophysical survey led to a minor re-route in the area of Greenfield Farm (TF 171750).

#### 2.2.2 Results of the 1997 Desk-Based Assessment

An Archaeological Desk-Based Assessment (ADBA) was carried out by NAL in January 1997. This recorded 211 archaeological sites and find spots/scatters within, (or very close to) a 1km-wide data-collection area. Each site was placed into one of five categories (A-E), ranging from Scheduled Ancient Monuments to single find spots. Most sites were categorised 'B' and 'C', that is, considered to be of sufficient archaeological importance to be avoided prior to any initial field survey. One Category B site (RCHME cropmark site, TF 1045) and one Category C site (cropmark of possible trackway, TF 1771), thirteen Category D sites (mainly ridge and furrow field systems), and 37 Category E sites (most of these recent field boundaries) were crossed by the proposed route. Engineering constraints meant that the pipeline route could not be re-routed at this stage, and as a consequence further investigatory measures were recommended.

#### 2.2.3 Results of the 1997 Fieldwalking and Field Reconnaissance Surveys

A programme of Non-Intrusive Field Survey was carried out by NAL in December 1997, which consisted of fieldwalking and a field-reconnaissance survey. This fieldwork produced no artefact concentrations which could be interpreted as representing discrete archaeological sites. It did however, locate three small medieval pottery scatters and four dispersed prehistoric flint scatters. The field-reconnaissance survey identified three areas of upstanding ridge and furrow, and highlighted the potential for archaeological and environmental remains to be found preserved within and beneath the peat in the Witham Valley.

#### 2.2.4 Results of the 1998 Geophysical Survey

Geophysical survey was carried out along the proposed pipeline route. This comprised a full magnetic scan of all areas, followed by more detailed gridded survey where appropriate. The geophysical survey was carried out in January and February of 1998 (GSB 98/07). The combined results of these surveys led to the recommendation that thirteen areas would require further investigation by trial-trench evaluation in advance of construction (See Appendix 13 for Evaluation Report).

### **2.2.5 Results of the 1998 Evaluation Trenches**

NAL were commissioned by Laing Engineering Ltd between 6th of February and the 17th March 1998 to carry out a programme of field evaluation. The majority of the evaluation trenches produced geological anomalies, agricultural features or modern features. They did, however, locate two areas of archaeological interest, as follows.

#### **Plot 146 (Site 19), (OS Field 4754, south-east of Kirkby La Thorpe, TF 105 455)**

Fieldwalking in this area recovered one Roman and two medieval pottery sherds. Magnetic scanning produced positive responses and therefore a more detailed gridded magnetometer survey was employed. This highlighted at least twelve pit-type anomalies. A 4m x 15m evaluation trench was machine-stripped and hand-excavated over these anomalies revealing several small, irregular pits (the result of gravel quarrying or natural disturbance), and a curvilinear feature containing pottery, animal bone and charcoal which may represent the gully of a round house. The pottery dates to the late Iron Age period.

#### **Plot 149 (Site 21), (OS Field 0003, south of Kirkby La Thorpe ,TF 104 451)**

The Desk-Based Assessment identified a site from the RCHME'S aerial photographic National Mapping Programme, which was described as probably relating to a Deserted Medieval Village. Two groups of cropmarks were known either side of the proposed route. A detailed magnetometer survey produced evidence of linear & curvilinear features. The area was recommended for trial-trenching ahead of construction and two 10m x 2m trenches were opened. Excavation revealed ditches containing bone, charcoal and Romano-British pottery.

Both of the above sites were subsequently (during the watching brief) found to represent more extensive settlement remains, so have been discussed in detail within their relative periods - Iron Age and Romano-British respectively (Sections 7 and 8). For details of the remaining evaluation trenches, where no significant remains were discovered, see Appendix 13.

### **2.2.6 Results of Investigations at Car Dyke (SAM No.314) (TF 123 612)**

Transco was granted Scheduled Monument Consent by the Department of National Heritage to bore the pipeline beneath this Roman waterway (English Heritage Ref: HSD 9/2/2901). The Consent required what the ADBA had recommended, that a geophysical survey be carried out either side of the monument where the pipeline groundworks were to be placed. The survey was conducted by Geoquest Associates on 28th October 1997, and highlighted probable archaeological features on the northern bank of the monument (Geoquest, 1997). This area was topsoil-stripped under supervision in February 1998 and produced a series of natural tree-boles but no archaeological remains (Plates 16-17). NAL Report No.133 deals entirely with these investigations, a copy of which will be submitted to English Heritage.

### **2.3 Objectives of the Evaluations, Excavation and Watching Brief**

The general objectives of the field evaluation were:

- to gather sufficient information to establish the presence or absence, extent, condition, character, quality and date of any archaeological remains at selected sites along the proposed pipeline route;
- to assess the overall value and importance of any such archaeological sites;
- to assess the potential impact of the pipeline on each site;
- to provide information for the design of site-specific mitigatory measures;
- to provide sufficient information to determine the need for open-area excavation at each site, for which avoidance was not possible or desirable at this stage.

- to provide sufficient information to determine the need for open-area excavation at each site, for which avoidance was not possible or desirable at this stage.

The general objectives of the excavations were:

- to record all features of archaeological interest that would be damaged/destroyed during the construction of the pipeline;
- to gather sufficient information to establish the presence or absence, extent, condition, character, quality and date of any archaeological 'remains' at selected sites along the proposed pipeline route;
- to assess the overall archaeological value and importance of any archaeological sites.

The general objectives of the watching brief were:

- to locate, recover, identify, and conserve (as appropriate) any archaeological artefacts exposed during the pipeline's construction;
- to locate, sample, interpret and record any archaeological deposits exposed during the pipeline's construction;
- to gather sufficient information to establish the presence or absence, extent, condition, character, quality and date of any archaeological remains at sites along the pipeline route;
- to recommend mitigatory measures for preservation *in situ* of any archaeological deposits (where feasible and desirable);
- to sample (and submit for analysis) any deposits with the potential to yield palaeoenvironmental data.

### 3 DESCRIPTION OF THE PIPELINE CORRIDOR

#### 3.1 General

The 38km-long pipeline runs through the central part of Lincolnshire, beginning just under 1km south-west of the village of Hatton, 20km east of Lincoln (TF 173762) (Figure 1). It travels in a south by south-westerly direction before terminating 3.5km to the north-east of the village of Silk Willoughby, and 2km south-east of Sleaford (TF 084436).

#### 3.2 Topography and Geology

The upper third of the proposed pipeline route crosses the southern part of the Lincoln Clay Vale; it then passes into the Fenlands of the Witham Valley for its central portion, and finally traverses part of Lincoln Heath for its lower third.

The land along the route is low lying and of low relief, with ground elevations generally ranging from 10-15m above Ordnance Datum, although the northern and southern ends do reach 20-30m OD, and the Fenlands drop as low as 2m OD.

The geology along the pipeline route consists of a series of clay, marine and estuarine deposits, sands, gravels and occasional bands of alluvium. The deposits all date to the Upper Jurassic and later (Figure 3).

The northern end of the pipeline route, between Hatton AGI (TF 172762) and the River Witham (TF 144660) almost exclusively consists of drift deposits of Boulder Clay with several bands of alluvium and fen gravel and a single outcrop of solid geology (Upper Jurassic Kimmeridge Clay).

From the River Witham the pipeline runs southwards through a series of marine and estuarine deposits across the Metheringham and Blankney Fens until Car Dyke (TF 123611), where the geology changes to river sands and gravels with several outcrops of Boulder Clay. Within these Fens, several bands of peat were identified in the pipe-trench.

Immediately south of road crossing 12, at TF 108583, the Boulder Clay is replaced by a band of Upper Jurassic Oxford Clay which was present for only 600m along the pipeline route. According to the Geological OS map of Lincoln (Sheet 114) the clay is replaced by peat deposits, extending to, and possibly beyond, Dorrington Fen. During the construction of the pipeline it soon became clear that this was not the case, and that any peat deposits that did occur were deeply imbedded below clay and silt beds. It is likely that the peat recorded by the OS has deteriorated, having been eroded through the draining of this fenland over the last few centuries in order to create farmland.

Between Dorrington Fen and the village of Anwick, the geology was seen within the pipe-trench to comprise mainly of Boulder Clay, interspersed with the occasional marine deposit.

At Anwick (TF 130490) the Boulder Clay beds are cut by a thin band of peat and an early marine deposit dating to the Neolithic, before continuing as the dominant surface geology until Bargate Hill to the south-west (TF 109462).

At Bargate Hill the drift deposit of Boulder Clay change to the solid geology of Oxford Clay. This continues for approximately 250 metres before changing to Sleaford sands and gravels. These glacial deposits are much later in date (Quaternary period), and overlie the Oxford Clay beds. The Sleaford beds continue to the south of the village of Kirkby la Thorpe for a kilometre before reverting to the Oxford Clay beds again at TF 082455, which continue almost uninterrupted until the end of the pipeline. A single band of alluvium, approximately 200m wide, overlies the Oxford Clay beds at TF 09480 44380.

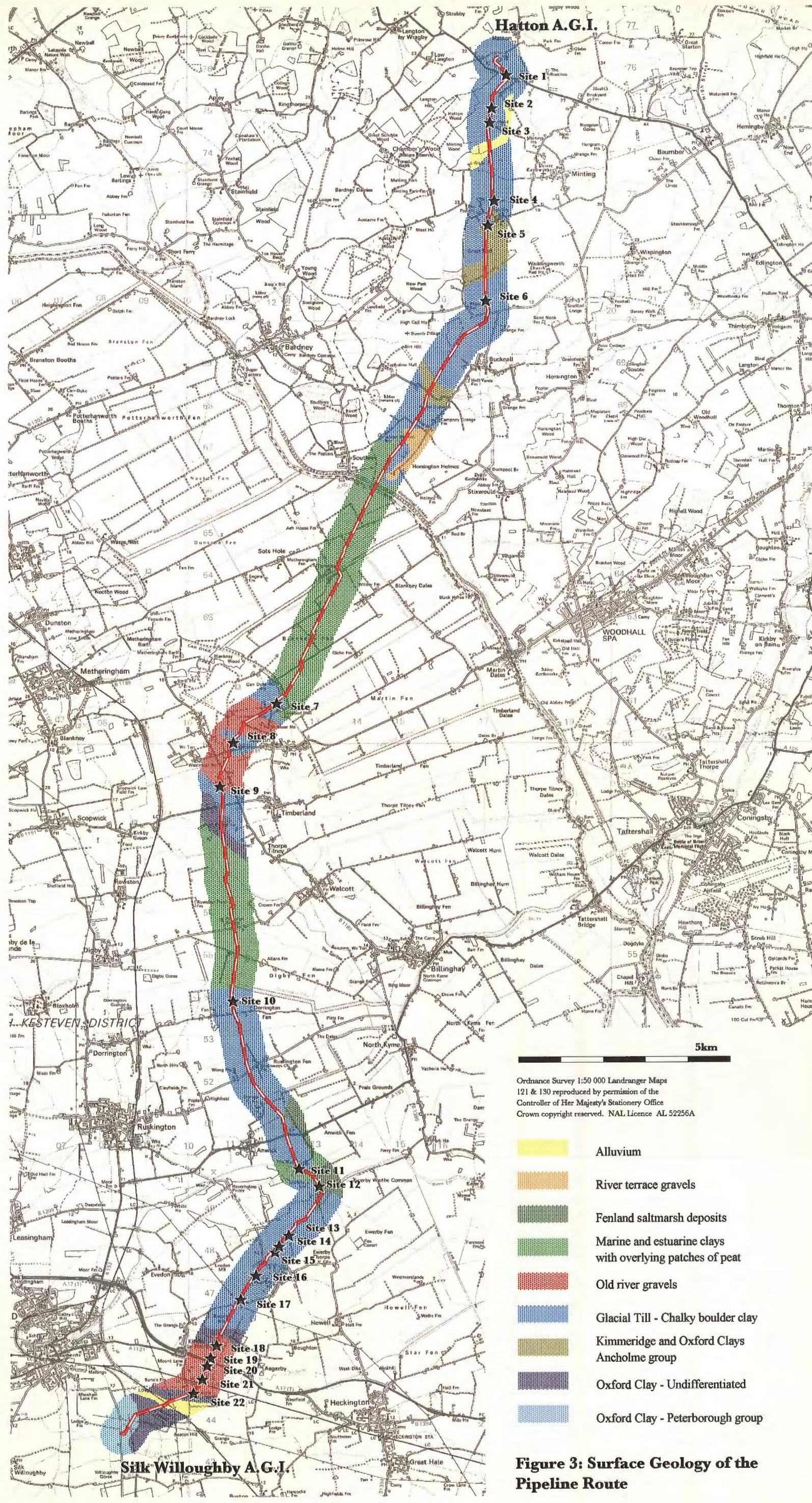
### 3.3 Soils and Landuse

The low lying nature of the land in this part of Lincolnshire, and the underlying clay geologies, have generally resulted in fairly heavy soils, naturally prone to waterlogging. Because of this, however, a long history of drainage has helped to develop the area for arable farming, making it today one of the most important fertile agricultural areas in the country. This is particularly the case throughout the Witham Fenland. This change to intensive farming has unfortunately produced a gradual lowering of the water table, and an acceleration in the erosion of the peat deposits in the area.

## 4 METHODOLOGY

### 4.1 Pipeline Construction

The pipeline route comprised twenty-two construction sections, delimited by road crossings. The sections ran 'negative' to 'positive' (*i.e.* north to south, from Hatton A.G.I to Silk Willoughby A.G.I), and were numbered sequentially (0-21). Each field or plot of land crossed by the pipeline was located within a construction section, but was also given a unique plot number from first Plot 1, immediately



**Figure 3: Surface Geology of the Pipeline Route**

positive of the Hatton A.G.I, to final Plot 157, negative of Silk Willoughby A.G.I. Table 2 below lists each plot, together with its length and NGR (half way point on pipeline centreline).

Construction Section Number	Construction Plot Number	Route length per Plot (to nearest 10m, based on pipeline centreline)	NGR (centre of plot along pipeline centreline)
1	1	70	TF 1730 7610
	2	170	TF 1739 7602
	3	240	TF 1752 7586
2	4	210	TF 1751 7565
	5	150	TF 1739 7551
	6	210	TF 1726 7538
	7	270	TF 1721 7514
	8	230	TF 1718 7488
	9	460	TF 1715 7426
	10	540	TF 1720 7371
3	11	330	TF 1722 7327
	12	250	TF 1722 7298
	13	30	TF 1721 7283
	14	250	TF 1719 7268
	15	70	TF 1717 7255
4	16	130	TF 1713 7244
	17	360	TF 1708 7220
	18	140	TF 1708 7211
	19	740	TF 1708 7177
	20A	170	TF 1707 7120
	20	590	TF 1707 7070
	21	270	TF 1712 7028
5	22	560	TF 1699 6991
	23	270	TF 1662 6969
	24	110	TF 1649 6956
	25	90	TF 1643 6948
	26	150	TF 1636 6937
	27	110	TF 1629 6927
	28	130	TF 1622 6916
	29	120	TF 1616 6906
	30	600	TF 1589 6860
	31	70	TF 1574 6830
6	32	360	TF 1565 6808
	33	300	TF 1553 6778
	34	20	TF 1543 6764
	35	110	TF 1539 6758
7	36	480	TF 1523 6732
	37	200	TF 1506 6703
	38	160	TF 1494 6691
	39	260	TF 1481 6674
	40	320	TF 1466 6648
	40A	270	TF 1452 6622
	41	250	TF 1435 6588
	42	470	TF 1419 6555
	43	50	TF 1408 6531
	44	300	TF 1400 6515

Construction Section Number	Construction Plot Number	Route length per Plot (to nearest 10m, based on pipeline centreline)	NGR (centre of plot along pipeline centreline)
8	45	310	TF 1385 6485
	46	190	TF 1373 6464
	47	370	TF 1365 6438
	48	110	TF 1354 6416
	49	200	TF 1361 6396
	50	130	TF 1354 6381
	51	180	TF 1347 6366
	52	170	TF 1338 6351
	53	180	TF 1331 6335
	54	110	TF 1324 6322
	55	60	TF 1321 6314
	56	180	TF 1315 6303
	57	220	TF 1360 6285
	58	140	TF 1298 6268
	59	10	TF 1299 6261
	60	160	TF 1297 6253
	61	250	TF 1288 6234
	62	250	TF 1277 6210
	63	130	TF 1269 6191
9	64	130	TF 1271 6180
	65	170	TF 1263 6167
	66	170	TF 1254 6152
	67	150	TF 1245 6137
	68	200	TF 1237 6122
	69	30	TF 1229 6113
	70	110	TF 1222 6109
	71	250	TF 1207 6098
	72	90	TF 1195 6085
	73	160	TF 1186 6077
	74	380	TF 1162 6064
	75	130	TF 1139 6052
	76	130	TF 1131 6041
	77	130	TF 1126 6029
	78	140	TF 1117 6018
	79	80	TF 1111 6011
	80	70	TF 1105 6005
	81	230	TF 1100 5992
10	82	100	TF 1100 5974
	83	200	TF 1094 5960
	84	120	TF 1087 5945
11	85	150	TF 1080 5932
	86	50	TF 1075 5923
	87	140	TF 1072 5914
	88	140	TF 1078 5901
	89	200	TF 1085 5885
	90	240	TF 1085 5860

Construction Section Number	Construction Plot Number	Route length per Plot (to nearest 10m, based on pipeline centreline)	NGR (centre of plot along pipeline centreline)
12	91	90	TF 1084 5844
	92	110	TF 1084 5834
	93	120	TF 1083 5822
	94	280	TF 1083 5801
	95	370	TF 1087 5768
	96	390	TF 1093 5730
	97	200	TF 1097 5701
	98	140	TF 1091 5683
	99	300	TF 1096 5662
	100	240	TF 1103 5635
	101	130	TF 1108 5616
	102	120	TF 1103 5606
	103	390	TF 1108 5580
13	104	310	TF 1114 5544
	105	290	TF 1119 5515
14	106	250	TF 1116 5484
	107	300	TF 1111 5457
	108	160	TF 1108 5435
	109	640	TF 1107 5390
15	110	220	TF 1118 5346
	111	180	TF 1124 5327
	112	370	TF 1129 5299
	113	150	TF 1134 5274
	114	100	TF 1136 5261
	115	50	TF 1137 5254
	116	290	TF 1142 5237
16	117	160	TF 1150 5214
	118	530	TF 1168 5183
	119	40	TF 1184 5160
	120	110	TF 1189 5153
	121	150	TF 1198 5144
	122	560	TF 1223 5116
	123	180	TF 1231 5081
17	124	600	TF 1243 5043
	125	590	TF 1269 4991
	126	210	TF 1302 4965
	127	200	TF 1314 4947
	128	380	TF 1307 4918
	129	390	TF 1285 4885
	130	240	TF 1262 4867
	131	300	TF 1245 4848
	132	880	TF 1204 4804
	133	140	TF 1184 4775
18	134	70	TF 1178 4764
	135	330	TF 1163 4751
	136	150	TF 1151 4731
	137	100	TF 1143 4719
	138	130	TF 1137 4710
	139	130	TF 1131 4699
	140	200	TF 1121 4684

Construction Section Number	Construction Plot Number	Route length per Plot (to nearest 10m, based on pipeline centreline)	NGR (centre of plot along pipeline centreline)
19	141	160	TF 1121 4668
	142	460	TF 1105 4654
	143	100	TF 1085 4616
	144	240	TF 1077 4601
	145	310	TF 1064 4577
	146	240	TF 1052 4553
20	147	100	TF 1045 4534
	148	160	TF 1040 4523
	149	300	TF 1033 4501
	150	270	TF 1011 4467
21	151	470	TF 0976 4450
	152	70	TF 0951 4441
	153	170	TF 0939 4431
	154	520	TF 0927 4421
	155	190	TF 0867 4398
	156	50	TF 0859 4385
	157	220	TF 0853 4374

*Table 2: Location of Pipeline Construction Plots*

The pipeline was constructed within a fenced easement, in general, thirty-six metres wide. The width of the easement varied in places, for example to c.50m to accommodate obstacles such as road and railway crossings and overhead power cables. The easement was divided into four zones. Excepting construction sections zero and one, where the easement was reversed, the westernmost eight metres was occupied by topsoil removed during stripping. This left a 28m-wide area, roughly along the centre of which was a four metre wide area set-aside for the subsoil trench and pipe-trench. To the west of this, a 12m wide strip, the 'running track', was kept clear for use by vehicles and machinery, whilst to its east, a 12m wide area was used for the storage of pipe-trench material.

Topsoil was stripped from the working width of the easement in two operations. Initially, a third of the area was stripped by back-acting tracked excavators with smooth blades. The remaining two thirds was then pushed aside by D6 and D8 bulldozers.

Along much of the pipeline route, a 4m wide subsoil head layer was removed along the centre-line prior to the excavation of the pipe-trench proper, using back-acting excavators with toothed-buckets. Any extracted material was stored separately from the deeper pipe-trench deposits, and then replaced last after the pipe was in the ground and the deeper deposits had been replaced. This subsoil head layer was between 0.15m and 0.40m deep.

Trenching was carried out by back-acting excavators with toothed buckets. The average width of the pipe-trench was 3m wide at the surface (irrespective of whether a 'subsoil trench' had been excavated), narrowing to 1.5m-2m towards the base. On average, the pipe-trench was 2.1-2.5m deep. The upper edges were battered at 45 degrees, with only the lower trench having vertical sides. A number of 'bell pits' measuring c.6m wide and 4m deep were dug to accommodate the pipe at significant bends.

Thrust bore pits were dug to negotiate roads and railways. This process involved the excavation of a pit either side of the obstruction: a thrust bore pit negative (north) of the road or railway, and a reception pit on the positive (south) side. These pits varied in size and depth, depending on the obstruction.

Pre- and post-construction drainage was carried out along the full length of the line. A small trench, averaging 0.30m wide, was excavated parallel to the pipe-trench. Into this narrow trench, a plastic drainage pipe was placed, before being filled with coarse gravel.

#### **4.2 Archaeological Methods and Mitigation Strategies**

A permanent-presence watching brief was maintained throughout the entire topsoil strip. Each time archaeological deposits were identified, NAL immediately informed Laing Engineering Ltd and Transco to implement one or more of the following strategies:

- Hand-cleaning of limited areas.
- Machine-cleaning of limited areas (in order to delimit an archaeological site and define any features within it).
- Hand-excavation without the need for additional personnel.
- Mobilisation of a small additional team of archaeologists to hand-excavate and record, thereby freeing the main archaeologists to continue with the watching brief.
- Mitigation of damage either by a restricted strip, or by laying materials (such as bog-mats) along a limited section of the easement, to protect the archaeological remains exposed.

The chosen course of action depended upon:

- the density and physical extent of any archaeological deposits.
- the location of deposits within the easement.
- the (potential) importance/value of the archaeological deposits.
- the period of time available in which to investigate the site, between stripping and pipe stringing/bending.

In the case of single or isolated groups of archaeological features, the archaeologists undertaking the watching brief cleaned, excavated and recorded them in the course of their daily duties.

Any excavation strategy took account of the fact that all features lying in the course of the proposed pipe-trench would be destroyed, and therefore that such features needed priority investigation. Occasionally it was sufficient to sample those features lying away from the pipe-trench, although any strategy relating to these features did take account of:

- potential compaction damage along the running track.
- potential compaction damage over the remainder of the easement.
- the post-construction drainage.
- eventual subsoil ripping (to relieve overall compaction) during land reinstatement.

Any archaeological excavation endeavored to be minimally disruptive to the construction schedule of Laing Engineering Ltd and Transco.

Pipeline trenching operations were closely monitored and all visible archaeological features recorded. A geological record was also produced from observations made along the entire pipe-trench.

### **4.3 Archaeological Visibility within the Construction Environment**

Visibility of archaeological remains was and is always a significant factor during the construction of a pipeline. Visibility is dependent on many factors, including machine type, topsoiling depth requirements, weather and geology. All these factors were noted throughout all investigations.

The greatest opportunity to see features was during the initial easement topsoiling of the quarter side strip (sometimes up to half was cleared in this way), since this was carried out using smooth ditching buckets. The remainder of the easement surface was smeared, compacted and churned up by the bulldozers. Topsoiling by the back-actors was therefore monitored very closely, and if a 'site' was discovered, negotiations were made to clear the whole easement width with this method. The speed of construction activities affected opportunities to watch all initial topsoiling, as plant could achieve up to 1km of topsoiling and 800m of trench cutting a day, some of it in different locations.

Back-acting excavators dug out the pipe-trench which resulted in uneven sides, and which therefore led to difficulty in defining features, especially as it was essential to obey health and safety restrictions. On very soft ground, machines would immediately batter the sides of the trench to minimise collapse, thus making visibility very difficult, especially if the area comprised running sands and gravels.

A further limitation in recording archaeological features within the pipe-trench was that they were rarely cut perpendicular, and therefore suffered from varying degrees of distortion, requiring rectification to ascertain their original form.

### **4.4 Field Records**

NAL's Project Code for the Hatton to Silk Willoughby pipeline is HWP 98, the museum accession number being 269.98. Both of these were agreed in advance with Lincoln City and County Museum in November 1997.

Each 'site' identified by the watching brief was originally numbered with its Construction Section and Plot number. This information was used by all artefact specialists, so appears in their specialist reports in the appendices. Subsequently, site numbers 1-22 were allocated in place of the Section and Plot reference. Thus, the archaeological remains discovered within *Section 19, Plot 145*, have become *Site 18*. These new site numbers are used throughout this report.

All features and deposits were given a block of unique four-digit context numbers for recording purposes. In this report, if a four digit number refers to a feature 'cut', it is placed in square brackets, whilst if it refers to a fill, round brackets are used.

A system of pro-forma record sheets with appropriate fields were used for on-site recording. This system has been developed by NAL over the past 18 months, and is in a format acceptable to the IFA.

A full and proper written record was made of all archaeological deposits and any significant natural deposits located during surface and/or trench inspection.

The location of archaeological deposits found during topsoil stripping were recorded by total station theodolite survey.

Archaeological deposits found during trenching were located either by total station survey or by relating drawn feature (ditches, pits, etc) sections to pipe welds (the NGR and OD level being supplied by Laing Engineering Ltd at the end of the project).

A full and proper drawn record was made of all archaeological deposits and normally included:

- OS base plans (at an appropriate scale) showing the location of any excavation areas.

- excavation area plans (at 1:20, 1:50 or 1:100 scale, as appropriate), showing all archaeological and natural deposits.
- detailed plans at 1:20 scale of significant features.
- section drawings at 1:10 scale or 1:20 scale (as appropriate) of all excavated features or features seen in trench sections.
- section drawings at 1:10 or 1:20 scale (as appropriate) of representative sections showing any overlying site stratigraphy.

Multi-context recording was normally used, unless the stratigraphy was sufficiently complex to warrant recording on a single-context basis.

Detailed records (drawn and written) were kept of the depth below topsoil level of archaeological and/or basal deposits across each site under investigation.

A full and proper photographic record (35mm format) in monochrome and colour was taken. This included overall shots of each site, work in progress, overall pre-excavation shots and detailed feature shots. A suitable scale, context number and north arrow (if appropriate) appeared in all photographs whenever possible.

Any digital records appropriate to the work will be included within the project archive.

## 5. RESULTS

### 5.1 Introduction

A total of twenty-two sites of varying date and form were recorded along the pipeline during the watching brief (Figure 2). These range in type from solitary linear features to extensive multi-period settlement and funerary sites. They also include significant artefact scatters with little or no accompanying archaeological features. This report has allocated these sites to their respective archaeological periods, which will be discussed in chronological order. Due to difficulties in distinguishing between gradually merging technologies, the prehistoric periods *Mesolithic*, *Neolithic* and *Bronze Age* will be discussed under that single heading and with two broad sub-divisions: *Mesolithic to Early/Middle Neolithic* and *Late Neolithic to Bronze Age*.

Each period is preceded by a short description of its principal characteristics, with particular reference to its development within Lincolnshire. This is intended to assist the reader in placing each site within a broader cultural and economic context.

Multi-period sites are discussed, in their entirety, within the section of the dominant period. A brief mention of the site is, however, made within subsidiary period sections, to allow for cross-referencing.

All undated, isolated features, *i.e.* probable post-medieval field ditches, are summarised after the Medieval section.

## 6. MESOLITHIC, NEOLITHIC & BRONZE AGE

### 6.1 Archaeological Background

An improvement in climate heralded the end of the most recent glacial phase and the beginning of the Mesolithic period *c.* 8300 BC. The subsequent rise in sea level eventually resulted in the separation of Britain from the continent in the middle 7<sup>th</sup> millennium (*c.*6500BC) whilst the end of frost weathering allowed deeper soils to form leading to the gradual replacement of the open tundra-like vegetation by woodland. Throughout the Mesolithic period, the economy was based on hunting and gathering, probably carried out by small groups of people moving about a particular territory. Of the settlement sites in this country which have been fully investigated, occupation appears to have been intermittent, perhaps seasonal (Adkins, 1998). Few sites are known in Lincolnshire, with the majority of evidence for the period coming from flint work. No significant sites are recorded in the vicinity of the pipeline.

The Neolithic is usually characterised as the period when the hunter-gatherer lifestyle of the Mesolithic was gradually replaced by more settled farming practices. The fertile soils of Lincolnshire encouraged this development at an early date, probably no later than *c.*4000 BC. Settlement evidence is again rare but the distribution of stone axes suggests that forest clearance was taking place almost everywhere and that great tracts of land were already opened up and settled by *c.*2300 BC (May, 1993). A further distinguishing feature of the Neolithic was the tradition of multiple burial in long barrow earthworks. These burial monuments occur frequently on the higher ground of the Lincolnshire wolds (*ibid*).

The first use of copper and bronze characterises the beginning of the Bronze Age *c.*2500 BC. During this period, rising sea-waters were encroaching upon eastern Lincolnshire, covering large areas of land with salt marshes and open water. This meant that lowland sites became slowly overwhelmed by marine deposits which settled and gradually formed into peat. It is only by the recent draining of the fens and the subsequent drying out and receding of the peat deposits that a large number of these ancient sites are beginning to come to light. These sites almost exclusively consist of barrows, or individual burial mounds, with little evidence for actual settlement, the nearest being located at Billingborough in the south of the county. This lack of settlement evidence may be due to a number of factors: firstly, the unstable nature of the floodplains and marshes may have prevented such settlement; secondly, any

evidence may have been destroyed by later flooding or the meandering of rivers; and thirdly, sedimentation may have covered the sites and hidden them from view (Brown, 1997).

## 6.2 Pipeline Results - Mesolithic to Early/Middle Neolithic

Fieldwalking in 1993 detected only a low level of Mesolithic activity and a slightly higher level of early to middle Neolithic activity in the form of worked flint (Appendix 1). Fieldwalking in 1997 echoed these findings with only eleven flints out of the seventy-four submitted for analysis being dated to this period. These flints came from nine fields spread out along twenty-five kilometres of the proposed pipeline, indicating an apparently low level of exploitation in the area.

A small number of positively identified Mesolithic and early-middle Neolithic flints were collected during the 1998 evaluation and watching brief stages of the pipeline. These consisted of six tools, two cores and thirty-four flakes. The only marked concentration amongst these flints was at Site 18, Kirkby la Thorpe. Excavations here accounted for both core fragments and twenty-six of the flakes. The remaining six tools and eight flakes again came from nine fields, spread out along 34km of the pipeline, once more indicating an apparently low level of exploitation in the area.

## 6.3 Site 18 Flint Scatter

Plot 145, Kirkby la Thorpe, TF 10647 45772

### Summary

*This is a multi-period site with a significant scatter of unstratified and re-deposited Mesolithic/early-middle Neolithic flint suggestive of localised activity, of an indeterminate nature.*

### Introduction

This site is situated on a slight ridge of Oxford Clay, at approximately 10m OD, halfway between the summit of Bargate Hill (at 20m OD), and the line of the present day A17 (Figure 6). The floor of the valley (at approximately 5m OD) and the surface geology of the ridge consists of free-draining Sleaford sands and gravels.

### Results

The Mesolithic/early-middle Neolithic flint assemblage predates possible late Neolithic/Bronze Age settlement activity which in turn predates Iron Age and Anglo-Saxon occupation. Of the 138 knapped flints recovered from this field during excavation, twenty-six flakes/blades and two cores have been positively identified as potentially Mesolithic/Neolithic in date. These flints were recovered from a variety of contexts across the site, all of which produced more recent artefacts. No evidence was found to suggest that these flints were anything other than re-deposited. Therefore, although they are considered a significant component of the overall artefact assemblage, they have been interpreted as representing a probable phase of late Mesolithic/Neolithic activity with no detectable associated feature digging.

Because of its complex character, this site is discussed fully within the Anglo-Saxon section (9.3).

## 6.4 Discussion

Excepting the significant findings at Site 18, the density of recovered Mesolithic/early-middle Neolithic flint is low. Whilst the numbers involved are too small to draw any conclusions regarding settlement patterns or activity centres, they do seem to indicate an increase in activity in the southernmost third of the route. This includes an increase in background noise around Site 18, immediately to the north of which a possible Mesolithic scraper and three Mesolithic blades were found.

Although there appears to be a lack of visible activity across the remaining parts of the Fens and Clay Vale, it should be remembered that any evidence which may have been deposited in the more central Fens would have been sealed under substantial later marine and estuarine deposits. Given that so few finds from this period have been made previously in these areas, the flints found during this survey,

although low in number, are highly significant and add to our limited local knowledge of Mesolithic/early-middle Neolithic activity.

### 6.5 Pipeline Results- Late Neolithic & Bronze Age

The majority of the flint collected as part of the 1993 and 1997 fieldwalking surveys reflects late Neolithic/early Bronze Age technology, and represents background activity rather than discrete sites. Even so, four areas contained slightly enhanced numbers of flints of this date:

- **South of Hatton AGI, for three kilometres to Minting, TF 17410 76030 to TF 17230 73280**  
Low density and broad distribution of sixteen flints.
- **Dorrington Fen, TF 11000 54100**  
Low concentration of nine flints covering a distance of 230m.
- **Anwick Fen, TF 13000 49600**  
A scatter of twenty-one late Neolithic/Bronze Age flints 200m to the west of a Bronze Age barrow cemetery, covering a 1.6 km stretch of the pipeline route.
- **North of Ewerby, TF 12430 48450 to TF 12100 48110**  
A slight scatter probably representing background activity from a 500m stretch of the route.

Evaluation trenching at the beginning of the watching brief in 1998, and excavation during construction, have added further to the overall background scatter of flint and have also provided ceramic evidence. The combined results indicate four significant artefact concentrations, two of which (Dorrington and Anwick Fens) have been noted above as areas of enhanced activity.

- ***Site 10, Late Neolithic/Bronze Age Artefact Scatter and Buried Soil Plot 109, Dorrington Fen, TF 11050 54120***
- ***Site 12, Late Neolithic/Bronze Age Artefact Scatter Plots 125 - 128, Cobbler's Lock, Anwick Fen, TF 12538 50138 - TF 13150 49310***
- ***Site 18, Late Neolithic/Bronze Age Artefact Scatter Plot 145, Kirkby la Thorpe, TF 10647 45772***
- ***Site 19, Late Neolithic/Bronze Age Artefact Scatter Plot 146, Kirkby la Thorpe, TF 10526 45538***

These four sites will now be individually discussed.

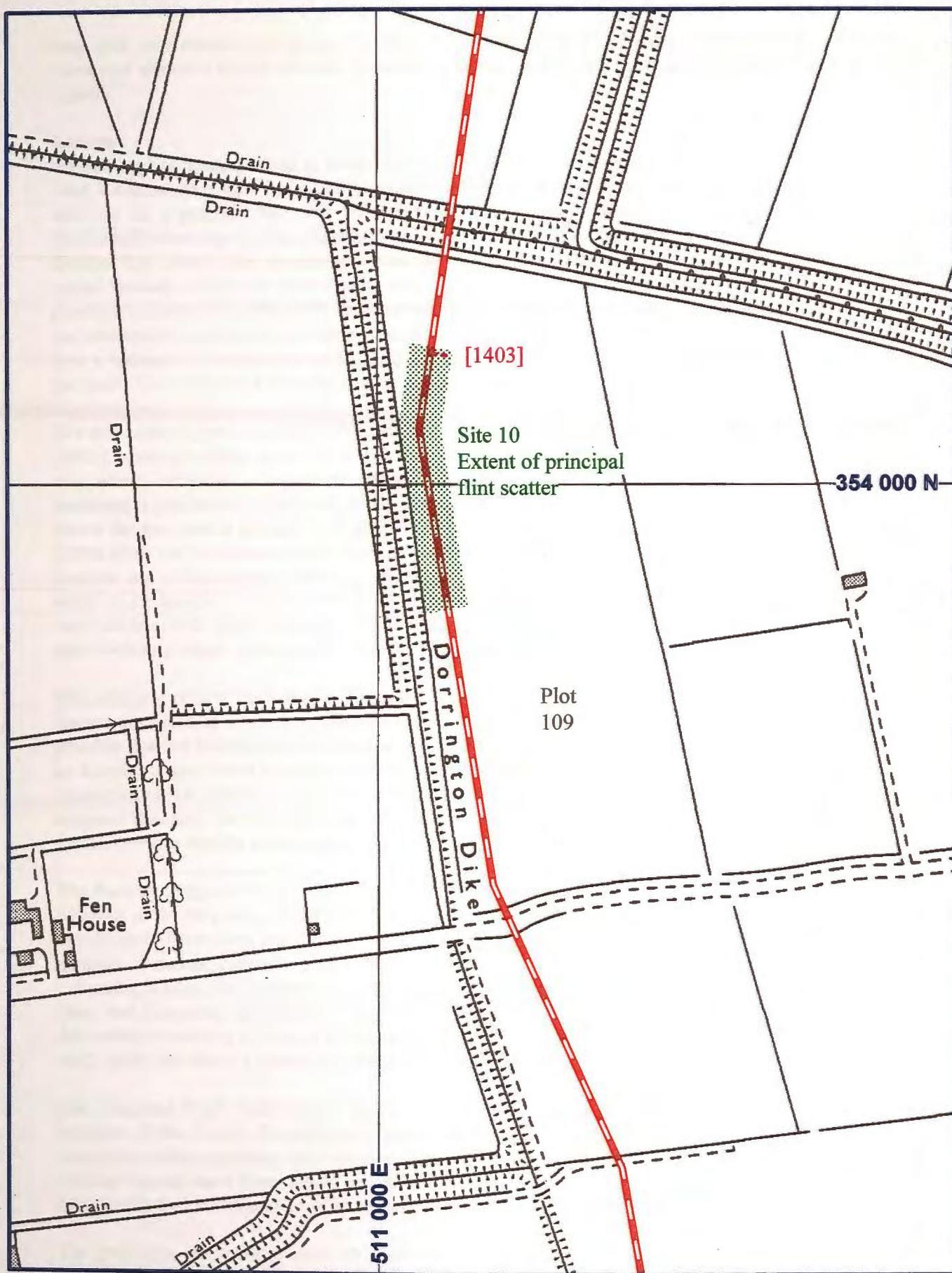
### 6.6 Site 10 Late Neolithic/Bronze Age Artefact Scatter and Buried Soil Plot 109, Dorrington Fen, TF 11050 54120

#### Summary

*This site is composed of a significant scatter of late Neolithic/Bronze Age flint and pottery, centred on a narrow peat band preserved within a natural hollow. It is suggested that these artefacts represent settlement debris which was subsequently sealed beneath extensive peat deposits. Because of modern farming methods and improved drainage, this protective layer has been almost entirely destroyed, leading to the incorporation of the artefacts into the topsoil.*

#### Introduction

This field is located on the western edge of the fenland and is bounded on two sides by the Dorrington Dike (Figure 4). The underlying geology is Jurassic Clay and although peat is mapped over this area



Scale 1:5000

Figure 4: Site 10, Late Neolithic/Bronze Age Artefact Scatter

very little was evident during construction. Given the dark, humic nature of the soil and the recent history of intensive arable farming, it seems likely that most of the peat has been incorporated into the topsoil.

### Results

Archaeological investigations in 1993, 1997 and 1998 recovered a total of 47 knapped flints from this field. Of these, two were identified as possible Mesolithic/early-middle Neolithic multi-platform cores and one as a possible Neolithic flake. The remainder of the identifiable flint assemblage is late Neolithic/Bronze Age in date (Appendix 1, Dr. 1.4/1.5). The watching brief also produced 46 sherds of Bronze Age pottery and numerous animal bones, some of which were collected from a buried soil sealed beneath a band of peat within natural hollow (1405). The buried soil produced five flints, twenty-six sherds of pottery, two eroded possible cow rib fragments and a single sheep's tooth. All of the unstratified pot was found within 40m of this peat band whilst the majority of the flint was scattered over a distance of 250m to the south. Only one scraper and two waste flakes were found to the north of the band. The majority of the bone fragments were found over a distance of 150m to the south.

The thin layer of peat, context (1404), appears to have been preserved within a slight, irregular hollow, [1403], running roughly east-west across the easement. The hollow measured approximately 10m wide and, where sectioned, a maximum depth of 0.42m from the base of the topsoil. The band of peat measured a maximum of 6m wide and 0.10m deep and was central to the hollow. Lying immediately below the peat was a thin layer of pale grey silty clay, context (1405). This layer was approximately 0.09m deep and contained occasional charcoal flecks. The aforementioned flints, pot and bone came from the top of this deposit, immediately below the peat. Although it was not possible to section the full width of the hollow it is likely that (1405) was present beneath the full width of peat layer (1404), as it was visible at both edges where the peat had eroded. The remainder of the hollow was filled (above the peat) with thin bands of sterile silty sands.

The hollow was situated along the boundary of two differing surface geologies. That to the north of the feature consisted of an orange silty sand, and it appeared to overlay blue-grey clay to the south. It is possible that the hollow was the result of water action at this junction. The lower, sterile fills would fit an alluvial origin whilst the peat indicates waterlogged conditions, at least for a period, following the deposition of the artefacts. The fact that the hollow forms a distinct 'cut-off point' for finds to the north suggests this may have marked the edge of an area of wetter, less habitable ground. Alternatively, further remains may be sealed under later alluvial deposits to the north.

### The Pottery (Appendix 2).

Analysis of the 46 pottery sherds weighing 1101g has shown that a number of vessels, at least three, are represented. Their form and decoration are indicative of middle Bronze Age bucket-shaped vessels. A number of sherds show the simple flattened or rounded rim of this type of vessel with one sherd indicating a thick flat bottomed base (Appendix 2, Dr. 2.9). Decoration consists of horizontal incised lines and fingernail impressions (Appendix 2, Dr. 2.1/2.4). Two of the sherds from (1405) show decoration consisting of a small pre-firing perforation, approximately 8mm in diameter and piercing the wall, which lies about 15mm below the rim (Appendix 2, Dr. 2.2).

The form and slight decoration of bucket-shaped, thick walled pots, is typical of the East Midlands tradition of the middle Bronze Age Deverel Rimbury type of pottery. Rims are simple and types of decoration, when apparent, are restricted to the few types as described, with simple horizontal patterns. Similar vessels have been found on settlement sites in this area such as at Billingborough, Bourne Meadow Drove, Kirkmond Le Mire and more recently at Welland Bank.

The pre-firing perforations seen on some of the sherds are quite unusual and raise the question of possible function. It has been suggested that these holes may have been used for attaching a leather or fabric cover to the pot, maybe for the storage of dry goods. A few sherds in context (1405) exhibit internal sooting which could indicate use in a domestic context such as cooking. The small fingernail

marks found on this type of pottery may indicate that women were responsible for the production of this pottery.

There is at present no reason to suggest that these vessels were made anywhere other than close to the locations where they were found. All the fabric types are consistent with those found in middle Bronze Age pottery in the area, such as the settlement site of Billingborough and the cremation cemeteries of Pasture Lodge, near Long Bennington, and at Frieston and Grantham in Lincolnshire.

Pottery of this middle Bronze Age type from the settlement site at Billingborough was given a date of 1520-1372 Cal BC, but this date is now under review. However, a date in the middle to later second millennium BC is still considered to be appropriate for this type of bucket-shaped vessel with simple rims and finger-tip decoration. At Swarkestone in Derbyshire, a small bucket-shaped vessel was found in a sawn tree-bole with the wood dating to 1440-1145 Cal BC.

The context and fragmentary nature of the pottery suggests that it originated from an area occupied in the middle Bronze Age. It is also clear that several pots are represented suggesting domestic refuse.

#### **The Flint (Appendix 1).**

The flint assemblage fits in with the date suggested by the pottery, being distinctly late Neolithic/Bronze Age in nature. A total of thirteen scrapers, one cutting flake, seven cores and twenty-five waste flakes were recovered. Two of the cores and one flake have been tentatively ascribed a Mesolithic/early-middle Neolithic date. Of the remainder, all but one of the cores and eleven of the flakes have sufficient characteristics to be given a probable late Neolithic/Bronze Age date. Three of the flakes and two core fragments were recovered directly from (1405).

The core fragments represent a mixture of single, double and multi-platform types. All of them are moderately to heavily flaked, with some having been flaked to near exhaustion confirming that resources in the area were limited. The cores do not exhibit any diagnostic traits but from their general appearance are likely to be late Neolithic/Bronze Age.

Of the twenty-four late Neolithic/Bronze Age waste flakes, more than three-quarters are secondary flakes, and all but one of the remainder are tertiary flakes. Most exhibit the traits of hard-hammer manufacture. Metric analysis and distribution of flake size accords most closely with Late Neolithic/Bronze Age industries. An apparent positive bias for tools may reflect specialist activities at the site (or the sampled part of the site) and is probably the result of settlement.

The most likely source for this material is the terrace gravels of the River Slea, Witham and Bain, and possibly small patches of sand and gravel around Sleaford, Billinghay and Martin. A selection of flint artefacts have been illustrated and can be found at the back of Appendix 1

#### **The Bone (Appendix 7)**

The majority of the animal bone was recovered from the base of the pipeline 'header' trench, from context (1409), approximately 0.50m below the base of the topsoil. It consisted of thirty-four pieces, (715g), represented principally by a partially articulated cattle skeleton, including the right foreleg, part of the right hind leg, vertebral column and pelvic girdle. Although fairly small, and so comparable in size with much prehistoric stock, this animal was probably a male, being quite robustly built. A shaft fragment from a smaller sheep-sized animal was recovered from the same context. Unfortunately, although it is likely that they are contemporary, there is no direct link to the Bronze Age deposits within [1403]. Only a single sheep's tooth and two badly eroded possible cow-sized rib fragments were found in direct association with the Bronze Age pottery within context (1405).

#### **Discussion**

The combination of flint, pottery and bone almost certainly represents the artefactual remains of a settlement site. The pottery suggests domestic refuse, reinforced by the presence of possible storage and cooking vessels. The recovery of sheep and cattle bone indicate the presence of domesticated animals,

although the sample is too small to say if this represents local farming practice or consumption. The bias for tools amongst the flint assemblage, albeit very small, could indicate the potential for specialist activities - perhaps even of a specialist activity area within a larger site. It is possible that archaeological features, as well as additional artefacts, are preserved elsewhere in the field but unfortunately, because of the limitations of the pipeline easement, investigations into its true extent or level of preservation were not possible. Some of the flint and all of the pottery is relatively unabraded which suggests a long-term history of low level agricultural landuse and a relatively recent incorporation into the ploughsoil. Modern drainage and farming practices over the last few decades are likely to have initiated the destruction of the thin peat layer which previously protected these deposits. Continued agriculture may eventually lead to the incorporation of the entire assemblage into the plough zone and the loss of potentially important stratigraphic and artefactual information.

### **6.7 Site 12 Late Neolithic/Bronze Age Artefact Scatter**

Plots 125 - 128, Anwick Fen, TF 12538 50138 - TF 13150 49310

#### **Summary**

*This site consists of a very slight scatter of late Neolithic/Bronze Age flints and Bronze Age pottery. Also present is a fragment of a possible Bronze Age sword. These may be related to a Bronze Age barrow cemetery located less than 200m to the east.*

#### **Introduction**

These fields lie adjacent to the present day course of the River Slea (Figure 5). Peat is mapped over this area but very little was evident during construction. The local surface geology is also disrupted by the presence of numerous extinct river channels marking ancient courses of the Slea.

#### **Results**

Studies of the 1993 fieldwalking report showed a higher concentration of flints in this area, especially within Plot 125, but the report did not discriminate between Mesolithic/early-middle Neolithic and Late Neolithic/Bronze Age. The combined results of the 1997 fieldwalking and the 1998 watching brief, however, show a very slight scatter of Mesolithic/early-middle Neolithic flints in Plots 125 - 127 consisting of two flakes, one core, one side scraper and one cutting flake, and post-dated by a more numerous scatter of Late Neolithic/Bronze Age material in Plots 125-128.

Fieldwalking in 1997 had already detected a slight concentration of late Neolithic/Bronze Age flints consisting of five tools and sixteen waste flakes. It was thought to correspond with an enclosure cropmark through which the pipeline passed, and perhaps also a Bronze Age barrow cemetery located less than 200m to the east. This cemetery was surveyed during 1975 and 1976 (Chowne & Healy, 1983) and resulted in the recording of at least nine probable Bronze Age barrows protruding through a layer of peat. In addition, a large assemblage of Mesolithic microliths and related forms were collected as well as numerous later Neolithic/early Bronze Age flints. These included finer objects such as missile heads, knives and a chisel which may have been ploughed out from burial deposits within the barrows.

The watching brief in 1998 recovered three waste flakes in Plot 126 as well as a fragment of possible Bronze Age copper-alloy sword, Registered Find No. 48. The latter was discovered at the boundary of Plots 125 and 126 during right of way clearance. The surviving length of the mid-blade section is 59mm with a width of 23mm. The edges are bent and damaged and the casting of the object was poor, giving a pockmarked appearance on the radiograph. The marks are probably due to the presence of small air bubbles that became trapped when the molten metal was poured into the mould (Appendix 11). As with the fine flint tools found during the earlier survey, they may have originated from a burial context.

Two fragments of Bronze Age pot were recovered from Plots 126 and 128. The sherd from Plot 126 was retrieved from the topsoil whilst the one from Plot 128 came from beneath a thin layer of peat immediately south of the present course of the River Slea. The pottery fragments are both undecorated, moderately abraded body sherds typical of the East Midlands tradition of the middle Bronze Age

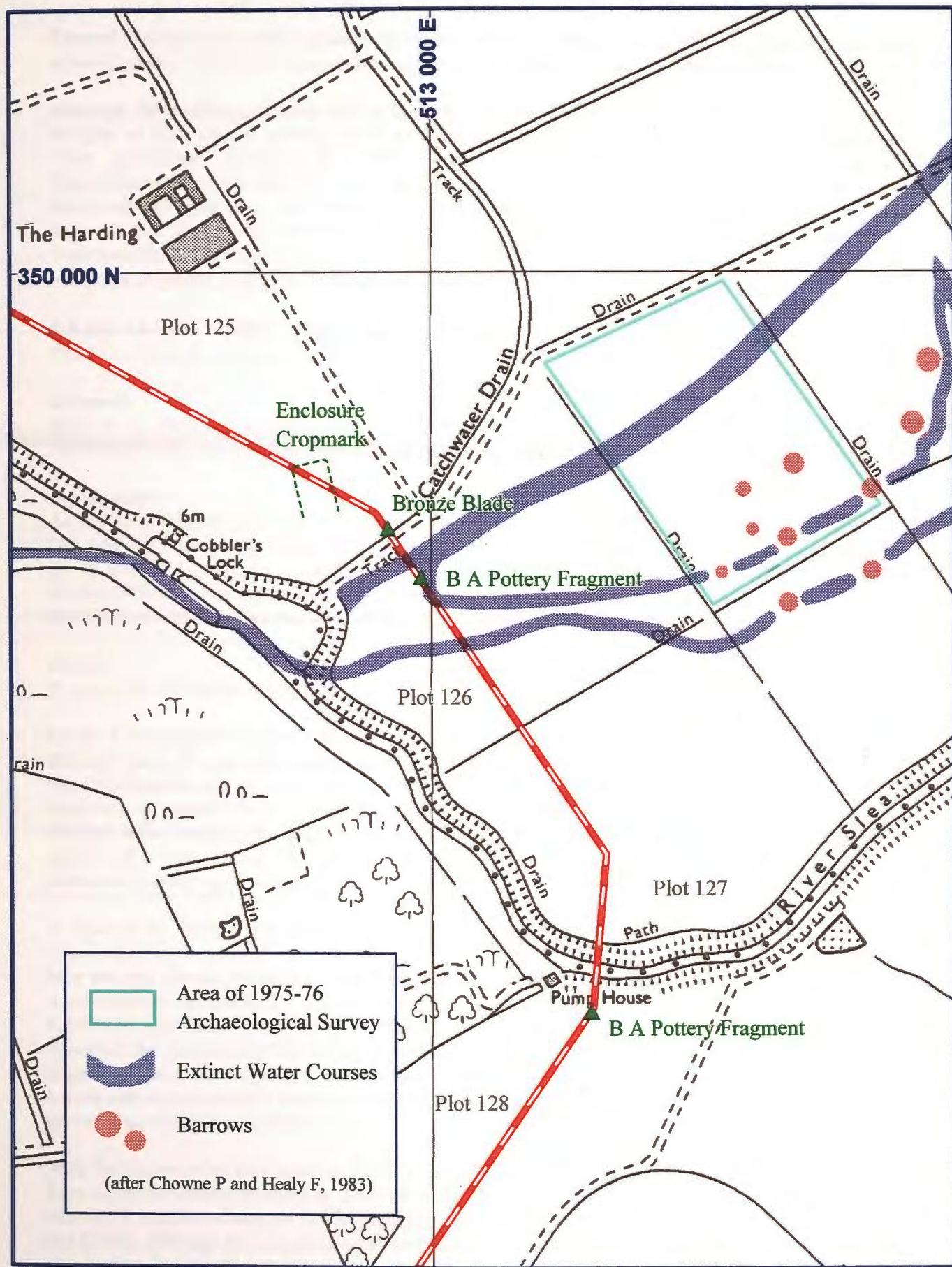


Figure 5: Site 12, Late Neolithic/Bronze Age Artefact Scatter

Deverel Rimbury type. Both appear to be locally produced wares (Appendix 2). A single sherd of very abraded pottery was also recovered during the 1975/76 survey to the east (Chowne & Healy, 1983).

Although the artefacts collected during the 1997 fieldwalking survey and the 1998 watching brief are too few on their own to confirm either settlement or ritual origins, they do become more significant when considered alongside the earlier survey work. Our findings suggest that both the Mesolithic/early-middle Neolithic and later Neolithic/Bronze Age activities continued west of the previously surveyed area. The finding of the Bronze sword fragment is especially significant as it suggests that the barrow cemetery itself may have extended as far west as the pipeline route. Unfortunately no distinguishable remains of either barrow structures or features associated with the enclosure cropmark were found during construction.

### **6.8 Site 18 Late Neolithic/Bronze Age Artefact Scatter**

Plot 145, Kirkby la Thorpe, TF 10647 45772

#### **Summary**

*This is a multi-period site with a significant scatter of unstratified and re-deposited late Neolithic/Bronze Age flint and pottery suggestive of intermittent settlement activity.*

#### **Introduction**

As previously mentioned, Site 18 is situated on a slight ridge of Oxford Clay, at approximately 10m OD, halfway between the summit of Bargate Hill, 20m OD, and the line of the present day A17 (Figure 6). It produced extensive evidence spanning the Mesolithic to the Medieval periods. The Late Neolithic/Bronze Age component was predicated by a phase of indeterminate Mesolithic/early-middle Neolithic activity. The late Neolithic/Bronze Age artefacts appear to follow a similar pattern.

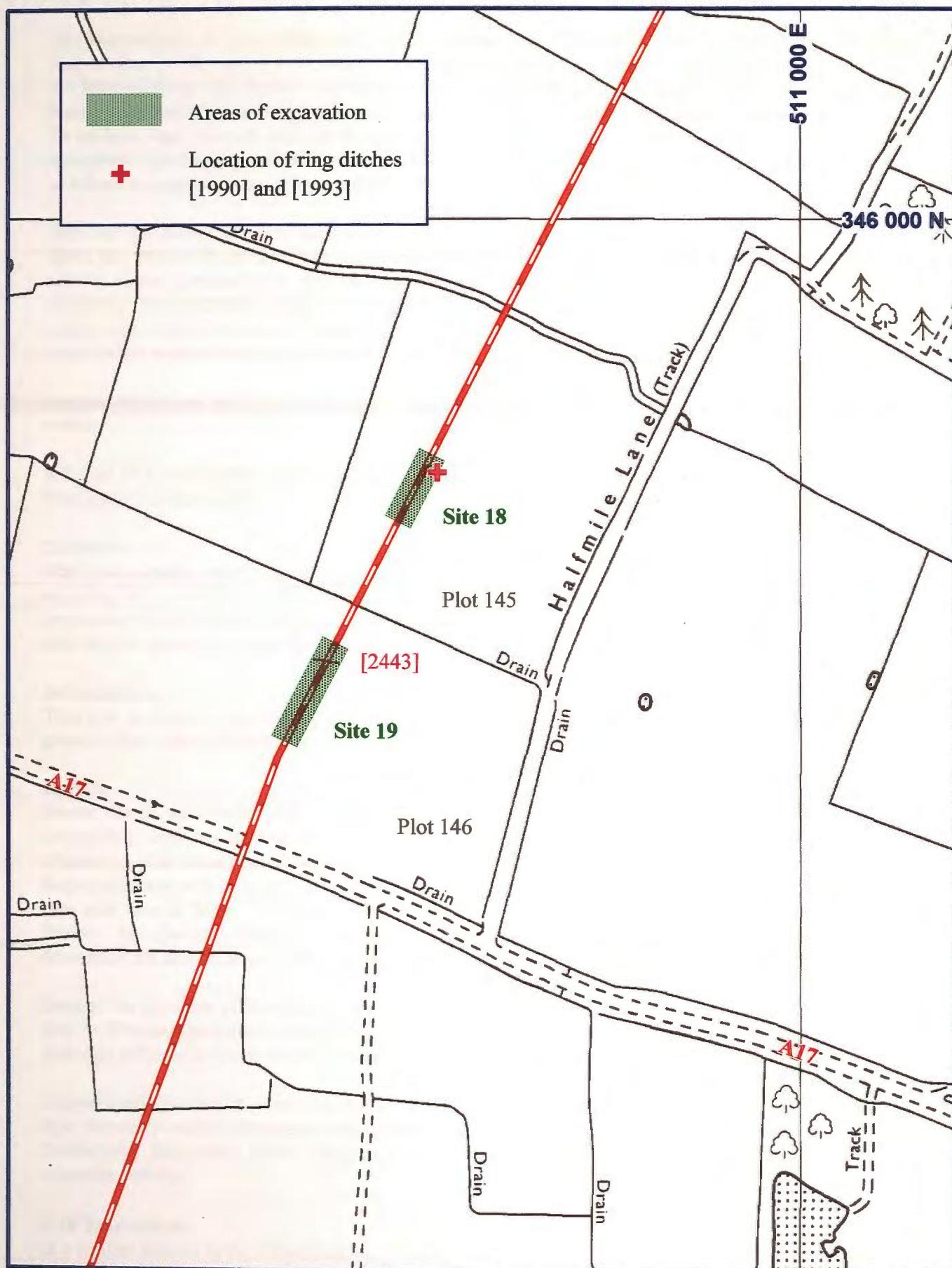
#### **Results**

A single late Neolithic/early Bronze Age flint scraper was recovered during fieldwalking in 1997.

Of the 138 knapped flints recovered from this field during the 1998 excavation and watching brief, thirteen flakes, five scrapers and four cores have been specifically identified as being potentially late Neolithic/Bronze Age in date. In addition to these, there are seventy-seven flints more generally identified as prehistoric but which are also considered likely to belong to this period. This group includes seven 'prehistoric' cores. It is unclear why so many cores are present as there is a virtual total absence of primary flakes. This implies discard away from areas of core procurement and flaking, and raises the question as to why they were brought to this particular (part of the) site (Appendix 1).

A total of 32 sherds of Bronze Age pottery were recovered, fourteen of which were unstratified (Appendix 2). All appeared to be locally produced wares consisting of decorated and undecorated body, base and rim sherds typical of the East Midlands tradition of the middle Bronze Age Deverel Rimbury type of pottery (Appendix 2. Dr. 2.3/2.5/2.6/2.7). A date in the middle to later second millennium BC is considered appropriate for this type of bucket-shaped vessel with simple rims and fingertip decoration. However, the variations at Site 18 may indicate that a longer period of time covering several generations might be appropriate for the pottery and thus for the occupation of the site. There was no evidence of burials and the fragmentary nature of the pottery seems to suggest that this material is likely to represent the remains of settlement debris.

With the exception of two posthole fills, all stratified late Neolithic/Bronze age flint and pottery came from contexts/features containing later artefacts. With no definite evidence for re-cutting of these features, it is assumed that the late Neolithic/Bronze Age material is residual. The two postholes, [1919] and [2306], although they contained only prehistoric flint flakes and/or Bronze Age pottery sherds, may also be later in date. At least four similar features contained Iron Age material alongside earlier pottery and/or flints, suggesting re-deposition was occurring within later postholes.



Scale 1:5000

Figure 6: Site 18, Multi-period, and Site 19, Iron Age Settlement

The vast majority of the stratified late Neolithic/Bronze age finds came from the fills of two substantial ring ditches, [1990] and [1994], which have been interpreted as probable burial monuments. Although the form of these ring ditches has much in common with Bronze Age barrow monuments, they have been given a tentative Iron Age date on the basis of artefact recovery and a lack of convincing evidence for an Iron Age re-cut of what, at first sight, appears likely to be an earlier monument. However, it is recognised that this type of monument would appear to be unique in Lincolnshire for the Iron Age and so a Bronze Age date has not been ruled out entirely.

With an absence of securely datable late Neolithic/Bronze Age features it is not possible to be sure about the nature of the activities occurring here. The most probable interpretation is of settlement activity, either permanent or, perhaps more likely, intermittent and covering several generations. The discovery of nine of the unstratified pottery sherds from within 90m of the main area of excavation, as well as the finding of further stratified and unstratified late Neolithic/Bronze Age material in the field immediately to the south (Site 19), tend to suggest that this occupation may have been quite extensive.

Further details can be found within the Anglo-Saxon section, (9.3), where the site is considered as a whole.

### **6.9 Site 19 Late Neolithic/Bronze Age Artefact Scatter**

Plot 146, TF 10526 45538

#### **Summary**

*This site consists principally of Late Iron Age settlement remains. However, excavation led to the recovery of seven unstratified and re-deposited sherds of middle Bronze Age pottery and two prehistoric waste flakes. Although insufficient to indicate either localised ritual or domestic activity, they may be associated with the more intense activity witnessed at Site 18, only 140m to the north.*

#### **Introduction**

This site is situated approximately 140m south of Site 18, on the free-draining Sleaford sands and gravels of the valley bottom (Figure 6).

#### **Results**

Seven sherds of Bronze Age pottery were recovered from this plot. Three of the sherds were unstratified, undecorated body sherds, whilst four were retrieved from ditch [2407] and its recut [2443] (Figure 6). The stratified pot consists of three undecorated body sherds and one body sherd with fingernail decoration on a cordon (Appendix 2, Dr. 2.8). All seven sherds are of the same fabric type - a type also seen at Sites 10, 12 and 18 - and are typical of the East Midlands tradition of the middle Bronze Age Deverel Rimbury type of pottery. Similarly-shaped pots with cordons and incised decoration are known from Stainsby, Crosby and Metheringham (Appendix 2).

Despite the presence of Bronze Age pottery, it is most likely that ditch [2443] is Iron Age in date and that the Bronze Age pottery came from elsewhere. Ditch [2443] is situated at the northern edge of a late Iron Age settlement which will be discussed later (7.9).

As previously mentioned, it may be that we are seeing the traces of a more widespread scatter of Bronze Age debris, possibly associated with activities at Site 18. However, with only two broadly dated 'prehistoric' flint waste flakes being recovered from Site 19, there does not appear to be the same intensive activity.

### **6.10 Discussion**

In a similar fashion to the Mesolithic/early-middle Neolithic period, the main areas of activity appear to be concentrated along the southernmost third of the route, and are identifiable solely from their artefactual remains. Like the previous period, there also appears to be a detectable increase in background noise around Site 18, witnessed by the late Neolithic/Bronze Age scraper, the two waste flakes and the seven middle Bronze Age pottery sherds being found to the south (Site 19 & Plot 150, TF

10100 44600), and the one late Neolithic/Bronze Age scraper which came from Plot 142 to the north (TF 10900 46400). A little further north (Plots 124-139, TF 12300 50700 to TF 11200 46900) two middle Bronze Age pottery sherds and a further twelve flints, including a Neolithic scraper and two late Neolithic/Bronze Age tools, were found.

Two other slight concentrations of activity, not sufficient to be classified as 'sites', were apparent at the extreme north end of the pipeline: Plots 8 - 10 (TF 17100 75000 to 17200 73400) produced thirteen flints including two late Neolithic/Bronze Age scrapers, a possible Neolithic scraper and a Mesolithic blade; Plots 14 - 20 (TF 17200 72800 to 17000 70400) produced seven flints including two late Neolithic/Bronze Age scrapers.

Whilst small numbers of flint were present along the entire route, excepting the Witham Fen where sedimentation appears to have masked all prehistoric deposits, the distribution of pottery was more restricted. No Bronze Age pottery was found further north than Site 10, TF 11000 54100, or further south than Plot 151, TF 09700 44500. This may represent a preference, especially during the middle Bronze Age, for settlement on the western boundary of the Fen Edge. However it may also, at least in the case of Site 10 and the isolated fen finds, reflect a certain degree of preferential preservation beneath, and recent exposure from, the rapidly receding peat deposits.

In conclusion, the investigations appear to indicate a greater degree of late Neolithic/Bronze Age activity towards the south of the pipeline, especially within the area of the Slea valley. The discovery of two possible settlement sites at Site 10 and Site 18 are especially significant as so few such sites are known in Lincolnshire. These findings have also emphasised the need for further investigation, especially in the former fen areas, where modern farming techniques and rapidly receding peat deposits are leading to the simultaneous exposure and destruction of potentially well-preserved sites.

## 7. IRON AGE

### 7.1 Archaeological Background

Sea levels continued to rise dramatically up until the beginning of the Iron Age (c. 700 BC). This rise would have left parts of Lincolnshire as open sea with low islands, salt marshes and creeks. During the Iron Age, however, until around AD 100, the sea-level gradually fell, allowing greater access to the land on the coastal areas. It is thought that the later Roman Car Dyke may follow the coastline that existed during the later Iron Age (Simmons, 1993). Other areas, such as the Witham Valley, probably continued to be too marshy for extensive development.

Iron Age Lincolnshire was part of a larger tribal territory, peopled by the *Corieltauvi*, stretching from the Humber at the north, to the River Nene at the south. The route of the pipeline takes it close to several major Iron Age settlements: the northern half of the route runs between known centres at Lincoln and Horncastle, whilst the south end terminates to the south-west of Old Sleaford.

Old Sleaford was a particularly important centre during the middle to late Iron Age. The settlement was located next to the River Slea, which may have been navigable at this time, allowing trade links, via the coast, with Mediterranean Europe. Evidence for this late Iron Age trade can be seen in the form of large amounts of imported pottery at Old Sleaford. Other evidence for a thriving settlement is the discovery of 4,354 fragments of coin-pellet moulds and 247 crucible fragments (Elsdon, 1997). This, the largest collection of such material found at present in Iron Age Europe, can only confirm that this was a large and prosperous nucleated settlement and was probably the centre for a concentration of smaller settlements in this area. The majority of these settlements would have consisted of small, open sites with no, or very minor, defences.

### 7.2 Pipeline Results

Fieldwalking in 1993 and 1997 detected no traces of Iron Age activity. Eight sites were encountered during the 1998 watching brief, all but one of these at the south end of the route, east of Sleaford, and all of which were previously unrecorded and relatively rich in finds (Figure 2). All were located in areas of substantial subsoil deposits, or had been relatively undisturbed by modern farming methods. This meant that no artefacts had been dragged out of archaeological features and into the ploughsoil, making their detection through fieldwalking unlikely. Geophysical survey was able to locate one site, Site 19, which was situated on the more responsive Sleaford sand and gravels. Of the remaining seven sites, six were located on unresponsive boulder clays (Figure 3).

The eight sites are, as follows:

- **Site 6, Plot 20, Moor Farm, Bucknall, TF 17064 70624**  
Part of a late Iron Age settlement continuing into the first and second centuries AD.
- **Site 13, Plot 131, north of Ewerby, TF 12518 48551**  
Ditch, possibly Iron Age.
- **Site 15, Plot 132, north-west of Ewerby, TF 11900 47884**  
A small group of linear features containing late Iron Age pottery.
- **Site 16, Plot 135, west of Ewerby, TF 11612 47472**  
Part of a late Iron Age settlement.
- **Site 17, Plot 139, south-west of Ewerby, TF 11320 47018**  
Part of a late Iron Age settlement.
- **Site 18, Plot 145, east of Kirkby la Thorpe, TF 10647 45772**  
Part of possible Iron Age barrow cemetery.

- **Site 19, Plot 146, east of Kirkby la Thorpe, TF 10526 45538**  
Part of a late Iron Age settlement.
- **Site 22, Plot 150, south-east of Kirkby la Thorpe, TF 10200 44734**  
A complex of ?early or middle to late Iron Age settlement enclosures.

### 7.3 Site 6 Iron Age/Romano-British Settlement

Plot 20 - Moor Farm, Bucknall, TF 17064 70624

Site 6 is situated half way between the villages of Gautby and Bucknall in an area of intensive arable farming. It lay just over 10m above sea level in a relatively level landscape of boulder clay geology.

The field which contained the site was not available for fieldwalking in 1993 due to crop coverage. Fieldwalking in 1997 was also hampered by the presence of crop stubble which reduced visibility. Only the southern half of the field was walked and this produced only one sherd of medieval pottery and a prehistoric flint waste flake. Magnetic scanning in 1997 also failed to detect any significant anomalies. Observation during the 1998 watching brief resulted in the identification and excavation of part of an extensive settlement site originating in the late Iron Age but continuing into the second century AD. Evidence of third and fourth century activity was also found.

The dominant period evident is the middle to late first century AD, so the site is discussed at length within the Romano-British section. However the earliest late Iron Age phase (*Phase 1*), can be summarised as consisting of three circular gullies between eight and seventeen metres in diameter, as well as a number of smaller gullies, possible postholes and enclosure ditches, the latter laid out on roughly north-west to south-east and north-east to south-west axis (Figure 26). The smallest ring-gullies have been interpreted as roundhouse eaves-drip gullies, whilst the larger example has dimensions more suggestive of an enclosure. Although occasional pottery forms could have continued into the early Roman period, the dominant *Phase 1* presence is late Iron Age. Artefactual evidence suggests domestic occupation and possible weaving and iron working activities, although the latter may represent debris from the larger-scale smithing activities evident in the mid-late first century AD. Limited environmental analysis detected only a tiny amount of unidentifiable charred grain.

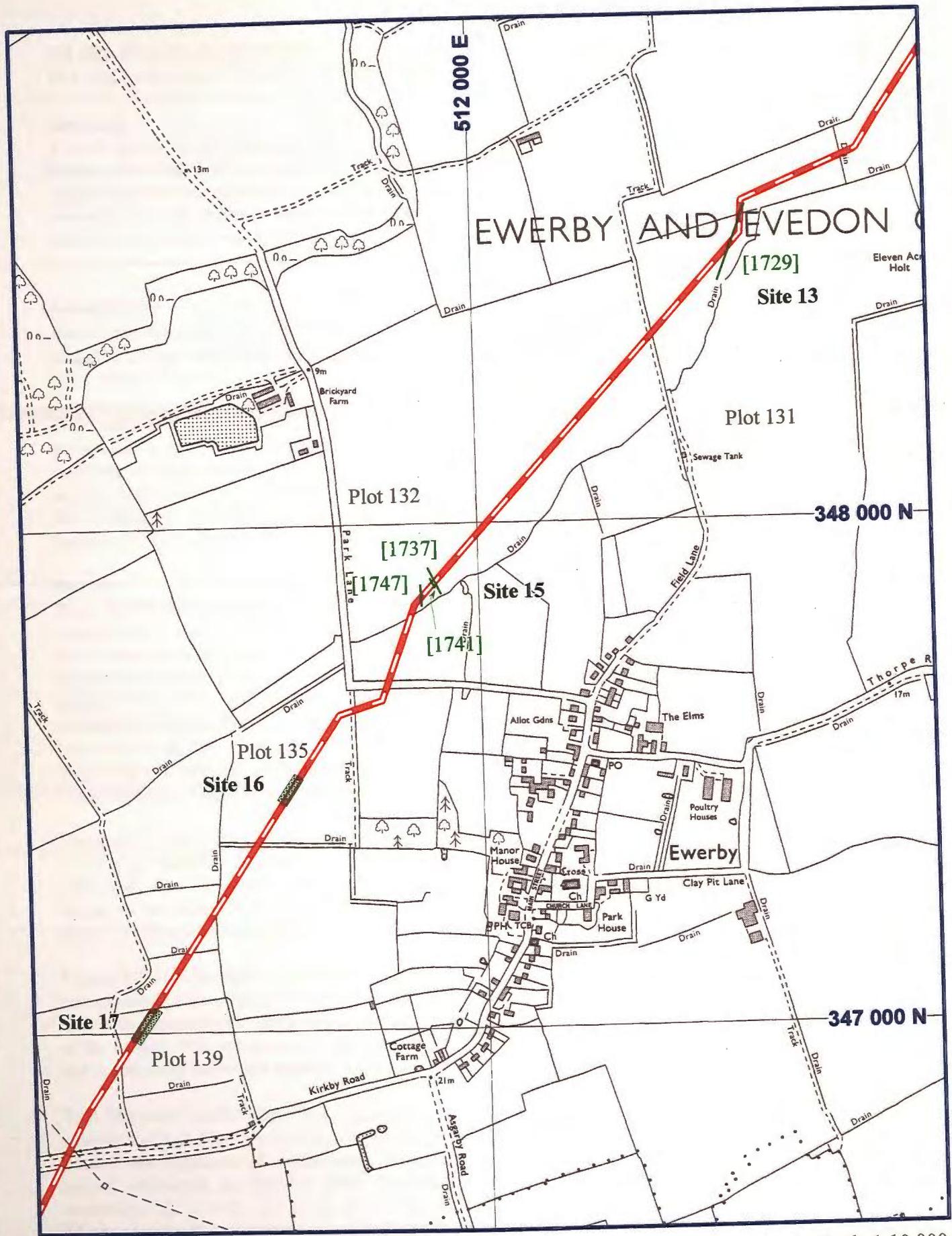
### 7.4 Site 13, ?Iron Age Ditch

Plot 131, north of Ewerby, TF 12518 48551

This fairly substantial ditch was recorded in the pipe-trench at the north end of Plot 131 (Figure 7). It was found below a 0.5m-thick layer of subsoil, (1732), which was seen to overlay the natural boulder clay geology. This subsoil, which consists of riverine flood deposits, extends to Road Crossing 18, TF 11800 47600, where the land gradually rises above the floodplain of the Slea.

The ditch consisted of a 2.5m-wide feature [1729] penetrating 1.35m into the boulder clay with a fairly steep-sided profile and a flattish base. Its lower portion was filled with a compact, light grey clay containing occasional small to medium-sized stones and very occasional charcoal flecks ((1730)), whilst its upper part had filled with a dark grey, charcoal-flecked silty clay ((1731)). Neither fill produced any artefacts.

Approximately 750m to the south-west, a number of Iron Age features have been recorded as Site 15, which, like [1729], were sealed directly beneath the layer of subsoil. In the same area, a significant scatter of thirteenth - fourteenth century pottery, as well as the remains of furrows, were recorded above this subsoil as Site 14. This demonstrates that the flood deposits predate the thirteenth - fourteenth century, and so too, therefore, does ditch [1729]. The proximity of Iron Age Site 13 suggests that this isolated ditch may also date to this period.



Scale 1:10 000

Figure 7: Sites 13, 15, 16 and 17, Iron Age Settlements and isolated features

## 7.5 Site 15 Iron Age Features

Plot 132, north-west of Ewerby, TF 11900 47884

### Summary

A small group of late Iron Age features were discovered to the north-west of the village of Ewerby during trenching. These consisted of two substantial linear features and a small gully all of which contained artefactual remains consistent with domestic habitation. The full extent and layout of the site within the easement remains unknown due to the presence of substantial overlying subsoil deposits. The features probably reflect the presence of a late Iron Age settlement adjacent to the pipeline route.

### Introduction

Site 15 was situated to the north-west of Ewerby in an area of boulder clay and clay-silt flood deposits (Figure 7). It lay c.2km south of the prehistoric course of the River Slea, just within the southern margin of its original floodplain.

Fieldwalking in 1993 and 1997, and geophysical survey in 1998, detected no evidence of Iron Age occupation in this area. However, with c.0.30 - 0.40m of dense clay silt flood deposits immediately overlying the Iron Age features, this is unsurprising. This subsoil layer has clearly protected the features and prevented the incorporation of artefacts into the topsoil, thus ruling-out their detection via fieldwalking. It continued to conceal the existence of such remains until trenching, when three distinct features; [1737], [1741] and [1747], became visible in the trench sides (Figure 8).

### Results

Ditch [1737] was situated c. 3.20m to the north of [1741], and 24.00m to the north of [1747]. It consisted of a steep-sided cut with a flattened base, measuring roughly 1.10m wide and 0.50m deep below the base of the subsoil. Its profile and fills were similar within both sections and it appeared to be orientated north-west to south-east. There were two distinct fills present - (1738) and (1739). The primary fill, (1738), was c. 0.14m deep and consisted of an orange clay with grey mottles. It contained occasional charcoal flecks, a sherd of late Iron Age pottery, fragments of animal bone and numerous pieces of fired clay. Some of this fired clay has been positively identified as part of a triangular loomweight, whilst the other pieces are unidentifiable burnt clay (Appendix 6). The upper fill (1739) was a dark grey silty clay with numerous charcoal flecks but no artefactual remains (Figure 9 (a)).

The animal bone from (1738) consisted of a sheep-sized shaft fragment and a pig mandible (Appendix 7). The pig mandible has the third and fourth deciduous premolars still in place, although these were fairly well worn. These teeth are shed quite early in pigs, typically around one year to eighteen months of age, so this mandible would have come from an animal younger than this, perhaps slaughtered at the start of its first or second winter.

Feature [1741] was visible only within the north-west facing section of the trench. In profile the original cut appeared to have fairly steep edges and a wide, rounded base (Figure 9 (b)). Having allowed for the distortion caused by the angle of the section, it measured c. 1.80m wide and 0.86m deep below the base of the subsoil. The second cut, [1746], was centred within the original cut and measured c. 1.50m wide and 0.50m deep below the subsoil. It too had fairly steep edges and a wide, rounded base.

Two fills were visible within the original cut [1741]. The primary fill, (1745), was c. 0.12m deep and consisted of a darkish grey clayey silt containing occasional charcoal flecks, two sherds of late Iron Age pottery and fragments of animal bone. The animal bone consisted of a complete cattle phalanx and a partial metatarsal, as well as small fragments of unidentified shaft and carpal/tarsal bones. The remaining fill, (1744), was made up of numerous lenses of mid-orange/grey and dark grey silty clay. These contained occasional charcoal flecks but no artefacts, and appeared to have been rapidly deposited. The section indicates that [1741] was probably entirely filled with (1744) prior to the digging of re-cut [1746].

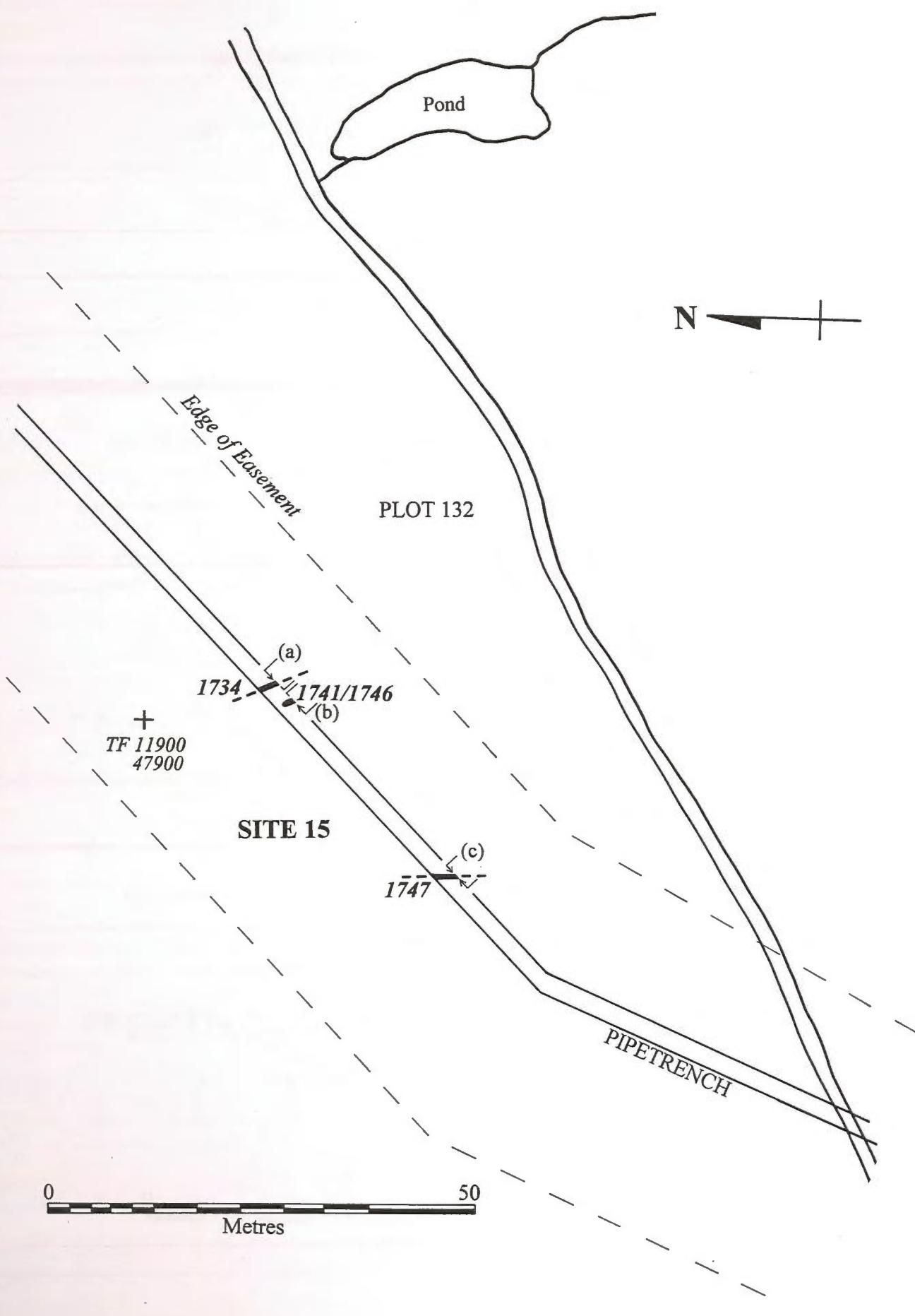
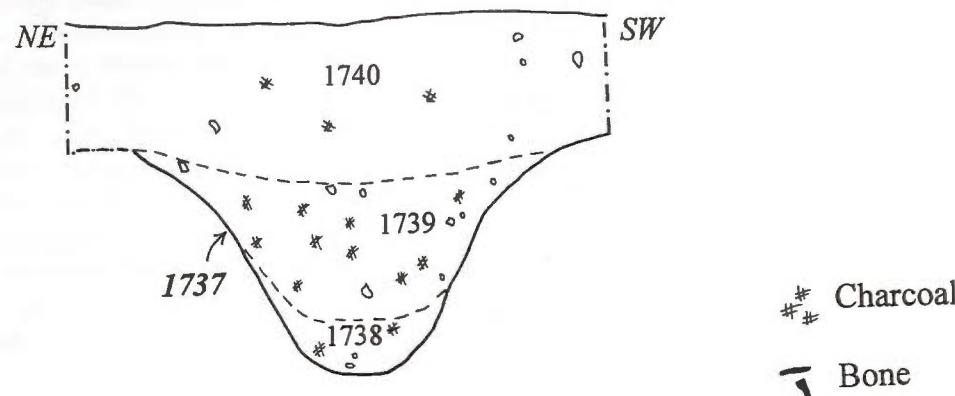
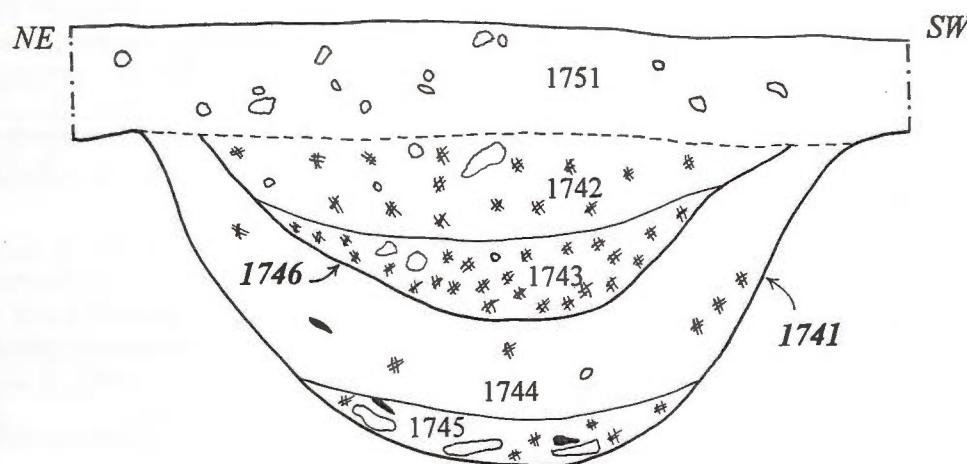


Figure 8: Site 15, Locations and Plan of Iron Age Features

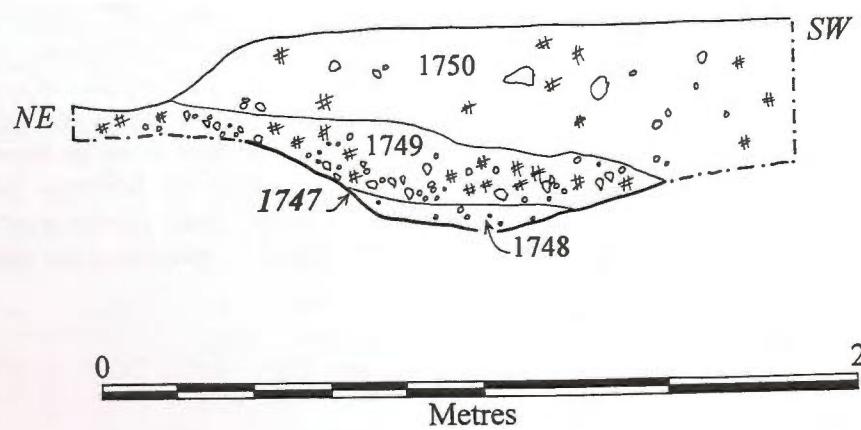
(a) Ditch 1737



(b) Ditch 1746/1741



(c) Ditch 1747



0 2  
Metres

Figure 9: Site 15, Section Drawings

Re-cut [1746] also contained two distinct fills - (1743) and (1742). Primary fill (1743) was a dark grey clayey silt with numerous charcoal flecks. It also contained two sherds of late Iron Age pottery, some unidentified fired clay, and some animal bone. The animal bone consisted of several cattle bones, including phalanx, mandible, tooth, vertebra and rib fragments (Appendix 7). Also present were several sheep bones and a pig humerus. The majority of the cattle bones, some of which were partly burnt, could all have come from the same individual. They were very small, falling within the range of size typical of prehistoric stock. However, the cattle bones within (1743) and (1745) represent at least two animals, one of which was under eighteen months to two years of age.

The remainder of the cut was filled by (1742) which comprised a mid-grey clay silt with slightly less, but still frequent, charcoal flecks. It also contained three sherds of late Iron Age pottery, some daub, some unidentified burnt clay, and some animal bone fragments. The animal bone consisted of several fragments of sheep bone as well as fragments of cow-sized rib fragments and several unidentified fragments, one of which was burnt.

Linear [1747] was less well-preserved than the other ditches, and less securely-dated. It measured c.0.70m wide and 0.25m deep below subsoil level (Figure 9 (c)). The cut was only partially visible in both sections, being orientated north-south. The gully contained two fills - primary fill (1748) and a second fill (1749). Fill (1748) consisted of a mottled orange/grey clay with occasional charcoal flecks, probably representing the initial weathering of the surrounding natural clay. Fill (1749), however, was a distinct dark grey-brown clay silt containing numerous charcoal flecks and a fragment of burnt, cow-sized, shaft bone. Sherds of medieval and possible Iron Age pottery were recovered from the subsoil immediately overlying [1747], but because of the localised disturbance neither could be firmly attributed to any context.

The lack of firmly stratified pottery and the differing orientation of [1747] from [1737] and [1741] make the dating of this feature difficult. The fact that it was sealed beneath the subsoil deposits, on the same level as the other features, makes a broadly contemporary date likely, as does the presence of burnt bone which may indicate domestic activity similar to that found in [1747] and [1737]. It certainly predates the medieval period, as a pottery scatter and furrow evidence indicate activity of this period above subsoil level.

#### Discussion

From the small amount of evidence available, it is not possible to ascertain the function of these features, though they would have been effective as enclosure boundaries or drainage features. The charcoal and artefacts are characteristic of domestic refuse and suggest settlement in the immediate vicinity. The stratified pottery sherds are all shell-gritted except for a single grey vessel, wheel-made, with cordons. The shell-gritted wares included fine shell-gritted wares, possibly necked bowls, and certainly another cordoned vessel. A minimum of two cattle, a sheep and a pig were represented, several pieces of which appear to have been burnt. The triangular loomweight from ditch [1737] indicates that weaving was taking place in the vicinity. Altogether, the remains paint a picture of a late Iron Age settlement at, or at least in very close proximity to, this location. The presence of the re-cut ditch suggests sustained use, although with such a small sample one can say little about the duration of this site. The relatively large amount of finds present, and the shielding of the features by flood deposits, increases the probability of further well-preserved and informative remains being found nearby.

## 7.6 Site 16 Iron Age Settlement

Plot 135, east of Ewerby, TF 11612 47472

### Summary

Part of a settlement dating to the late Iron Age, and continuing into the latest transitional period before the Roman invasion, was uncovered to the east of the village of Ewerby. The site consisted of a number of features including ditches, pits and postholes. A number of curvilinear gullies were uncovered, probably ring gullies, representing at least five roundhouses, and a possible stacking area for animal fodder.

### Introduction

The site was first uncovered during watching brief topsoil-stripping. The topsoil was removed using a back-acting excavator, and a rapid, small-scale excavation carried out.

The site was located c. 500m to the east of the centre of Ewerby village (Figure 7), and to the north of the top of Bargate Hill (20m OD) at c.15m OD. The topsoil (18127), was a mid-brown silty clay with occasional-moderate amounts of sub-angular, sub-rounded and rounded stones, with a depth varying from 0.3m to 0.4m. The field did appear to be under a young crop at the time of stripping. The natural deposit (18128) underlying the topsoil was a mix of grey/brown and olive green/grey clay with frequent orange mottling and numerous small limestone fragments; this geology is glacial boulder clay.

During the 1994 fieldwalking, a small scatter of prehistoric flints and a few medieval pottery fragments were recovered. The fieldwalking in 1997 did not produce any finds.

### Results

#### Phase 1 : Late Iron Age / latest transitional period

All of the features at Site 16 which contained dateable material dated to the late Iron Age, except for a single curvilinear ditch [1842] which contained late Iron Age and Romano-British pottery. Initially, during topsoil stripping, a group of features were excavated c.80m south of the main focus of the site. These included a fairly substantial ditch, a curvilinear gully, and two small pits (Figure 10).

Ditch [1810] was the most southerly feature present at Site 16. The ditch, orientated east-west, had vertical, slightly convex edges and a flat base, and was 0.90m wide and 0.60m deep, with a single fill (1811). The latter, a light grey/brown silty clay with occasional charcoal flecking, contained a number of late Iron Age pottery sherds. A sample of the fill (Sample No. 40) was taken. The only identifiable snail shell from the sample was a *Planorbis leucostoma*, a species characteristic of small ponds and bodies of water that dry up. Ditch [1810] could represent part of the southernmost boundary of the late Iron Age settlement.

Immediately to the north of ditch [1810], a shallow curvilinear gully [1808] was uncovered. The gully ran north-west to south-east, had near vertical sides and a flat base, was 0.30m wide and 0.18m deep, and contained a single fill (1809). The fill was a mid-grey silty clay containing five fragments of possible late Iron Age pottery and a number of cow-sized long bone fragments (possibly from the same long bone). The majority of the gully appeared to have been destroyed by ploughing. This makes any reconstruction or interpretation difficult, although it seems plausible that the curving gully represented a ring gully, part of a roundhouse dating to the late Iron Age, though it is unclear whether it represented an outer drainage gully or a structural slot for the timber walls. The south eastern end of the gully may have been a butt-end, which would suggest that the entrance was to the east. If the gully does represent a roundhouse ring gully, then the enclosed area would have had a diameter of c.7m.

A single feature was located within this possible structure, and is therefore likely to be contemporary with it. Feature [1805], a sub-circular pit with near vertical sides and an irregular base, was 0.68m long by 0.65m wide and 0.18m deep. The pit contained a single fill, (1806), which was a dark grey/black

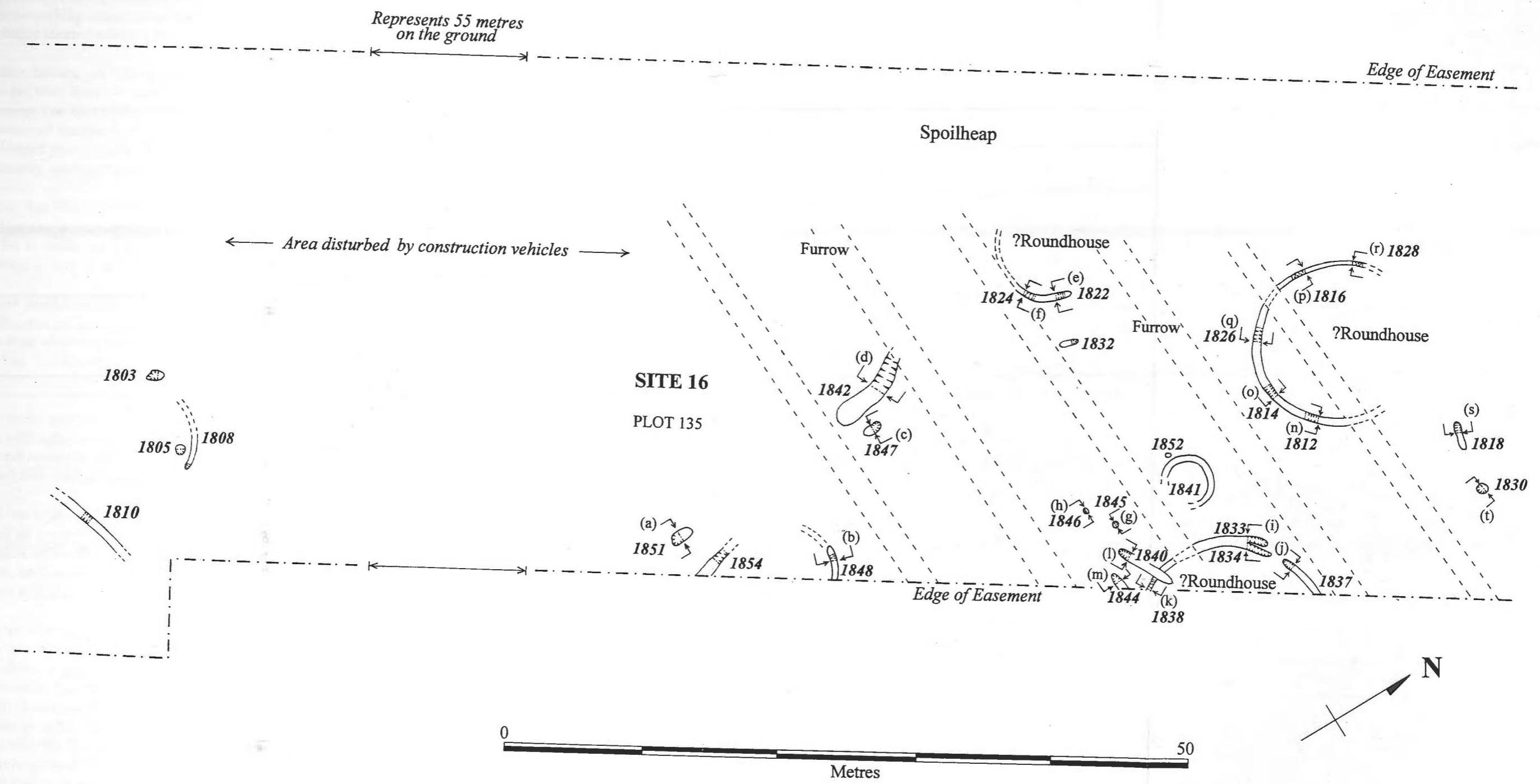


Figure 10: Site 16, Plan of Iron Age Settlement

silty clay containing some unidentified fired clay and a high percentage of charcoal (40-50%). It was evident that burning had occurred in-situ as the natural clay immediately surrounding the pit had been burnt (1807). A sample of the fill was taken (Sample No. 42). This contained charcoal, charred cereals and weed seeds, sheep bone, burnt bone and a few snails. The cereal grains included a possible free-threshing bread wheat, a possible barley grain, and a glume wheat. Other plant remains included two weed seeds of sheep sorrel, which may have been harvested as a weed of the cereals as it grows on cultivated ground. A few grammes of hammerscale were also recovered from the sample; these suggest that some iron-working occurred on the site nearby. It appears then, that feature [1805] was a domestic fire-pit, probably located within a roundhouse, of which only gully [1808] remains.

A single other feature, pit [1803], was uncovered at this end of the site, located 6.0m west of gully [1808]. The pit, with shallow, near vertical sides and an irregular base, was 0.36m long by 0.26m wide, and 0.11m deep. The fill (1804), a dark grey silty clay with a high percentage of charcoal (c.30% of the volume), contained fragments of a possible loomweight. A sample was taken from the fill (Sample No. 41), but produced poor results. The pit appears to have been backfilled with burnt material, probably from a fire nearby, perhaps fire-pit [1805].

The other Iron Age features within this plot are c. 70m further to the north. The 'blank' area between the two sets of features is misleading as it suggests that there was a gap in the settlement at this point. They may be so, but it could also reflect the fact that bulldozers were used to clear the topsoil here, and that any archaeology in this 'blank' area could have been obscured by the heavy machinery.

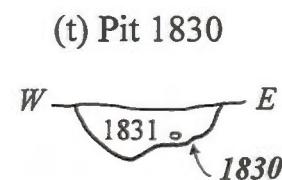
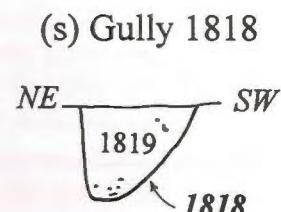
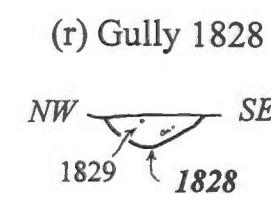
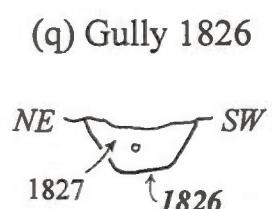
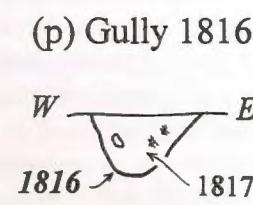
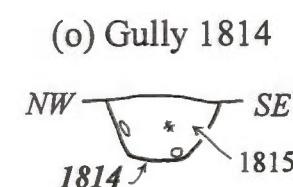
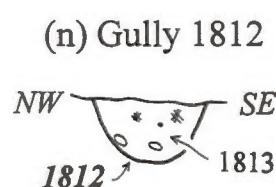
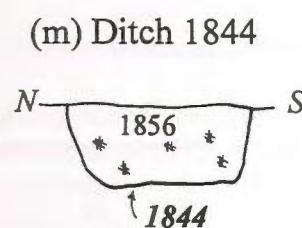
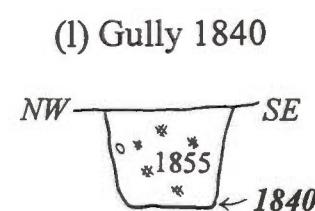
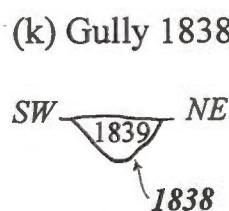
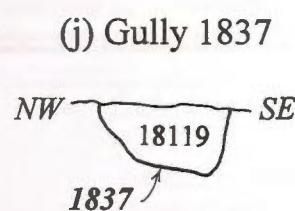
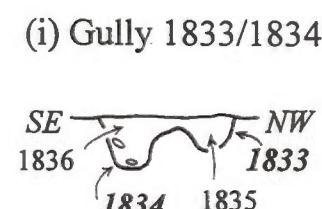
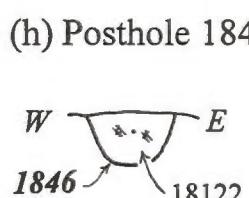
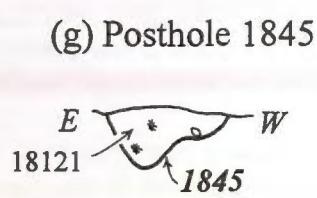
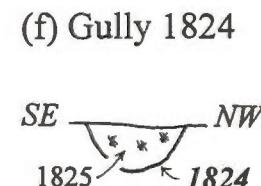
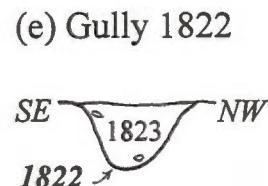
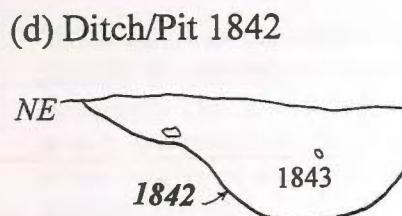
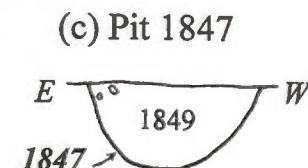
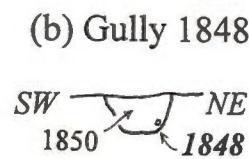
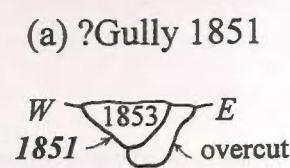
The next most southerly feature at Site 16 was located next to the easement edge. Feature [1851], a possible gully, was 1.75m long, 0.80m wide, and 0.42m deep, with an irregular profile (Figure 11 (a)). The western edge sloped at a fairly acute angle, whilst the eastern edge was vertical, and the base of the feature was flat. The fill (1853), a dark grey sandy clay with very frequent flecks of charcoal, contained a number of pottery sherds which are likely to be Iron Age in date.

Immediately to the east of gully [1851], a linear feature ran north-south. Ditch [1854] was 0.56m wide, 0.58m deep, with near vertical edges and a flat base. The fill (1857) was a mid-green/brown sandy silt with occasional charcoal flecking, containing a number of animal bone fragments (cow tooth, sheep horn-core, and cow- and sheep-sized bone), and a single, intrusive, Mesolithic flint blade.

Ditch [1854] had a similar profile to ditch [1810], which was located at the southernmost end of the site, and identified as a possible southern boundary for the settlement. Ditch [1854] may have formed an internal division within the settlement, possibly between buildings. To the north, beyond the excavated section, it was not possible to follow the route of the ditch, as fill (1857) appeared to merge with the surrounding natural clay.

Eight metres to the north east of ditch [1854] was curvilinear gully [1848]. The gully, which had silted up naturally, ran roughly east-west, with acute, straight sides, and a flat base (Figure 11 (b)). The solitary fill (1850), a grey/brown sandy silt with moderate amounts of charcoal flecking, produced no finds. It is plausible that the gully formed part of an Iron Age roundhouse structure. If this is the case, and if the gully is continued round to form a complete circle, then the gully would have enclosed an area with a diameter of 6.8m. The excavator suggested that the gully may have contained postholes, which could suggest that the ring gully was structural, not a drainage gully. That is, timbers may have been placed within the gully to form part of the roundhouse walls. North of gully [1848], c.7m away, ditch/pit [1842] and pit [1847] appeared to be the nearest features.

Feature [1842] ran roughly north south, although it appeared to curve at its northern end, towards the north-west. The cut had acute, convex sloping sides, and a sloping, rounded base, measuring 1.42m wide and 0.42m deep (Figure 11 (d)). The single fill, (1843), a dark grey/brown sandy silt, contained fragments of a possible triangular loomweight, a few pieces of unidentified fired clay, and a large amount of charcoal flecking and fire-cracked pebbles. A relatively large quantity of artefacts were



\* Charcoal



Figure 11: Site 16, Section Drawings

recovered from the excavated section, including numerous sherds of late Iron Age and Roman pottery and a large amount of animal bone (mostly cattle bone, with some sheep bones, and a number of cow-sized fragments).

The feature was truncated at its northern end by a medieval (Phase 2) furrow, which meant it was not possible to determine whether or not the feature was a long pit or a ditch curving round to the north-west. The fill (1843) shows that the feature was backfilled with a large amount of refuse (broken pottery and animal bone), as well as charcoal suggestive of burning, and fire-cracked pebbles suggestive of the heating of water. The contents of the feature therefore suggest that it was used to dispose of domestic rubbish.

Adjacent to feature [1842], to the east, was pit [1847]. This appeared oval in shape, measuring c.1.4m long, 0.59m wide, and 0.30m deep, with acute, concave sides, and a rounded base (Figure 11 (c)). The fill (1849) was a mid-dark brown sandy clay with a moderate amount of charcoal flecking, a sheep's tooth and fragments of a probable triangular loomweight.

The feature is likely to represent a rubbish pit, with the paucity of finds within the fill suggesting that the majority of the material discarded was organic, and therefore had a poor survival rate, thus leaving little trace in the archaeological record.

Approximately 10m north of feature [1842] was gully [1822]/[1824]. This curvilinear gully had two sections excavated through it, both being allocated different cut numbers:

- Gully [1822] was 0.34m wide, 0.20m deep, with steep sides and a flattish base (Figure 11 (e)). The fill, (1823), was a dark grey/brown sandy clay with frequent charcoal (up to 20mm diameter). Within the fill were a number of finds, including numerous late Iron Age pottery sherds, a cow's tooth, and sheep-sized animal bones.
- Gully [1824] was 0.34m wide, 0.14m deep, with steep, slightly concave sides, and a flat base (Figure 11 (f)). The fill (1825), a mid-light yellow/brown sandy clay with moderate quantities of charcoal (less than 10mm diameter), produced no finds.

This curvilinear gully was better preserved than those already mentioned (gullies [1808] and [1848]), surviving as one fifth of a completely circular shape. The gully is likely to have formed a ring gully, part of a construction slot for a roundhouse with an internal diameter of c.5.8m, of which no other evidence remains. The most northerly section through the gully [1822] appeared to be adjacent to a butt-end, suggesting that the entrance to the structure faced the east. The fills of the two sections are interesting in their variance considering they are only about 1.5m apart. Fill (1823) (of gully [1822]) contained a large amount of material, from artefacts such as late Iron Age pottery, to large quantities of charcoal fragments, whilst fill (1825) (of gully [1824]) contained no finds and only moderate amounts of smaller charcoal fragments. The change in charcoal content between the two sections may have occurred as a result of localised (accidental or otherwise) burning of the structure near to the entrance, whilst the concentration of artefacts near the entrance is not unusual, with similar evidence known elsewhere (Allen *et al*, 1984, Fig. 6.3).

Four metres to the east of gully [1822] was a narrow, elongated feature [1832]. This was orientated roughly north-south, with acute, near vertical sides and a flat base, and measured 1.00m long, 0.26m wide, and 0.17m deep. The fill, (18125), a dark grey/brown sandy clay, contained occasional flecks of charcoal, and produced seventeen sherds of late Iron Age pottery and some unidentified fired clay. The feature may represent the remains of an eaves-drip gully, surrounding the roundhouse formed by gully [1822]/[1824]. If this is the case, then the drainage gully would have had a diameter of c.12.8m.

Over 10m to the east of feature [1832] was a small ring gully [1841] and a fire-pit [1852]. Ring gully [1841] had an internal diameter of three metres, with a gully width of 0.40m, and depth of 0.04m. This

meant that whilst the feature was visible on the surface, it was not possible to obtain a section through its fill. The latter, (18120), a naturally-silted deposit of mid-grey/brown silty clay, produced no finds, although it is likely to be late Iron Age in date. The ring gully would have enclosed an area that was too small for habitation, so another function is likely. It has been suggested that such small, shallow ring gullies represent stacking areas for animal fodder (Allen *et al*, 1984, 91).

Immediately to the west of ring gully [1841] was fire-pit [1852]. This pit was sub-circular, with a length of 0.46m, a width of 0.44m, and depth of 0.04m. It contained two fills, (18124) and (18123). The former, primary fill (18124) was a very dark grey/black lens of charcoal containing four sherds of Iron Age pottery, whilst the secondary fill (18123) consisted of a light brown sandy clay, devoid both of finds and charcoal. The fire-pit is likely to have been used, and presumably cleaned-out, on a number of occasions before being abandoned. The position of the pit, close to ring gully [1841], suggests that the two may have been contemporary.

Four metres to the south of gully [1842] and pit [1852], were two postholes [1845] and [1846]. Posthole [1845] was circular, with fairly steep sides, and a slightly rounded base, measuring 0.40m in diameter, and 0.16m in depth (Figure 11 (g)). The fill (18121) was a mid-grey/brown sandy silt with occasional charcoal flecks but no finds. Posthole [1846] was also circular, with steep, near vertical sides, and a flat base, measuring 0.30m in diameter, and 0.16m in depth (Figure 11 (h)). The fill (18122), a grey/brown sandy silt, contained occasional flecks of charcoal but no finds.

Both postholes [1845] and [1846] are very similar, and it seems reasonable to assume that they were contemporary, and probably provided the same function. The postholes were 2.0m apart, so could represent the former posts of a 'two-post structure', a fairly common feature of Iron Age sites, thought to have been used as drying racks or similar structure.

To the east of the two postholes was the largest (in diameter) curvilinear gully, [1833]/[1834]/[1837]/[1838]. The gully had a number of sections excavated through it, each allocated a different cut number:

- Gully section [1833], a butt-end, was 0.34m wide, and 0.20m deep, with steep sides, and a fairly rounded base (Figure 11 (i)). The gully appeared to cut (and therefore post-date) gully section [1834]. The fill, (1835), was a green/brown sandy silt with occasional charcoal flecks and finds including several sherds of possibly Iron Age pottery.
- Gully section [1834], another butt-end, was 0.66m wide, and 0.32m deep, with near vertical sides, and a flat base (Figure 11 (i)). The fill, (1836), a mid-grey/brown sandy silt with occasional charcoal flecks, contained a number of finds. These included seven sherds of Iron Age pottery and several animal bones (a cow's tooth and cow-sized bone).
- Gully section [1837], another butt-end, was 0.26m wide, and 0.20m deep, with vertical sides, and a flat base (Figure 11 (j)). The fill, (18119), a grey/brown sandy silt appeared to have silted up naturally. No finds were recovered.
- Gully section [1838] was 0.30m wide, 0.15m deep, with fairly steep, straight sides, and a slightly rounded base (Figure 11 (k)). The fill (1839) was a dark grey/brown sandy silt, with moderate amounts of charcoal flecking. It produced no finds.

The curvilinear gully is likely to represent a ring gully, probably a drainage gully for an Iron Age roundhouse. No evidence for a structure was evident, although as most of the feature lay outside the easement, this is not surprising. Butt-ends [1834] and [1837] could indicate where an entrance once existed. However, at 1.0m wide, it would have been somewhat narrow. Its north-west facing aspect is also unusual, most roundhouse entrances facing the less windy east or south-east. It seems more likely that an entrance into the roundhouse lay outside the easement, and that this 1m-wide gap was simply a

break in the drainage gully, which need not have been continuous. The drainage gully was the only gully on the site to show evidence of maintenance, with its western butt-end [1833]/[1834] having been recut (Figure 11 (i)). The size of the internal structure itself remains unknown, although similar-sized eaves-drip gullies from other sites (it encloses an area of 14.7m), are thought to have surrounded a dwelling with a diameter of 8-12m.

Ring gully [1833/4/7/8] was also the only feature on the site which had been truncated by a later feature (gully [1840]) dating to the Iron Age.

Gully [1840] ran north-east to south-west, across the ring gully. This later feature was c. 4.4m long, 0.45m wide, and 0.32m deep, with vertical edges and a flat base (Figure 11 (l)). The fill (1855), a grey/brown sandy silt with occasional charcoal fragments (up to 20mm in diameter), contained a large quantity of late Iron Age pottery, as well as part of a probable triangular loomweight. The function of gully [1840] is unknown, although its profile suggests that it may have been used for wall construction (possibly for a building).

Immediately to the south of gully [1840], against the easement edge, was ditch [1844]. This was 0.64m wide and 0.25m deep, with only 2.4m of its length visible within the easement. The sides of the ditch were near vertical, and the base was flat (Figure 11 (m)). The feature appears to have silted-up naturally with fill (1856), a mid-grey/brown clayey silt with occasional charcoal flecks. The function of the ditch, and its relationship with ring gully [1833/4/7/8] remain unknown.

Ten metres north-west of ring gully [1833/4/7/8] was the best preserved ring gully present on the site. This feature, of which around half the original length survived, had five sections excavated through it, each allocated a separate cut number [1812, 1814, 1816, 1826 and 1828]:

- Gully [1812] was 0.38m wide, 0.19m deep, with fairly steep, straight sides, and a flat base (Figure 11 (n)). The fill, (1813), was a green/brown sandy silt, containing a single fragment of probably Iron Age pottery.
- Gully [1814] was 0.32m wide, 0.19m deep, with near vertical sides, and a flat base (Figure 11 (o)). The fill (1815), a green/brown sandy silt formed by natural silting, contained five sherds of possibly late Iron Age pottery.
- Gully [1816] was 0.37m wide, 0.20m deep, with straight, steep sides, and a flat base (Figure 11 (p)). The fill, (1817), was a green/brown sandy silt, created by natural silting, and with no finds present.
- Gully [1826] was 0.36m wide, 0.17m deep, with acutely angled sides, and a flat base (Figure 11 (q)). The fill, (1827), a grey/brown silty clay with frequent charcoal flecking, contained a single cow bone.
- Gully [1828] was 0.32m wide, 0.11m deep, with fairly steep and slightly concave sides, and a rounded base (Figure 11 (r)). The fill (1829) was a light to mid-brown sandy clay with frequent charcoal flecks. There were no finds within the excavated fill.

The gully (labelled [1812] for reference) is thought to be a ring gully associated with a late Iron Age roundhouse. The gully's precise function is not clear, although from the size of the internal area (11.2m in diameter), it is more likely to represent a drainage gully than the actual construction trench for the building. There were no breaks in that stretch of the drainage gully exposed, suggesting that an entrance faced somewhere between the north and the east.

North-east of the ring gully were two other features: gully [1818], and pit [1830]. These were the most northerly features on the site. Gully [1818] was c. 2.0m long, 0.40m wide, and 0.26m deep. Its northern

edge sloped fairly steeply, whilst the southern edge was vertical, with the base being flat Figure( 11 (s)). The fill (1819) was a grey/brown sandy clay with occasional charcoal flecks but no finds. The function of this gully remains unclear.

Feature [1830], a sub-circular pit, was 0.76m long, 0.53m wide, and 0.15m deep, with steep, concave sides, and an irregularly-shaped base (Figure 11 (t)). The fill (1831) was a dark grey/brown silty clay with a moderate amount of charcoal. The fill contained no finds. The function of this feature also remains uncertain.

### **Phase 2 - Medieval**

At some point during the medieval period the field was ploughed, with the ploughing in the form of strips running east-west. The remnants of the furrows remained after the topsoil was stripped, and showed that some damage had occurred to the late Iron Age archaeology during the medieval period.

### **Discussion**

It appears that Site 16 consisted of part of a settlement which dated to the late Iron Age. The size of the settlement remains a mystery, although its southern limits are thought to be represented by ditch [1810]. Five probable dwellings, and a possible stacking area for fodder, were identified within the excavated area, although it is highly likely that more were present, especially within the 'blank' area between ring gully [1808] and pit [1851]. The remains of these roundhouses varied, with several represented by construction gullies, and others represented by drainage gullies surrounding the position where the buildings had once existed.

The economy of the settlement seemed to show a bias towards cattle, with sheep being the only other animals present. The pottery evidence shows that the settlement was only occupied for a short while, from the late Iron Age into the latest, transitional period before the Roman invasion. The definite and possible triangular loomweight fragments indicate that weaving was taking place in the vicinity.

The majority of the features appear to indicate a single phase of occupation, with only ring gully [1833] showing any degree of maintenance of a structure, and gully [1840] proving that at least one feature was dug after a roundhouse had been demolished. The pottery from all of the ring gullies is late Iron Age in date, with the only evidence for Roman activity coming from a large curvilinear ditch [1842]. Several grey ware sherds with minimal shell inclusions, common to the late Iron Age, were recovered from a number of contexts across the site. These included carinated and cordoned vessels, probably necked bowls, with most of the shell-gritted sherds appearing to have been wheel-thrown and not handmade. Medieval and later ploughing have caused extensive damage to the site, and it appears likely that much of the original depth of the features present on the site has been lost. The lack of well-preserved evidence for structures on the site is probably therefore due to ploughing, as often only the storm-water drainage gullies are all that survive to show the site of former buildings, especially on heavy clay (Reid, 1993, 56).

## 7.7 Site 17 Iron Age Settlement

Plot 139, west of Ewerby, TF 11320 47018

### Summary

*Part of a late Iron Age settlement of at least two phases of occupation was uncovered to the west of the village of Ewerby. The remains of three possible roundhouses, as well as the majority of the other archaeological features, lay to the east of a large boundary ditch. Medieval and modern ploughing are likely to have destroyed much of the remains on the site.*

### Introduction

The site was identified during the topsoil stripping stage of the watching brief. After its discovery, a rapid, small-scale excavation was carried out. The site is situated 500m west of Ewerby, and 550m south-west of another late Iron Age settlement discovered along the pipeline (Site 16, Plot 135) (Figure 7). Topographically, the site lies to the north east of the summit of Bargate Hill, at 20m OD and on relatively flat ground in an area of boulder clay. The topsoil (18127) was a mid-brown silty clay with occasional-moderate sub-angular, sub-rounded and rounded stone, whilst the natural clay (18128) consisted of a compact, grey/brown and olive green/grey clay mix.

When the plot was originally fieldwalked in 1994, a single prehistoric flint flake, a piece of Romano-British pottery, and a sherd of post-medieval pottery were recovered. The 1997 fieldwalking produced even fewer finds, with only a single sherd of medieval pottery recovered. The data from both sets of fieldwalking did not provide evidence that archaeological remains existed here.

### Results

The archaeological features exposed appear to represent at least two main phases of activity. (Figures 12 (a) and (b)), as follows.

#### Phase 1 : Late Iron Age

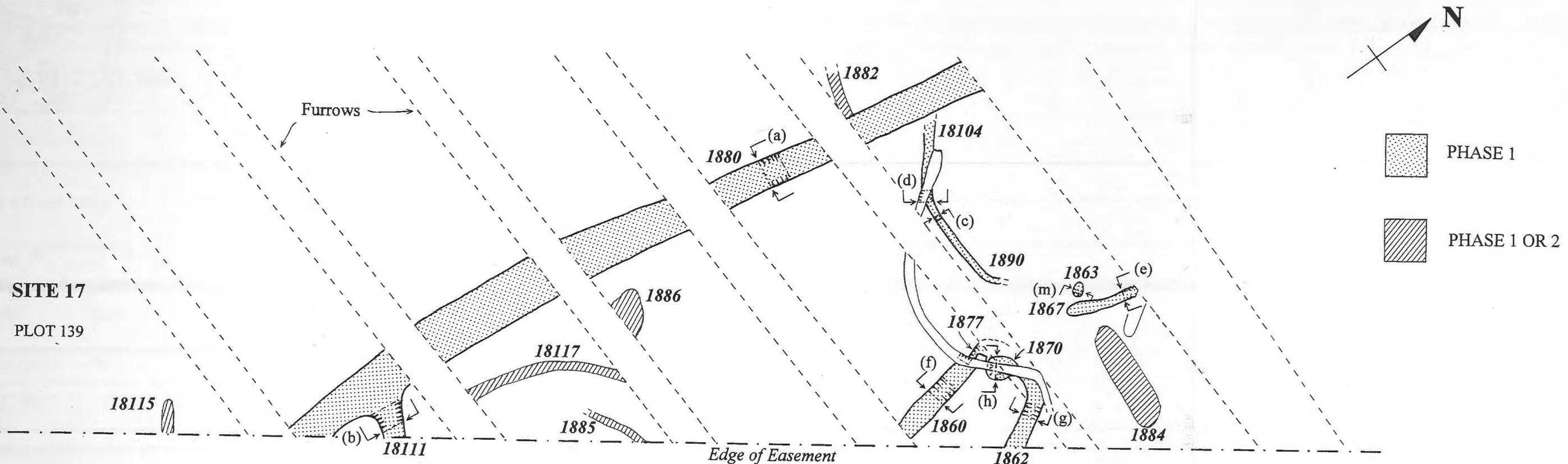
The Phase 1 features include a substantial boundary ditch, several smaller ditches, and a curvilinear gully thought to represent the remains of a roundhouse (Figure 12 (a)).

Ditch [1880], located towards the western side of the site, was 1.02m wide and 0.68m deep, with near vertical sides and a flat base (Figure 13 (a)). The ditch ran north-south and had completely silted up with a single fill (1891), before being re-cut [18126] during the Phase 2 activity on the site. The fill, (1891), was a mid-orange/brown silty clay containing occasional charcoal flecks. A number of finds were recovered from the fill, including three late Iron Age pottery sherds, and cattle and cow-sized animal bones. The position and size of the ditch suggest that it was a boundary ditch, perhaps marking the westernmost limits of an Iron Age settlement.

At the southern end of ditch [1880], another ditch, [18111], running east-west, appeared to be contemporary with the larger ditch. This smaller feature contained a single fill (18113), which had been re-cut ([18112]), probably also during the Phase 2 activity on the site (Figure 13 (b)). Ditch [18111] was 0.30m deep, though its width was unknown as the southern edge had been truncated by the recut. The northern edge of the earlier ditch was straight and very steep, with a fairly flat base. The fill, (18113), was a yellow/brown silty clay with occasional charcoal flecking and no finds. It appears that the ditch silted up naturally. This ditch is likely to have formed an internal division within the main enclosure.

Probable roundhouse gully [1890/18104] was located immediately to the east of ditch [1880], in the northern half of the site. Two sections were excavated through the gully (Figure 13 (c) and (d)), each being given separate cut numbers. The gully had steep, straight sides with a flat base, was 0.24m wide and 0.14m deep, and contained a single fill (18107/18105). The latter appeared to have silted up naturally, and no finds were recovered.

(a) Phase 1



(b) Phase 2

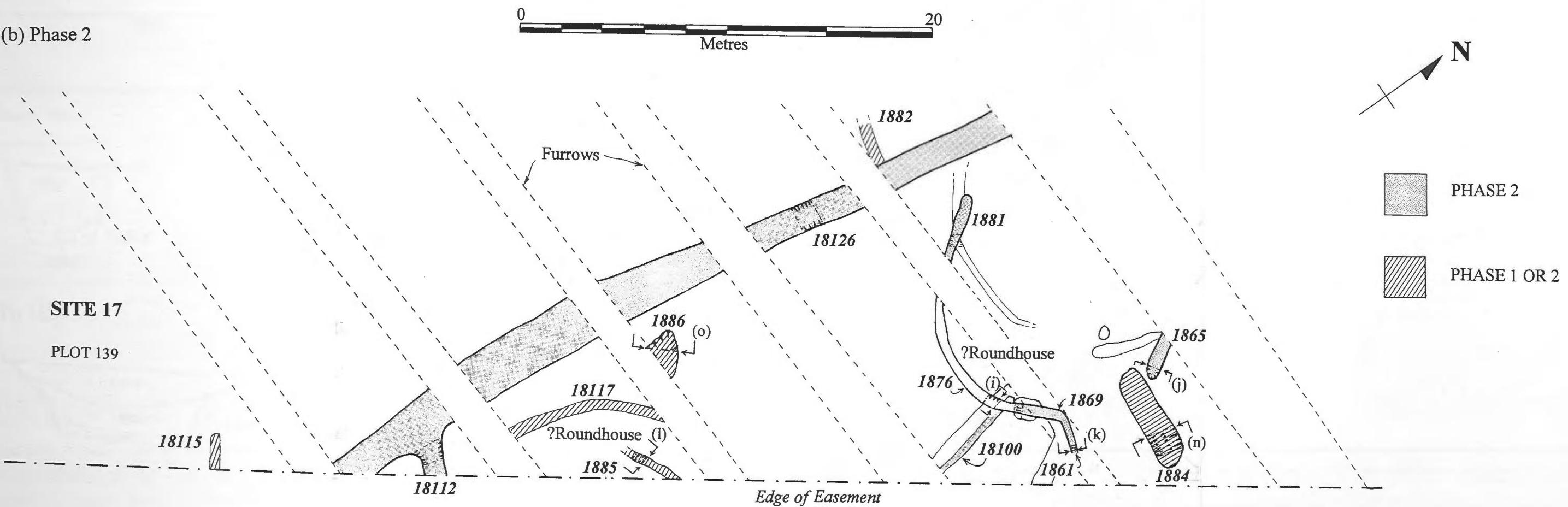
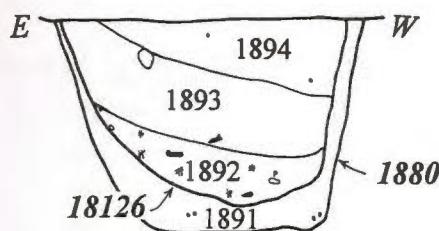
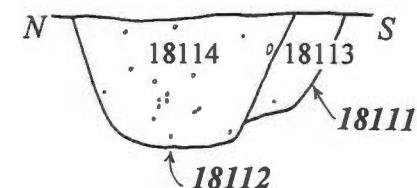


Figure 12: Site 17, Plan and Phase Plan of Iron Age Settlement

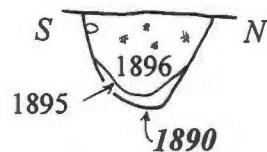
(a) Ditch 1880,18126



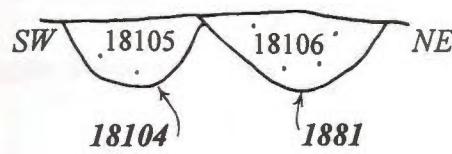
(b) Ditch 18111,18112



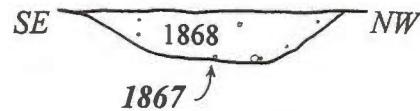
(c) Gully 1890



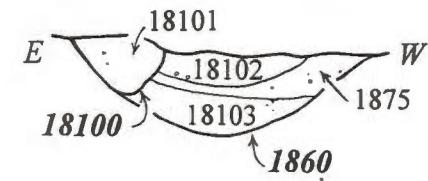
(d) Gully 18104,1881



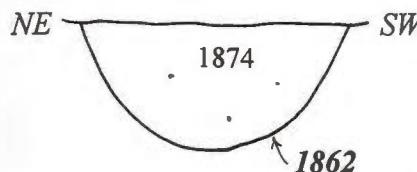
(e) Gully 1867



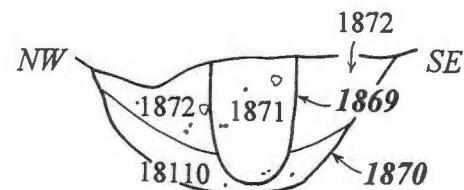
(f) Ditch 18100,1860



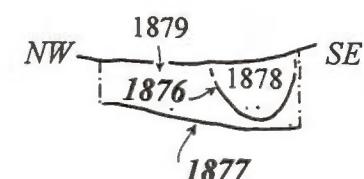
(g) Ditch 1862



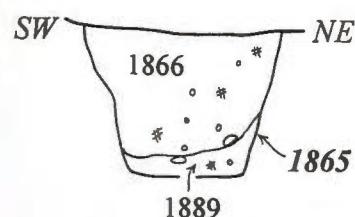
(h) Pit 1870 and Gully 1869



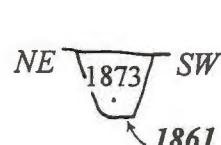
(i) Gully 1876,1877



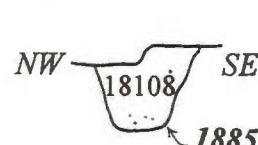
(j) Gully 1865



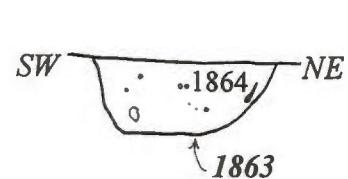
(k) Gully 1861



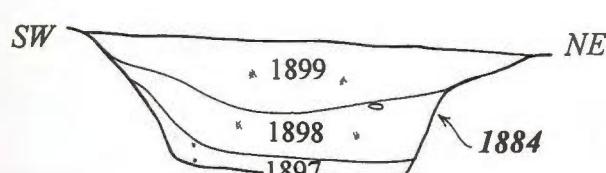
(l) Gully 1885



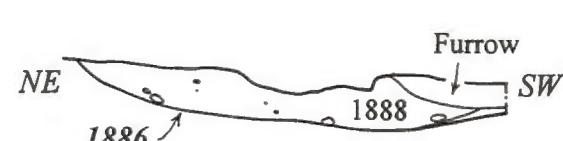
(m) Post-pit 1863



(n) Pit 1884



(o) Pit 1886



0 2  
Metres

- Bone
- Pottery
- \*\* Charcoal

Figure 13: Site 17, Section Drawings

Gully [1867] was situated further east, and was 0.86m wide, with a depth of 0.19m (Figure 13 (e)). At its south end, it terminated. Its single fill, (1868), was a mid-grey/brown sandy silt with occasional charcoal flecks, apparently formed by natural silting of the gully. The fill also contained a number of finds including late Iron Age pottery (Appendix 3, Dr. 3.67), cattle bones, and cow- and sheep-sized bones.

Post-pit [1863] was located next to the butt-end of gully [1867]. The pit was circular, with a diameter of 0.58m and a depth of 0.24m, with variable edges (northern edge: concave and gradual, southern edge: near vertical), and a flat base (Figure 13 (m)). The fill, (1864), a dark grey/brown sandy silt with occasional charcoal flecks, contained several fragments of animal bone (sheep bones, and sheep- and cow-sized bone). The variable profile of this feature is typical of post-pits, the vertical south face representing the position of the post. The presence of several artefacts within the pit suggests that the post may have been removed and the hole backfilled with rubbish.

The butt-end of gully [1867] suggests that the 3m gap between it and gully [1890] represents the former position of a south-east facing entrance. This accords with most other roundhouse entrances, which tend to be east, or south-east-facing. The post-pit ([1863]) next to this butt-end might represent the former position of an entrance post. These pieces of evidence strengthen the argument that both gullies [1890] and [1867] represent the gully of a former roundhouse. The diameter of the gully would have been c.14m, suggesting that it was the outer drainage gully, not an internal wall construction slot.

The pottery evidence suggests that this roundhouse would have been contemporary with the enclosure ditch. However, at its west end, gully [1890] could be traced to within 0.50m of boundary ditch [1880], and a continuation of the curving gully would bring it across the line of the ditch, suggesting that one of the features is later than the other. If so, it seems more likely that the roundhouse gully pre-dates the ditch, partly because there were no hints that the gully cut across the top of the ditch, but also because the Phase 2 roundhouse which superceded this one, appears to have respected the position of the large ditch, indicating that the enclosure ditch was still in use when this later roundhouse was built.

If the earlier roundhouse does pre-date the enclosure ditch, then strictly speaking, Phase 1 should be split into two, to represent an early episode of building construction, and the subsequent laying out of the main settlement boundary ditch. However, it is not impossible that the western ends of the earlier roundhouse gully did respect the enclosure ditch (or even ran into it), and that a stretch of gully never actually existed on the west side of the roundhouse itself. In other words, the ditch may have acted as a drain for water which, either fell into the gully first, or which fell directly from the structure's roof into the ditch. For this reason, the structure and the ditch have been left in the same phase.

Opposite the entrance of the earlier roundhouse was a group of Phase 1 features. Ditch [1860] ran roughly north-south, and was 0.99m wide, 0.31m deep, with fairly shallow, concave edges and a rounded base (Figure 13 (f)). The ditch contained a total of three fills (18103, 1875 and 18102) with a later gully [18100] being dug along the same alignment, probably during the Phase 2 activities (see below). The three fills consisted of:

- Primary fill (18103), a mid-yellow/brown sandy clay with occasional charcoal flecking, formed by natural silting. The fill contained no finds.
- Secondary fill (1875), a mid-grey/brown sandy silt with some charcoal flecking, formed by natural silting. The fill contained a single piece of possible Iron Age pottery, cattle and cow-sized animal bone.
- Tertiary fill (18102), a yellow/brown silty clay, containing occasional flecks of charcoal, and probably formed by natural silting processes. The fill contained no finds.

It appears then that the ditch had silted up naturally, initially during a period with little human activity nearby (18103), although this activity increased (1875) with higher concentrations of charcoal and a number of artefacts being deposited. There was then another period with little human activity nearby (18102), before a gully [18100] was dug into the side of the ditch, possibly in Phase 2.

Roughly parallel with the above ditch, and 4.6m from it, was ditch [1862]. This appeared to curve to the west at its northern end, although this was not clear as the feature was truncated by a later, Phase 3, medieval furrow. Ditch [1862] was 0.90m wide, 0.40m deep, with fairly shallow, concave sides, and a rounded base (Figure 13 (g)). The single fill, (1874), was a dark grey/brown sandy silt, with some flecks of charcoal.

It appeared, from the quantity of artefacts, that a large volume of rubbish had been dumped into the ditch as it silted up. The finds consisted of a fairly large quantity of late Iron Age pottery, including fragments of cooking vessels and a bowl, animal bone (including sheep, horse, pig, and sheep- and cow-sized bone), and a fragment of unidentified fired clay.

Pit [1870] was located between ditches [1860] and [1862], and had been cut by Phase 2 roundhouse gully [1869], as well as a medieval furrow. The pit was 1.90m long, 1.02m wide, and 0.48m deep, with two fills (18110 and 1872) (Figure 13 (h)):

- Primary fill (18110), a yellow/brown silty clay with occasional flecks of charcoal, contained no finds, and appeared to have formed through natural silting.
- Secondary fill (1872), a grey/brown sandy clay with more frequent flecks of charcoal and a high organic content, contained a large number of artefacts. These included numerous sherds of late Iron Age pottery and animal bone (cattle, sheep, pig, and cow-sized bones).

The pit was presumably a rubbish pit. It appears that after it was dug, it was left open for a period of time before being back-filled with rubbish, thus allowing a layer of silting (18110) to accumulate in its base.

### Phase 1 Discussion

Substantial ditch [1880] probably marked the western extent of a late Iron Age settlement, with, immediately to its east, shallow curvilinear gully [1890] representing the remains of one of the roundhouses belonging to that settlement. Opposite a probable entrance to this roundhouse were a pair of parallel gullies, which may have linked up at their south end to form a small rectangular enclosure. This may have been used as an animal pen, or to mark-out an activity area. Ditch [1862], as well as pit [1870] contained a large number of finds within their fills, suggesting that a significant level of domestic activity was occurring at this time.

### Phase 2 : Late Iron Age / latest transitional period

During the Phase 2 activities on the site, the large boundary ditch continued in use (re-cut [18126]), and a new roundhouse was constructed (Figure 12 (b)).

Re-cut [18126] of ditch [1880] had a slightly different profile to its predecessor (Figure 13 (a)). The base was slightly rounded, and the sides were very steep and slightly concave. The re-cut was 0.94m wide and 0.60m deep, and contained three fills (1892, 1893 and 1894):

- Primary recut fill (1892) was a grey/brown sandy silt with occasional flecks of charcoal. It contained a fairly large number of finds, including numerous sherds of late Iron Age pottery, an oyster shell, animal bone (cattle, and cow- and sheep-sized bones), and a single piece of Romano-British brick/tile.

- Secondary recut fill (1893), an orange/brown sandy silt, with occasional flecks of charcoal, appeared to have silted naturally. It also contained a number of finds (although fewer than primary fill (1892)), including some late Iron Age pottery sherds, and some pieces of animal bone (cattle, pig and cow-sized).
- Tertiary recut fill (1894) was a light-grey/orange silty clay with occasional flecks of charcoal, formed by natural silting.

It appears then, that after the ditch was re-cut, a large amount of rubbish was thrown into the ditch, in two stages (1892 and 1893), before the ditch was left to finally silt up (1894). The periods when rubbish was being deposited within the ditch, presumably correspond to times of greatest domestic activity. The point at which this ditch became disused may also be when the settlement was abandoned.

At the southern end of Phase 1 boundary ditch [1880], was ditch [18111] running east-west, away from ditch [1880]. It appears that this ditch was also re-dug during Phase 2. Re-cut [18112] contained a single fill (18114), and was 0.72m wide, 0.42m deep, with steep, near vertical sides, and a flat base (Figure 13 (b)). The fill, (18114), a grey/brown sandy silt containing occasional charcoal flecks, was formed through natural silting processes. It contained several finds, including late Iron Age pottery, cow-sized animal bone, and fragments of a possible triangular loomweight. This ditch re-cut is likely to have continued functioning as an internal boundary within the settlement during Phase 2.

Further to the north, and slightly overlying Phase 1 roundhouse gully [1890], was another curvilinear gully, also thought to represent a roundhouse. This gully had three sections excavated through it, with each section allocated a separate cut number [1869, 1876 and 1881]. All three contained a single fill (1871, 1878 and 18106 respectively) Each section will firstly be described as a separate entity before they are discussed generally together:

Gully [1869], located at the eastern end of the gully (overlying pit [1870]), had near vertical sides, a fairly rounded base, was 0.35m wide, and 0.32m deep (Figure 13 (h)). The fill, (1871), was a pale grey/brown sandy silt with occasional flecks of charcoal, formed by natural silting. Within the fill were several finds, including a number of sherds of possibly late Iron Age pottery, and cow- and sheep-sized animal bones.

Gully [1876], located towards the eastern end of the gully (overlying ditch [1860]), had near vertical, concave edges, a rounded base, was 0.29m wide, and 0.24m deep (Figure 13 (i)). The fill, (1878), a grey/brown silty clay with some charcoal flecking, was caused by natural silting, although it also contained a number of finds, including a single sherd of pottery of probably Iron Age date, and animal bone (cow and cow-sized).

Gully [1881], located at the western end of the gully (overlying gully [1890]), had fairly steep, concave edges, a rounded base, and was 0.28m wide and 0.13m deep (Figure 13 (d)). The fill, (18106), a dark grey/brown sandy silt with occasional charcoal flecks, was formed through natural silting. No finds recovered from this fill.

The width of the entire gully (labelled [1869] for reference) appeared fairly uniform throughout, although its depth varied considerably. This may be due to differential rates of destruction by ploughing across the site, making some features appear deeper than others.

Adjacent to the south part of gully [1869] were two other narrow stretches of gully, [1861] and [18100]. The former appeared to be an extension of gully [1869], whilst [18100] cut through the top of earlier ditch [1860].

Gully [1861] was 0.25m wide, 0.21m deep, with near vertical, straight sides and a flat base (Figure 13 (k)). The gully contained a single fill (1873), a dark grey/brown sandy silt with occasional charcoal

flecks. Within this fill were several sherds of Iron Age/Romano-British pottery and a number of sheep bones.

Gully [18100] was 0.32m wide, 0.19m deep, with fairly steep, concave sides, and a slightly rounded base (Figure 13 (f)). The fill (18101), a dark grey/brown sandy silt with moderate charcoal flecking, contained no finds.

Both gullies [1861] and [18100] appeared to have silted up naturally, with some human activity occurring nearby. The location of the two gullies, radiating away from curvilinear drainage gully [1869], suggests that they were dug as additional drainage features.

Opposite the junction of the main roundhouse gully and narrow gully [1861], was the remains of a slightly wider gully, [1865]. This had near vertical edges, a fairly flat base, was 0.67m wide and 0.50m deep, and terminated at its south end. It contained two fills (1889 and 1866) (Figure 13 (j)):

- Primary fill (1889), a orange/brown silty clay with occasional charcoal flecks, appeared to have formed through erosion of the gully edge and natural silting. No finds were recovered.
- Secondary fill (1866), a dark grey/brown sandy silt with a moderate amount of charcoal, appeared, from the volume of finds, to be a rubbish deposit deliberately backfilled into the gully. The finds included numerous late Iron Age pottery fragments, animal bone (including cattle, sheep, pig, horse, and cow- and sheep-sized animal bone, and fragments of a possible triangular loomweight.

It appears that the gully was left open for some time, before being backfilled with rubbish, perhaps from the roundhouse itself. The large volume of finds from the butt-end is in common with the evidence from other roundhouse entrance gullies (Allen *et al*, 1984, Fig. 6.3, p.94).

If one continues the line of this short stretch of gully in a circular fashion, it meets gully [1869] to form the circle of the roundhouse. The southern butt-end of this shorter gully, opposite gully [1869], suggests that a 4.2m-wide entrance once existed here.

### Phase 2 Discussion

The Phase 2 evidence appears to show that the large boundary ditch and the internal dividing ditch were being maintained, and therefore perhaps that the settlement did not expand westwards during this time. The original, Phase 1 roundhouse appears to have been replaced by another, which was positioned slightly south-east of the original, but was of comparable size.

### Unphased Features

A number of features could not be phased, although it is likely that they came from one of the two Iron Age phases (Figure 12). These are discussed below.

The most significant unphased features were a pair of curvilinear gullies, [18117] and [1885], which lay in the angle formed by the main boundary ditch and the internal dividing ditch. Gully [18117] was the more substantial, at 0.44m wide, 0.12m deep, with fairly steep, concave sides, and a flattish base. The fill (18118), a mid-dark grey/brown sandy silt with occasional charcoal flecks, produced no finds.

Smaller gully [1885] sat within the curve formed by the larger gully, and was parallel with it. This less substantial gully was 0.33m wide, 0.26m deep, with near vertical straight sides, and a flat base (Figure 13 (l)). Its fill, (18108), a grey/brown sandy silt with occasional charcoal flecks, contained several finds (late Iron Age pottery, cow-sized animal bones, and part of a probable triangular loomweight).

The position of the two gullies respective to each other suggests that the outer one may have been a drainage gully, around a roundhouse whose wall foundations were represented by the inner gully. The profile of the latter suggests that this may well have been the case. Such a structure would have had a diameter of 10.8m, with the drainage gully having a diameter of 15.8m. A second, less favoured interpretation is that both gullies were the outer drainage gullies for two phases of roundhouse, the later one shifting away from the main boundary ditch, in the same way that the Phase 2 roundhouse further north was sited further away from its Phase 1 predecessor.

To the west of boundary ditch [1880], there were two gullies ([1882] and [18115]) which would have been outside the settlement. Both appear to be of late Iron Age date. Gully [1882] extended westwards from ditch [1880], whilst gully [18115] was located against the easement, south west of ditch [1880], so its relationship with this boundary ditch remains unknown.

Gully [1882] was 0.43m wide, 0.32m deep, with near vertical, straight sides, and a flat base. The gully contained two fills (1895 and 1896):

- Primary fill (1895), a brown sandy clay, containing a single cow bone.
- Secondary fill (1896), a grey/brown sandy silt, containing a higher volume of finds, including numerous sherds of late Iron Age pottery and a single sheep bone.

The gully appears to have been left open for a while, allowing several phases of silting to occur. Primarily, this seems not to have included any significant human activity, although by the time the secondary silting deposits had begun to form, this activity had increased dramatically, with rubbish (broken pottery) being dumped into the gully. The function of this feature remains unknown.

Approximately 1.5m of gully [18115] existed within the easement area, to the south-west of boundary ditch [1880]. The gully ran north-west to south-east, with a butt-end at its north-western end. It was 0.54m wide, 0.12m deep, with shallow, concave sides and a rounded base. The fill, (18116), a grey/brown sandy silt, contained a single piece of late Iron Age pottery. The function of this feature remains unknown.

Pit [1884] was located immediately to the south-east of Phase 2 gully butt-end [1865]. The pit was 4.80m long, 1.48m wide and 0.50m deep, with steep, near vertical sides, and a flat base (Figure 13 (n)). It contained three fills (1897, 1898 and 1899):

- Primary fill (1897), an orange/brown sandy clay with occasional charcoal flecks, contained no finds.
- Secondary fill (1898), a grey/brown sandy silt, contained a number of finds, including several sherds of late Iron Age pottery and animal bone (cattle bone, some with butchery marks, and cow- and sheep-sized bone).
- Tertiary fill (1899), a dark grey/brown sandy silt with occasional flecks of charcoal, contained a large number of finds, including several sherds of late Iron Age pottery (Appendix 3, Dr. 3.66), animal bone (sheep, pig, horse, cow, and cow- and sheep-sized bone), a fired clay spindle whorl (Appendix 11, 11.1) and a piece of unidentified fired clay.

The function of this pit is unclear. Originally, when the pit was dug, it was probably left open for some time and allowed to silt up naturally. After this, it appears that some domestic rubbish was dumped within it, whilst it continued to silt up. The final stage of silting included a higher volume of rubbish being deposited. This material included half a spindle whorl. This item originally appears to have been decorated with four dimples on its side, and has a diameter of 32mm. When used, the spindle whorl would have had a wooden hand-spindle fitted through it, and this would have acted as a flywheel,

allowing fibres to be spun (Adkins *et al*, 1998, 251). The spun fibres would then have been used to make cloth for clothing.

Pit [1886] was located close to boundary ditch [1880] and roundhouse gully [18117]. This pit was partly truncated by a medieval furrow, whilst modern ploughing appears to have greatly reduced its overall depth. The pit was 1.37m wide and 0.18m deep, with shallow concave sloping sides and a flat base, and contained a single fill (1888) (Figure 13 (o)). This fill consisted of a dark grey/brown silty clay with frequent flecks of charcoal, and contained a number of finds, including several sherds of late Iron Age pottery and animal bone (sheep, and sheep- and cow-sized bone). It was probably a rubbish pit.

### Phase 3 : Medieval

The medieval period was represented by five furrows running east-west across the site (Figure 12). These varied from 1.8m to 3.9m wide, and were between 5.0m and 6.0m apart. The widest furrow was also the most northerly; this furrow was adjacent to the modern field boundary, and it is likely that it has survived to a greater extent due to its close proximity to the modern boundary.

### Site 17 : Overall Discussion

The site appears to represent the western portion of a late Iron Age settlement, which saw at least two main phases of occupation. The pottery evidence is almost exclusively of Iron Age date, with only a single sherd of Roman pottery coming from ditch [1862]. The shell-gritted Iron Age pottery includes both handmade and wheel-made vessels, with bowls, cooking vessels and a storage jar. A small fragment of a carinated bowl from ditch [1810] has been recognised as being similar to one found at Sleaford, based on its rim form and unusual moulded base. In fact, the assemblage as a whole is directly comparable with late Iron Age pottery occurring at Sleaford.

Of the other artefacts recovered, the fragments of triangular loomweights and the spindle whorl indicate that weaving was taking place on the site, whilst the cattle, sheep and pig bones provide some indication of the food economy of the occupants of the settlement.

The first phase, during the late Iron Age, saw the digging of the western boundary ditch [1880], and the construction of at least one Iron Age roundhouse. The second phase saw the western boundary ditch being re-dug ([18126]), and a new roundhouse being constructed. This second phase appears to belong to the late Iron Age or latest transitional period immediately prior to the Roman invasion in 43 AD. The recovery of a few early Romano-British finds supports this supposition. At some time, almost certainly during one of the two main phases, it appears that another roundhouse was constructed, south of the phased roundhouses. The site appears to have been abandoned at the very end of the Iron Age.

Across the site, it was apparent that heavy ploughing, from the medieval period onwards, has caused a great reduction in the depths of the features. This has meant that more ephemeral features have probably already been lost to the plough, leaving only the bases of the more substantial features to aid identification and interpretation of the site.

### 7.8 Site 18 ?Iron Age Barrow Cemetery

Plot 145, east of Kirkby la Thorpe, TF 10647 45772

The Iron Age remains found here are a highly significant part of a multi-period site of regional importance. As a multi-period site it will be discussed as a whole under a single period, in this case Anglo-Saxon (9.3). In summary, however, the Iron Age evidence consists of two ring ditches and three rectangular ditches, all of which are only partially exposed, as well as a number of scattered pits and postholes.

The dimensions of the larger ring ditch, 9.9m in diameter with a width of up to 1.7m and a depth of up to 0.62, has suggested a non-secular function. The smaller ring ditch would have cut, or been cut by, the

larger and measured 6.30m in diameter, with a width of up to 0.85 and a depth of up to 0.35m. Although these dimensions are comparable with small Bronze Age barrows, the presence of Iron Age pottery within the earliest fills, combined with the absence of a convincing re-cut, has led to them being assigned an Iron Age date. However, given the scale of the larger feature, their function is still thought to be religious.

The rectangular ditches have been assigned to this period principally due to the presence of a few Iron Age sherds and a lack of later datable material. Assuming they are square in plan they would have had diameters of 4.10m, 6.00m and 7.90m. They appeared to have suffered heavily from truncation, as too had the ring ditches, and varied in depth between 0.03m and 0.30m. Having speculated an Iron Age date the only obvious parallel is that of the Arras culture's 'square barrows'.

Both these theories are highly speculative and, if true, unique in Lincolnshire. Full details and discussion can be found in the Anglo-Saxon section 9.3.

### 7.9 Site 19 Iron Age Settlement

Plot 146, south-east of Kirkby la Thorpe, TF 10526 45538

#### Summary

*The site contains two possible circular structures, a number of boundary ditches and gullies, and several pits. All the dateable evidence suggests two phases of occupation dating exclusively to the late Iron Age. Several sherds of middle Bronze Age pottery were recovered from various contexts, suggesting some pre-Iron Age activity. The site was abandoned at the end of the late Iron Age, and sealed by hillwash from the north. From the medieval period to the present day, the field has been ploughed.*

#### Introduction

This part of the pipeline route was originally fieldwalked in 1994, when a small number of flint artefacts and medieval pottery fragments were recovered. The 1997 programme of fieldwalking recovered one piece of Romano-British pottery and two sherds of Medieval pottery. The site was first highlighted during the geophysical survey, carried out in December 1997 (GSB survey report 1998/07). Magnetic scanning located several isolated potential targets, including a concentration of possible pits. A single 4m by 14m trench was opened during the evaluation phase to investigate the geophysical anomalies. This trench produced a small number of shallow, ephemeral features, but these did not suggest that a substantial site was present, so no further action was deemed necessary at this stage (Appendix 13).

The site was found 600m to the south-east of the centre of Kirkby la Thorpe village (Figure 14), within the valley (at 5m OD) formed by Kirkby Mount (20m OD) to the north, and Bargate Hill (30m OD) to the south. Immediately to the north of the site is a ridge of Oxford Clay where a multi-period multi-functional site was discovered (Site 18, Section 9). Site 19 is located on the free-draining Sleaford sands and gravels. The site possessed a layer of topsoil ((2400), a grey/brown sandy silty loam) overlying a layer of hillwash ((2401), an orange/brown sandy silt) which sealed much of the archaeology.

#### Results

Although the site was investigated in two stages (evaluation followed by excavation), the site will be discussed as a whole (Figure 15 (a)).

#### Bronze Age

Four sherds of middle Bronze Age pottery were recovered, one from ditch [2407] and three from its recut [2443]). Three other fragments of middle Bronze Age pottery found at the site were unstratified.

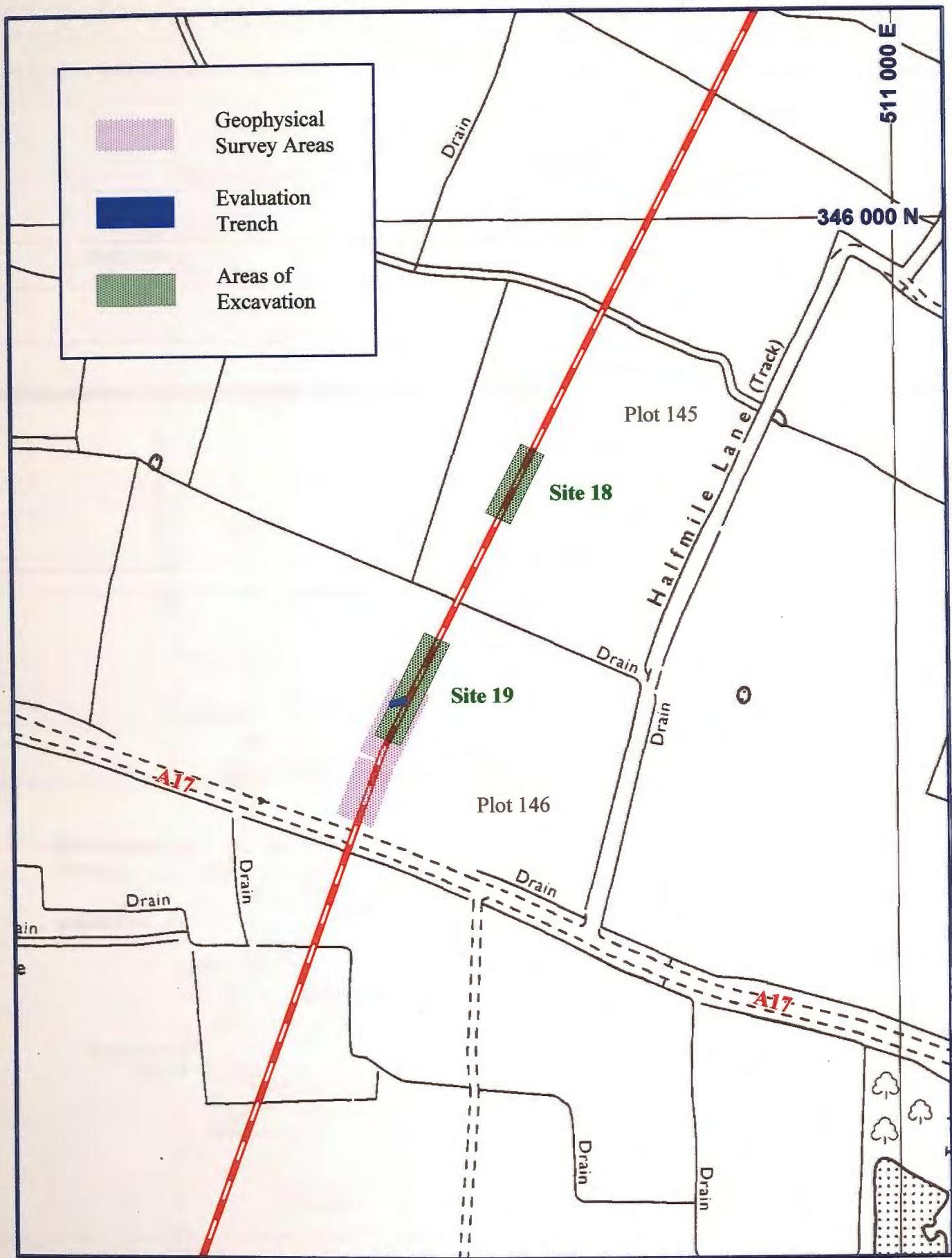
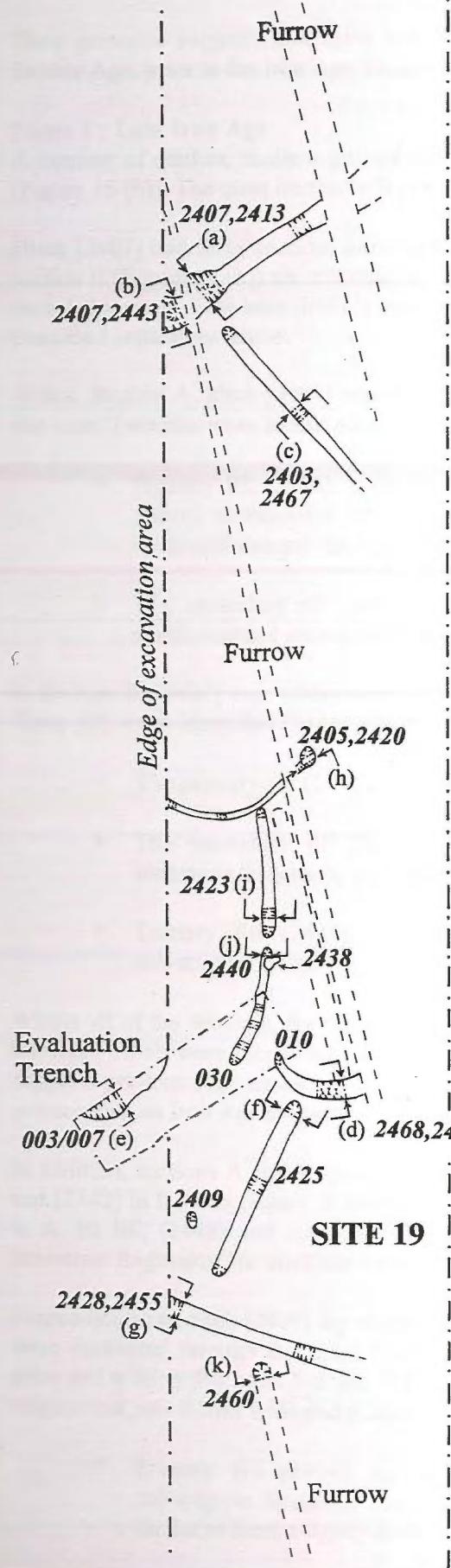
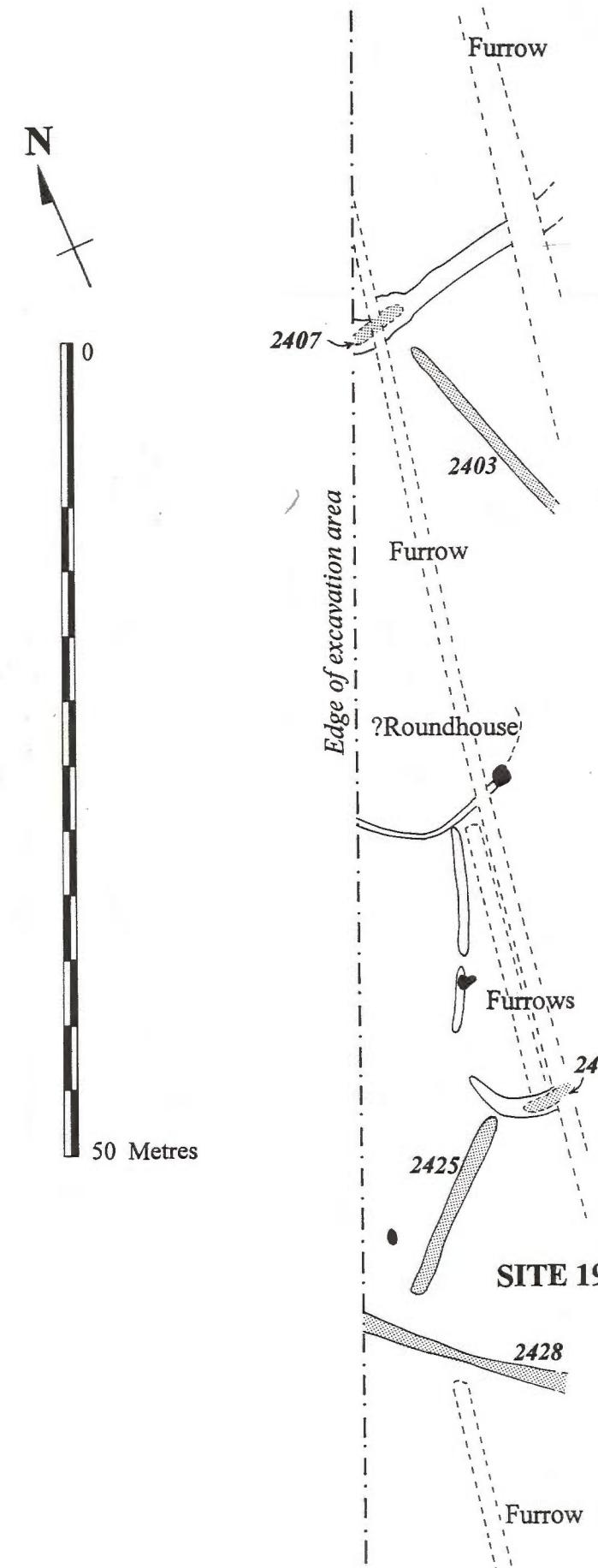


Figure 14: Site 18, multi-period, and Site 19, Iron Age Settlement

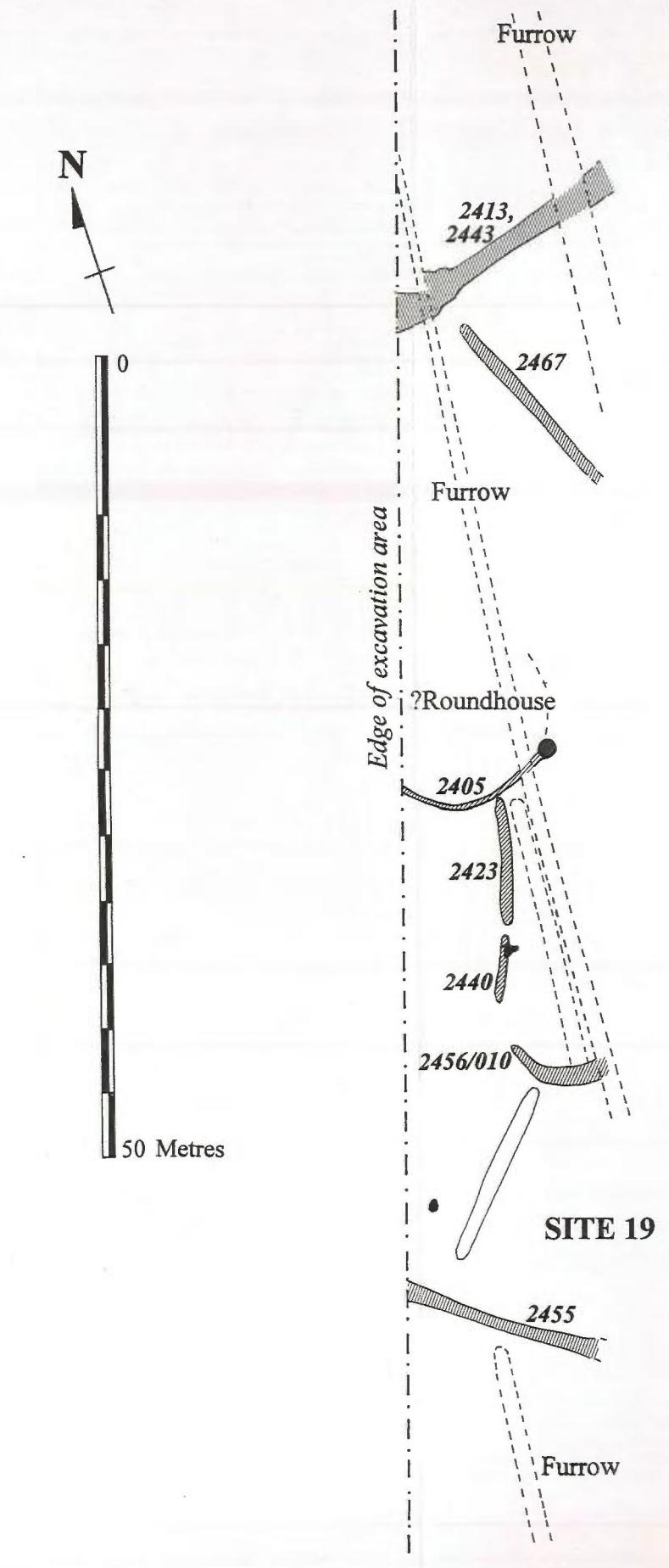
(a) Composite Site Plan



(b) Phase 1



(c) Phase 2



■ PHASE 1  
■ PHASE 2  
■ UNPHASED

Figure 15: Site 19, Plan and Phase Plan of Iron Age Settlement

Their presence suggests that there was probably some degree of human activity here in the middle Bronze Age, prior to the Iron Age occupation of the site (Appendix 2).

### Phase 1 : Late Iron Age

A number of ditches, shallow gullies and pits have been attributed to the Phase 1 activity on the site (Figure 15 (b)). The most northerly feature, [2407], appears to be the most complex, stratigraphically.

Ditch [2407] had three sections excavated through it, A, B and C. Only section A (Figure 16 (a)), and section B (Figure 16 (b)) are reproduced in profile here. In addition to the main ditch itself, each section revealed a recut. This later ditch is described in Phase 2. Each of the sections of original cut [2407] is described separately below.

Within Section A, ditch [2407] was 0.90m wide and 0.66m deep, with near vertical edges and a fairly flat base. Two fills were identified in this section (2414/2415 and 2416):

- Primary fill (2416), a dark grey/brown silty sand with frequent sub-angular and rounded gravel, contained a number of finds. These included a piece of Bronze Age pottery, an unidentifiable animal bone, and a fragment of unidentified fired clay.
- The secondary fill (2414/2415) was a mid-grey/orange silty coarse sand, with frequent small rounded gravel, and no finds.

In Section B, [2407] was 1.02m wide and 0.68m deep, with very steep, straight edges, and a flat base. Three fills were identified (2444, 2445/6 and 2447):

- The primary fill (2444) was a mid-orange/yellow sand, containing no finds.
- The secondary fill (2445/6) was a dark grey sandy silt with occasional sub-angular limestone fragments, and also containing no finds.
- Tertiary fill (2447), a light grey-orange/brown mix of sandy silts, with moderate sub-angular limestone and sub-rounded gravel, also contained no finds.

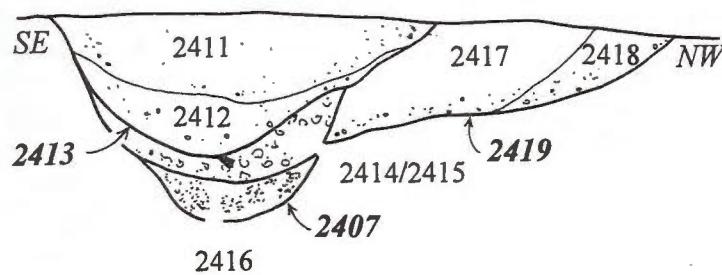
Within all of the sections, the ditch had silted up naturally, with very few finds being deposited. Those artefacts which were recovered tell us little about the site, although the Bronze Age pottery fragment suggests pre-Iron Age activity on the site. The ditch itself was probably part of an enclosure, possibly surrounding an Iron Age settlement.

In addition, sections A and B also showed that ditch [2407] cut through an earlier feature: [2419] in A and [2442] in B. This feature is interpreted as a pit. Its profile varied, being steep sided in B but less so in A. Its fill, (2448) and (2417/2418) was a light grey/brown sandy silt with moderate sub-angular limestone fragments. No artefacts were recovered.

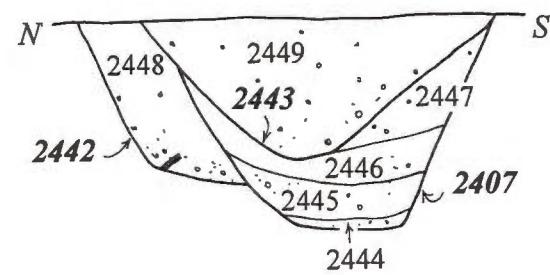
Perpendicular to ditch [2407] lay ditch [2403], which butt-ended immediately opposite it. Two sections were excavated through this ditch (Sections A and B), both revealing a profile with moderately steep sides and a fairly flat base. Section A had two fills, (2430) and (2404), and a Phase 2 recut [2467]. The original cut was 0.50m wide and 0.20m deep, and filled with:

- Primary fill (2404), an orange/grey silty sand with frequent rounded pebbles and sub-angular limestone fragments. The only finds recovered were a cow and a horse bone, the latter from a lightly-built, pony-sized animal.
- The secondary fill (2430), was an orange/brown silty sand with occasional rounded pebbles and sub-angular limestone fragments, containing no finds.

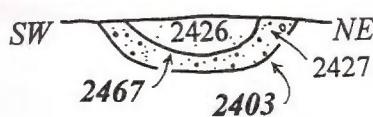
(a) Ditch 2407/2413 and ?pit 2419



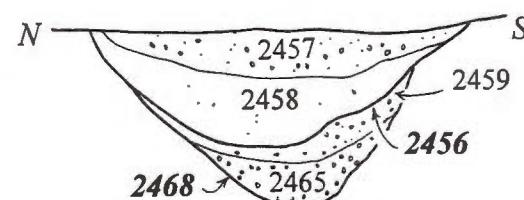
(b) Ditch 2407/2443 and Pit 2442



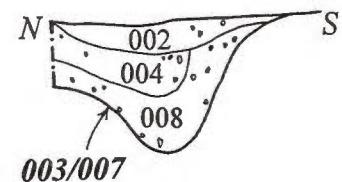
(c) Ditch 2403/2467



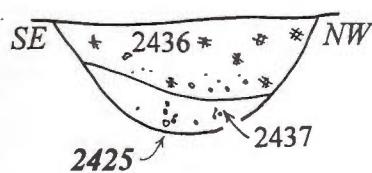
(d) Ditch 2456/2468



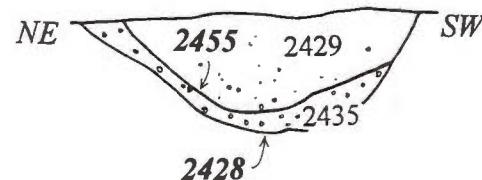
(e) Ditch 003/007



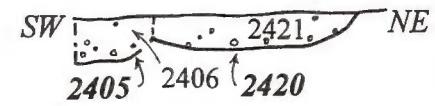
(f) Ditch 2425



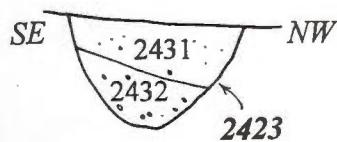
(g) Ditch 2428/2455



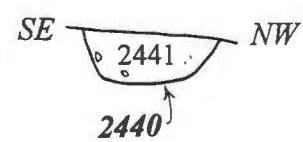
(h) Gully 2405 and pit 2420



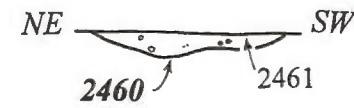
(i) Ditch 2423



(j) Gully 2440



(k) Furrow 2460



↗ Bone

\*# Charcoal

0 2  
Metres

Figure 16: Site 19, Section Drawings

Section B of ditch [2403] contained fill (2427) and a Phase 2 recut [2467] (Figure 16 (c)). The original cut had a width of 0.63m and a depth of 0.06m. Its fill was a dark orange/brown silty sand with frequent small rounded gravel, and no finds.

Although ditch [2403] produced no dateable finds, the fact that it was at right angles to ditch butt-end [2407], suggests that a 2m-wide entranceway may have existed here, and that the two ditches were therefore contemporary. Indeed, they appear to form the north-west corner of an enclosure.

Ditch [2468] consisted of a short stretch of ditch which terminated at its west end, and which was located towards the southern end of the site, beneath later ditch [2456] (Figure 16 (d)). It ran east-west, was 0.92m wide and 0.56m deep, with fairly steep, straight sides, and a rounded base. Within the ditch there were two fills (2459 and 2465):

- Primary fill (2465), a mid-orange silty sand with frequent small rounded gravel and the occasional fleck of charcoal, contained no finds.
- Secondary fill (2459) was a grey/brown sandy silt with frequent small rounded and sub-rounded gravel, and a number of finds (several late Iron Age pottery fragments and unidentifiable animal bone fragments).

The precise function of this ditch is unclear, but it probably represented part of the series of enclosures present here during the late Iron Age (Phase 1).

Ring ditch [003/007], uncovered during the evaluation stage, was located to the north of ditch [2425] (Figure 15 (a)). Two sections ([003 and 007]) were excavated through it. These both showed the ditch to be 0.33m deep and 0.60m wide, with near vertical edges and a slightly rounded base (Figure 16 (e)). Both sections containing two fills, all caused by periods of natural silting:

- The primary fill (005 and 008) was a light brown silty sand containing some small rounded gravel and occasional flecks of charcoal. No finds were recovered.
- The secondary fill (006 and 004) was a dark brown/grey silty sand with occasional small rounded gravel and a large number of finds. These included 27 sherds of late Iron Age pottery, cow and sheep bone, cow- and sheep-sized bone, burnt bone, and fragments of one or two probable/possible triangular loomweights. The subsoil in this area (002) also produced fragments of a definite triangular loomweight, and some unidentified fired clay.

Although only a small proportion of the ditch was uncovered during the evaluation stage (about one fifth), it was possible to deduce that, if the ditch formed a complete circle, then the original diameter of the ring ditch would have been 5.1m, with a ditch width of 0.6m (Appendix 13). The lower, primary fill (008 and 005), appears to represent a period of silting and erosion of the edge of the cut immediately after the ditch had been dug. All of the finds from the ditch were recovered from the upper fill (004 and 006), which probably occurred after the ditch had been abandoned.

Ditch [2425] was located to the west, and slightly south, of ditch butt-end [2468]. The ditch ran northeast-southwest, was 11.6m long, 0.87m wide, and 0.43m deep, with near vertical sides and a rounded base (Figure 16 (f)). Three sections (A, B and C) were excavated, two of which were through the butt-ends. Two fills were present within each section (2436 and 2437):

- The primary fill, (2437), was a red/brown sandy gravel with frequent amounts of small rounded gravel. Three sherds of possibly late Iron Age pottery were recovered.
- Secondary fill (2436), was a red/brown sandy silt with moderate small rounded gravel, occasional charcoal flecks, and numerous finds. The latter included a large number of late

Iron Age pottery (including one decorated piece), animal bone (cow, sheep tooth, several cow-sized fragments), and a small quantity of unidentified fired clay. The majority of these finds were recovered from the northern butt-end (Section C), suggesting that activity was more concentrated here.

The ditch fills show that some silting had occurred, with the incorporation of several sherds of Iron Age pottery from surface debris into the ditch, before a large amount of rubbish was dumped into the northern end of the ditch. The decorated late Iron Age pottery from this fill is interesting as it is identical in form to a piece of decorated Iron Age pottery recovered during a programme of unrelated fieldwalking near to the village of Ewerby (May, 1976, p.74, Fig.87, No.11).

Ditch [2428] was the most southerly of the Iron Age features uncovered at Site 19. This ran east-west across the whole easement, and was 1.10m wide and 0.37m deep, with two sections excavated through it (A and B). Both sections contained a single fill, (2435) and (2466), followed by a Phase 2 recut, [2455]. The ditch had fairly steep, irregular sides, and a fairly flat base (Figure 16 (g)). Fill (2466) was a mid-orange/brown silty sand with frequent rounded gravel and occasional charcoal flecking, and produced a few fragments of unidentified fired clay.

Both ditch [2428] and ditch [2425] appear to have been boundary features, with [2428] possibly delimiting the southern extent of the late Iron Age settlement, and ditch [2425] an internal division. The gaps at either end of this latter ditch were probably entrances.

#### Phase 1 Discussion

The Phase 1 evidence suggests that ditches [2407] and [2428] represented the northern and southern boundaries of a settlement enclosure dating to the late Iron Age. Other ditches within the excavated area may have formed part of a series of internal boundaries, perhaps to separate off animals from zones of human activity, the latter represented by the small circular structure. The greater quantity of finds at the northern end indicates that, certainly by the secondary period of silting of ditch [2425], the northern entranceway was being used more frequently.

#### Phase 2 : Late Iron Age

Several of the Phase 1 features appeared to have been recut, suggesting a second period of activity on the site. A number of new features were also attributed to this phase (Figure 15 (c)).

Ditch [2413/2443], at the northern end of the site, was the most substantial. Of the three sections (A, B and C) excavated through Phase 1 ditch [2407], two of them (A and B) contained evidence of this Phase 2 ditch. Within Section A, the feature was recorded as [2413], whilst within Section B, the west-facing section was recorded as [2443] (the east-facing section was numbered [2408]).

Ditch [2413] was 1.30m wide and 0.44m deep below the base of the topsoil (2400). The ditch, with irregular edges (near vertical northern edge and fairly steep, straight southern edge), and a fairly flat base (Figure 16 (a)), contained two fills (2411 and 2412):

- Primary fill (2412), a mid-orange/brown sandy silt with frequent sub-angular limestone fragments, contained no finds.
- The secondary fill (2411) was a mid-orange/brown sandy silt with occasional sub-angular stones, and several finds. These included a single fragment of Iron Age pottery and a number of animal bones, all from cattle.

The ditch where recorded as [2443] was 1.30m wide and 0.48m deep, had very steep, straight sides, and a fairly flat base, and a single identifiable fill (2449) (Figure 16 (b)). This was a mid-brown sandy silt with moderate amounts of sub-angular limestone fragments and several artefacts within its matrix. The finds included three pieces of Bronze Age pottery and a single unidentifiable fragment of animal bone.

Ditch section [2408] had fairly steep sides and an irregularly-shaped base, and was 1.40m wide and 0.34m deep. The solitary fill, (2450), was a mid-brown sandy silt with a moderate amount of sub-angular limestone fragments, and no finds.

The fills of the ditch show that it silted up naturally, although some material may have been dumped into the ditch, or perhaps washed in, during the second period of silting of [2443]. The ditch appears to have perpetuated the course of Phase 1 ditch [2407], and therefore continued to act as the northern boundary of the settlement.

Immediately south of ditch [2443] was a recut of Phase 1 ditch [2403]. This later ditch ([2467]) was 0.45m wide, 0.12m deep, with fairly steep sides, and a slightly rounded base (Figure 16 (c)). Two sections were excavated through it (A and B) with fill (2430) allocated to Section A, and fill (2426) allocated to Section B. Fill (2430) was an orange/brown silty sand with occasional rounded and sub-angular stones, and no finds, whilst fill (2426) was a dark brown sandy silt with occasional sub-rounded and angular stones, a single pig bone, and a sheep-sized animal bone.

As a recut of Phase 1 ditch [2403], this ditch appears to have continued functioning as an internal boundary feature. The gap between ditch [2467] and [2413]/[2443] indicates that the entrance at this point also probably continued in use.

In the centre of the site was curvilinear gully [2405]. This was 0.30m wide and 0.05m deep (Figure 16 (h)), and was excavated in two places. Even though only a small amount of the gully depth remained, a large number of finds were recovered from its solitary fill (2406). The majority of these were late Iron Age pottery fragments, probably from the same vessel, with several cow bones completing the assemblage. The fill was an orange/grey silty sand with occasional rounded and sub-angular stones.

The function of this gully is not certain, but it may well be a drainage gully for a roundhouse within the enclosure. As such, it would have enclosed an area of 12.0m. The western edge of the gully continued under the running track, whilst the eastern extent was truncated by shallow pit [2420].

Butt-ending against possible roundhouse gully [2405], was ditch [2423]. This was 8.10m long, with three sections excavated, two of which (Sections A and C) were of the butt-ends. The ditch was very shallow (0.05m deep) and quite narrow (0.30m wide), with slight, concave edges, and a rounded base (Figure 16 (i)). Section A contained a single fill (2406), whilst Sections B and C contained two fills each ((2431) and (2432), and (2433) and (2434) respectively):

- Fill (2406) (of Section A) was an orange/brown silty sand with occasional rounded and sub-angular stones, and contained a relatively large number of possibly late Iron Age pottery fragments and a few cattle bones.
- Primary fill (2432) (of Section B) was a mid-orange/brown sandy silt containing frequent amounts of small and medium-sized, rounded and sub-rounded stones. The fill contained no finds.
- Secondary fill (2431) (of Section B), a mid-orange/brown clayey silt with very occasional small rounded stones, contained several cattle teeth, and a number of unidentifiable animal bone fragments.
- Primary fill (2434) (of Section C), a mid-orange/brown sandy silt with frequent small and medium-sized rounded stones, contained a single cow bone.
- Secondary fill (2433) (of Section C) was a mid-orange/brown sandy silt with very occasional small rounded gravel, and no finds.

Gully [2440] was located 0.60m to the south of ditch [2423], continuing the same alignment. It was first uncovered within the evaluation trench as [030], where it was believed that it formed part of a series of animal burrows. The gully was 5.4m long and curved slightly towards the south-west at its southern end. It possessed steep, slightly concave sides and a flat base (Figure 16 (j)). Four sections were excavated during the evaluation stage, with two more during the excavation. All the sections showed the feature consisted of a single fill, a mid-orange/brown sandy silt with some small rounded gravel. No artefacts were recovered from any of the sections. Together, ditch [2423] and gully [2440] are interpreted as forming one side of a smaller enclosure within the main settlement enclosure, perhaps utilising possible roundhouse gully [2405] as another side, and with the gap between the ditch and the gully probably constituting an entrance.

Ditch [2456] was located to the south-east of gully [2440] and was first uncovered during the evaluation stage as [010], where it was thought to be the result of natural root disturbance. Topsoil stripping during the watching brief identified it as a curvilinear ditch, following the same course as earlier, Phase 1 ditch [2468]. This later ditch was 1.22m wide, 0.38m deep, with fairly steep, slightly concave sides, and a rounded base (Figure 16 (d)). The fills consisted of:

- Primary fill (2458), a dark grey/red silty clay with a high concentration of charcoal fill, containing 33 sherds of late Iron Age pottery, a large amount of animal bone (including horse, pig and sheep bones and sheep- and cow-sized bone fragments), and fragments of one or two probable triangular loomweights.
- The secondary fill, (2457), a mid-brown sandy silt with occasional sub-angular and rounded gravel, also contained a 30 sherds of late Iron Age pottery, as well as fragments of at least two triangular loomweights.

Both fills suggest that any associated settlement existed very close to this ditch. The pottery included a decorated vessel of a type well known from late Iron Age deposits at Sleaford, Ancaster, and other mid-Lincolnshire sites.

The position of this curving ditch in relation to the enclosure-forming ditch [2423] and gully [2440] further north, suggests that this curving ditch may also have formed part of a small enclosure, which used these two features as its western side. In other words, this ditch and gully may represent the same side of two enclosures, one to the west, the other to the east (where [2456] was used).

South of ditch [2456] was a recut of an earlier, Phase 1 ditch [2428], here labelled [2455]. This later ditch had steep, slightly concave sides and a fairly flat base (Figure 16 (g)). Two sections were excavated through it. In Section A, the ditch measured 1.10m wide by 0.31m deep, and in Section B measured 0.78m wide and 0.22m deep. The fill (2429/2469), was a mid-red/brown sandy silt with a moderate amount of small rounded gravel and charcoal flecks, and contained a number of Iron Age pottery sherds, and a cow-sized animal bone fragment.

As with its predecessor, this ditch was probably the southern boundary for the settlement enclosure, and the fact that it was recut in Phase 2 indicates that this boundary continued to function throughout the late Iron Age.

### Phase 2 Discussion

This phase was characterised by the maintenance of the main enclosure ditches, the construction of a number of internal enclosures, and possibly the building of two structures. The internal boundaries may have formed animal enclosures, or areas for specific activities. The finds assemblage suggests that cattle, sheep, horses and pigs were present at this time, with the main concentration of human activity in the central and south part of the site.

### **Unphased Features**

Pit [2420] appeared to cut possible roundhouse gully [2405], but this was not certain. This feature was sub-oval in shape, 1.10m long, 0.69m wide, and 0.16m deep, with fairly steep, concave sides and a flat base (Figure 16 (h)). The sole fill of the pit (2421) was a mid-red/brown sandy silt with a moderate amount of sub-angular and rounded stone, and occasional flecks of charcoal. Several fragments of possibly late Iron Age pottery and numerous animal bones were recovered from the fill, as well as some unidentified fired clay. The bones included sheep, cow and pig bone, sheep- and cow-sized bones, and a number of unidentified fragments. Such a large concentration of animal bone indicates that this was a deposit of domestic rubbish, and suggests therefore that the feature was a rubbish pit. An isolated spread of burnt material (2409) was located 2.0m to the west of ditch [2425]. The spread was irregular in plan, with a length of 0.75m, a width of 0.50m, and a depth of 0.04m. Its fill, (2410), was a very dark grey silty sand with occasional patches of mid-red/orange silty sand. The material within the fill consisted exclusively of fire-cracked stones (pot boilers) and charcoal. The feature may have been a hearth deposit, dumped and then later sealed and protected by a deposit of hillwash and alluvium (2401). Its fairly close proximity to possible circular structure gully [003], suggests it may have derived from a hearth within this possible building.

At the northern end of gully [2440] (Section A), a small pit, [2438], appeared to cut the gully, but again this was not certain. Pit [2438] was irregular in shape, with vertical edges and a flat base, with a length of 1.10m, a width of 0.68m, and a depth of 0.23m. The pit contained a single fill, (2439), a mid-grey/brown sandy silt with small rounded gravel, and occasional flecks of charcoal. It produced a single piece of Iron Age pottery.

### **Phase 3 - Medieval**

Several furrows ([2463, 2464 and 2460]), believed to date to the medieval period, were uncovered within the excavated area (Figure 16 (k)). A more detailed examination of this phase of activity can be found in the Medieval section.

### **Site 19 : Overall Discussion**

Although the excavation was limited, sufficient evidence came to light to demonstrate that the site was part of a settlement dating to the late Iron Age period. The first phase saw the digging of an enclosure of unknown size, with several internal divisions and a circular building, perhaps used for small-scale industrial or agricultural activity. The features then rapidly silted-up over a short period of time, before a second phase of increased activity occurred. This phase saw the re-digging of the enclosure ditches, and the construction of another circular structure, possibly a roundhouse.

The pottery from both phases of activity is almost exclusively of Iron Age date, with only several residual sherds of Age pottery washing into features, and several indeterminate Roman bodysherds from the subsoil overlying the site. The Iron Age assemblage contained both handmade and wheel-thrown pottery, almost all in shell-gritted fabrics. A single decorated fragment from curvilinear ditch [2456] is well known from late Iron Age deposits in Sleaford, Ancaster and other mid-Lincolnshire sites, such as Ewerby, Sapperton and West Deeping. As can be expected from its proximity, the whole assemblage is very closely linked to Old Sleaford late Iron Age ceramics.

The animal bone recovered suggest that the settlement contained a variety of livestock, including cattle, sheep, horse and pigs. The recovery of the fragments of up to six triangular loomweights shows that the inhabitants of the settlement were presumably weaving on the site.

The abandonment of the settlement towards the end of the late Iron Age was marked by the build-up of a layer of colluvium and alluvium. The colluvium probably came from Bargate Hill to the north, whilst the alluvium was derived from the floodplain edge on which the site was located. This mix of alluvium and colluvium would have caused rapid in-filling of features with silts, which could indicate why the settlement was occupied for such a short period of time, with two periods of intensive activity. The

shallowness of many of the features from the site indicates that it had been damaged by ploughing, although the band of subsoil had to some extent protected parts of the site.

Apart from the pottery sherds, no other evidence for Roman activity was found at this site, although on the ridge to the north, at Site 18, a number of artefacts of a Roman date were found, mostly by metal detector. These included several coins, a domed stud, a possible stylus, a mount, and a decorative 'duck'-shaped fitting. All of these finds indicate that some Romano-British activity occurred to the north of the site, although this took place during the fourth century AD, and not immediately after the site was abandoned.

South of the site, at Site 21, a Romano-British field-system was uncovered, 300m away. This contained some late Iron Age/Early Romano-British pottery, but again the emphasis was much later, from the mid-third century, into the fourth century AD.

Several other Iron Age settlement sites close to Ewerby village were uncovered during the pipeline construction phase (see Sites 15-17). There must presumably have been communication between them, and all were probably trading similar goods with other parts of Britain, and with the continent.

### 7.10 Site 22 Iron Age Enclosures

Plot 150, south of Kirkby la Thorpe, TF 10200 44734

#### *Summary*

*A complex of ditches, gullies, postholes and pits were discovered within the pipeline easement during topsoil stripping. The ditches represent a series of possible settlement enclosures, dating from as early as the Early Iron Age, through to the late Iron Age. A number of Roman pottery sherds were also recovered from the topsoil, suggesting that Roman activity occurred nearby, although not directly associated with the enclosures. During the medieval period the field was ploughed.*

#### **Introduction**

The site was first identified during the watching brief stage of pipeline construction (Figure 17). After its discovery, it was revealed that the landowner actually owned a number of aerial photographs, several of which showed the presence of a number of cropmarks in Plot 150 (Plate 1). These included a double rectangular enclosure which was cut by the pipeline route, and which was one of the features exposed at the site.

Masking many of the features was an undulating and sporadic layer of alluvium. This was removed by machine. A single feature which had been masked by the alluvium was only uncovered during the pipe-trenching. The feature is discussed here, since it is thought to belong to Site 22.

The site is located in a low lying position at 5m OD, between Kirkby Mount (20m OD) and Bargate Hill (30m OD) (Figure 17). Between the two hills, the surface geology consists of Sleaford sands and gravels. This deposit is free-draining, though prone to seasonal flooding due to its low lying position, and had been favoured for settling for some time, with a number of sites already uncovered along the pipeline. The topsoil (2500) was a dark grey/brown sandy silty loam containing occasional small, medium and large gravel pebbles. Directly below the topsoil was a layer of alluvium (2555).

The field was first fieldwalked in 1994 when three flint flakes, three medieval pottery sherds and three post-medieval pottery sherds were recovered. One of the flints, two of the medieval sherds and a single piece of post-medieval pottery were found in the vicinity of Site 22.

Fieldwalking in 1997 recovered five finds: one Saxon pottery sherd (late eleventh - early twelfth century), two medieval sherds dating from the thirteenth to the fourteenth century, and two

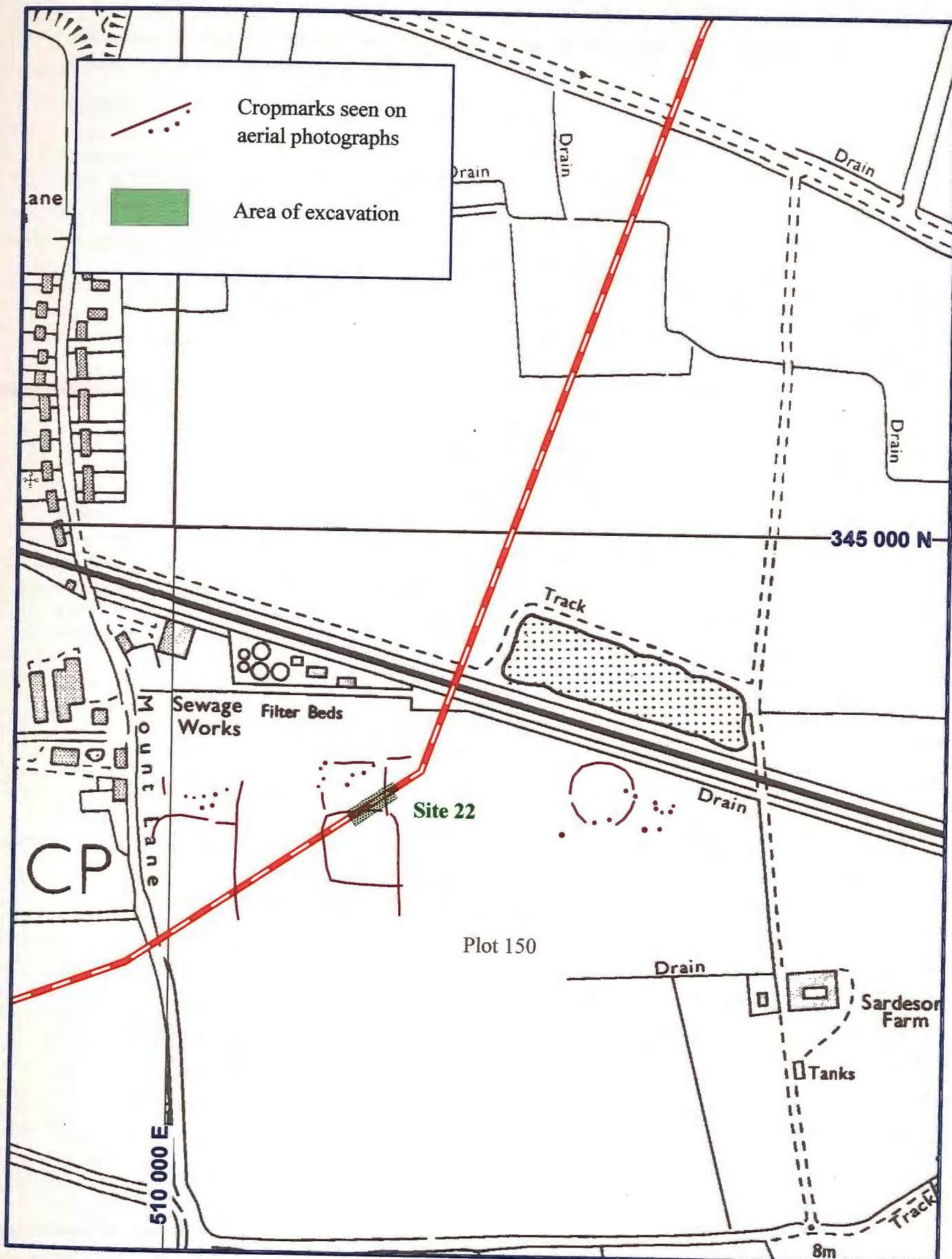


Figure 17: Site 22, Iron Age Enclosures

Scale 1:5000

post-medieval sherds (mid-late sixteenth century). None of these finds gave any indication that a prehistoric enclosure existed within the area.

### Results

Most of the ditches, gullies, postholes and pits belong to three main phases of middle to late Iron Age occupation (Figures 18, 19 (a)-(c)). A pair of small ditches and a single gully, which may stretch as far back as the early Iron Age, represent an earlier phase of activity. These four phases can be summarised as follows:

- |                                     |   |
|-------------------------------------|---|
| • Phase 1 (?early/middle Iron Age)  | pair of small, parallel ditches and isolated gully            |
| • Phase 2 (middle to late Iron Age) | substantial single ditched enclosure with entrance complex    |
| • Phase 3 (middle to late Iron Age) | consolidation of Phase 1, to create double-ditched enclosure  |
| • Phase 4 (late Iron Age)           | two new double-ditches, on different alignment to Phases 2, 3 |

#### Phase 1 : ?Early to Middle Iron Age

Two small ditches, [2511] and [2513], were uncovered 2.0m to the west of ditch [2504]. The shorter of the two, ditch [2511], consisted largely of a butt-end. It was 0.86m wide and 0.20m deep (Figure 20 (k)), and produced a number of finds within its solitary dark brown sandy silt fill (2512). These included a piece of possibly late Iron Age pottery, and a number of animal bones including sheep- and cow-sized fragments (several burnt).

Ditch [2513] was truncated by Phase 2 ditch [2518]. It was 0.86m wide, 0.26m deep (Figure 20 (k)), and contained two fills, (2514) and (2515):

- The primary fill, (2515), was a dark brown/grey sandy silt with frequent rounded gravel, and contained a single piece of cow skull (including the base of the horn core).
- The secondary fill, (2514), contained a higher volume of finds, including two possibly late Iron Age pottery fragments, and a number of animal bones (sheep, cow, sheep-sized). The fill was a dark brown sandy silt containing frequent amounts of rounded gravel.

Isolated gully [2544] was located in the south-east part of the site, where it butt-ended 2m from the edge of excavation. It was 0.46m wide by 0.15m deep, with steep sides and a concave base (Figure 20 (e)). The gully appears to have silted-up naturally with fill (2545), a mid-orange/brown sandy silt with moderate amounts of sub-rounded gravel, and a high frequency of charcoal flecking. A number of finds were recovered from the excavated section; these included a large quantity (78 sherds) of early to middle Iron Age pottery, and numerous animal bones (sheep teeth, sheep jaw fragments, cow jaw fragments, a cow back leg piece, pig teeth, pig jaw fragments, and numerous cow- and sheep-sized bones).

#### Phase 1 : Discussion

The function of the parallel ditches and isolated gully is uncertain, but they were presumably dug as boundary/drainage features, prior to the main enclosures of Phases 2 and 3. The quantity of domestic refuse from the isolated gully suggests this was used for disposing of rubbish, perhaps after it was no longer required for drainage. Its position suggests that most of the earliest Iron Age activity in the area may have been immediately east of the pipeline easement. The artefactual material for this phase shows that cow, sheep, pig and horse were present, and therefore suggests that livestock farming was being practised at this time.

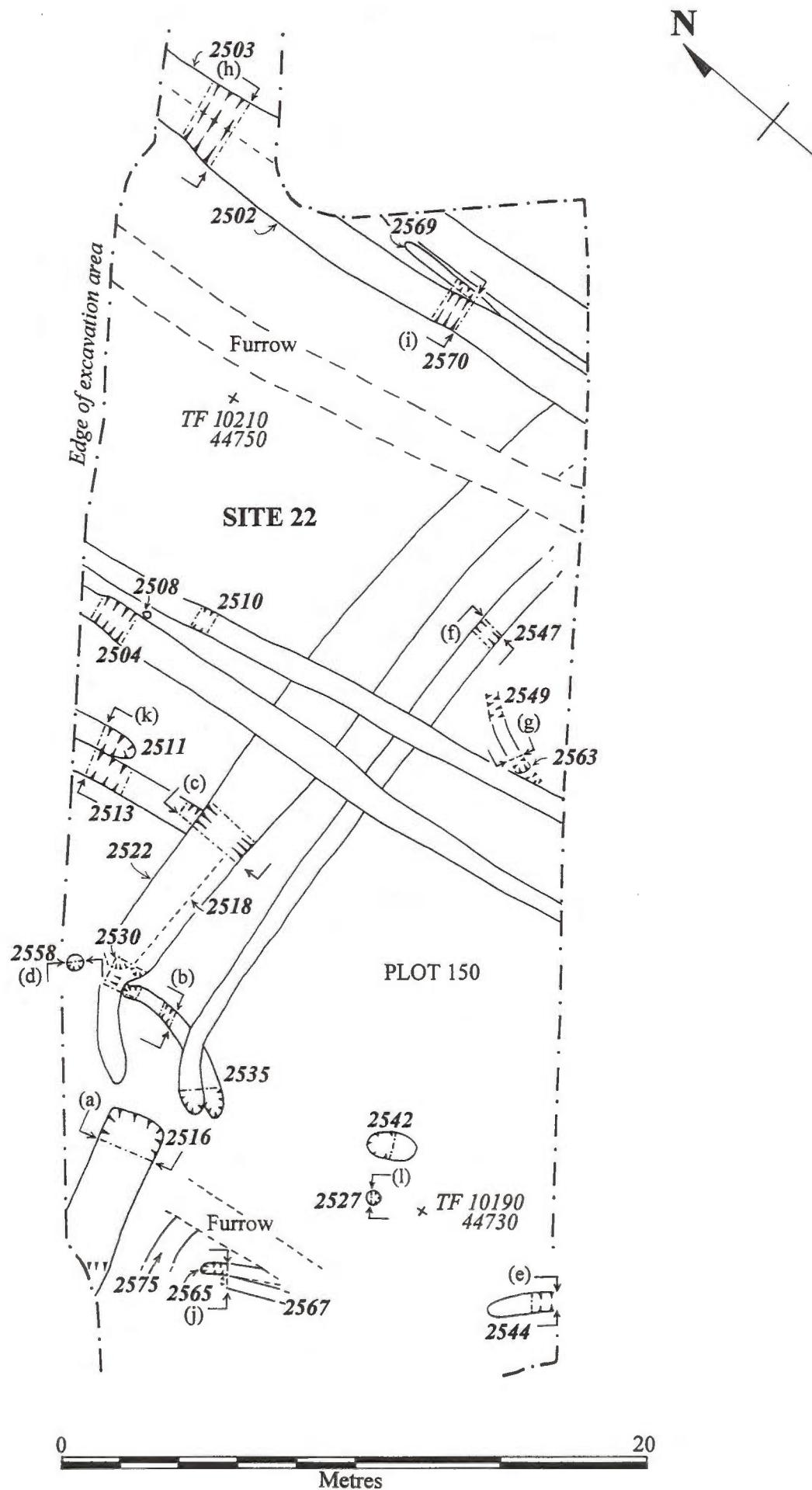


Figure 18: Site 22, Plan of Iron Age Enclosures

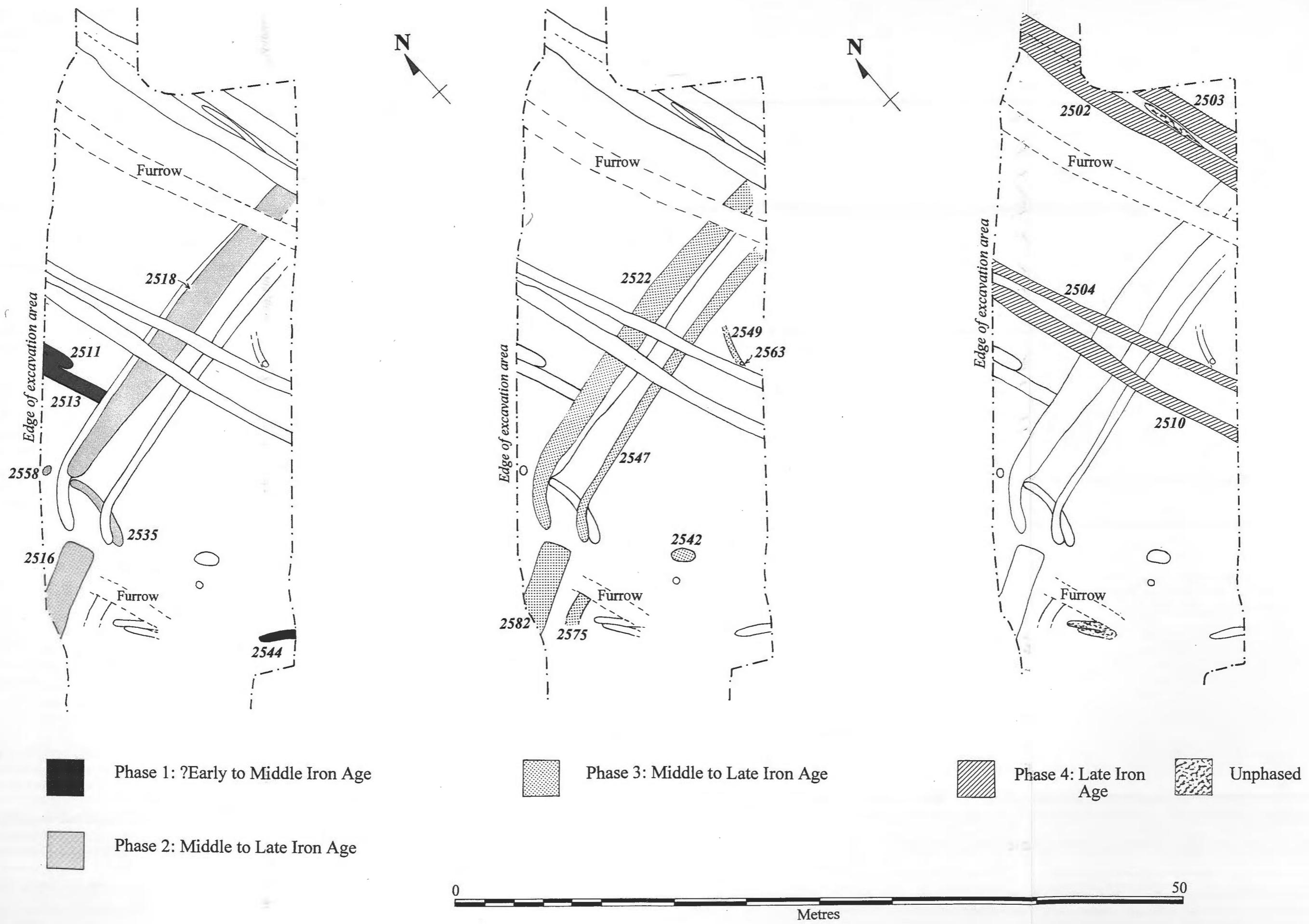


Figure 19: Site 22, Phase Plan

## Phase 2 : Middle to Late Iron Age

Two substantial ditches formed part of an enclosure. The gap between these ditches contained a curvilinear gully and a posthole, indicating that some kind of entrance feature had once existed. A single, curving gully also relates to this phase of activity (Figure 19 (a)).

Ditch [2516] lay at the western corner of the excavated area. This ditch had a distinctive square butt-end, and appears to have been re-cut ([2582]), as part of the Phase 3 activity on the site. The original ditch was 1.75m wide, 0.60m deep (Figure 20 (a), and contained three fills (2554, 2553 and 2552):

- The primary fill, (2554), a mid-grey silty sand with frequent small and medium-sized rounded and sub-rounded stones, appeared to be made up from collapsed natural sand from the edge of the ditch, mixed with the initial silting. The fill did include several finds, including a sherd of Romano-British pottery (grey ware) and a cow-sized bone.
- The secondary fill, (2553), a mid-grey clayey silt with very occasional, small, rounded gravel, reflected a period of silting when human activity was occurring nearby, since charcoal was also present. The fill contained a fairly large sherd of Iron Age pottery and several animal bones (cow bone, and cow-sized bone).
- The tertiary fill, (2552), a light grey clayey sand with occasional small rounded gravel, appeared to show a later still stage of natural silting within the ditch. The fill was fairly clean, with no finds, although there was an occasional fleck of charcoal.

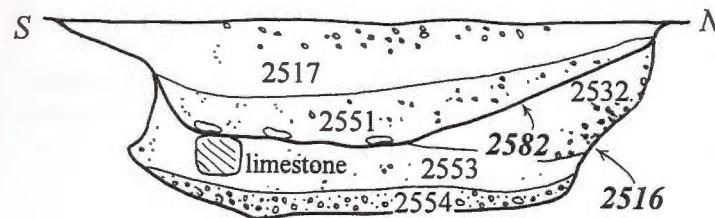
Opposite this ditch (4.5m distant), but slightly offset to the north, was the terminal of ditch [2518] (Figure 20 (c)). This ditch was 1.2 to 2m wide, 0.48m deep, and extended along the easement for 25m until it reached the edge of excavation. Like [2516], it had also been re-cut as ([2522]) during Phase 3, though on a slightly different alignment (this re-cut truncated the terminal of the original ditch). A second section was excavated through ditch [2518]; this was given a different cut number ([2529]). Its re-cut was also numbered differently, as ([2530]). The fills of the original ditch were as follows:

- The primary fill, (2519), was a light-mid grey sandy silt with frequent sub-angular limestone fragments and sub-rounded gravel. Formed by natural silting, it containing no finds or charcoal flecking, suggesting that little human activity occurred here at this time.
- The secondary fill, (2520), a light orange/grey sandy silt with a moderate amount of sub-angular and sub-rounded stones, also appeared to reflect a period of silting, again with no finds, although there was an occasional fleck of charcoal within the fill matrix.
- The tertiary fill, (2521), was a grey/brown sandy silt with occasional sub-angular limestone fragments, and occasional flecks of charcoal. This naturally silted deposit contained a number of artefacts, including eight fragments of late Iron Age pottery and numerous animal bones (cow, sheep, pig and horse bone, and cow/sheep-sized bone).

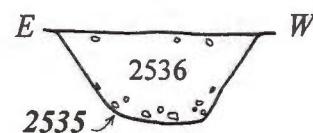
The fills of the original ditch thus show that little human activity occurred nearby after it had been dug, until the third period of silting (2521), when a considerable amount of animal bone and pottery was discarded into the ditch.

These two substantial ditches are thought to represent one side of an enclosure, with the gap between them being an entrance. Gully [2535] sat in this gap, and was a curvilinear feature, 0.7m wide and 0.35m deep (Figure 20 (b)). It contained a single fill, (2536), which produced eleven middle to late Iron Age pottery sherds. The fill was a mid-dark brown sandy silt containing moderate amounts of small rounded stones. The position of the gully suggests that it formed part of the entranceway.

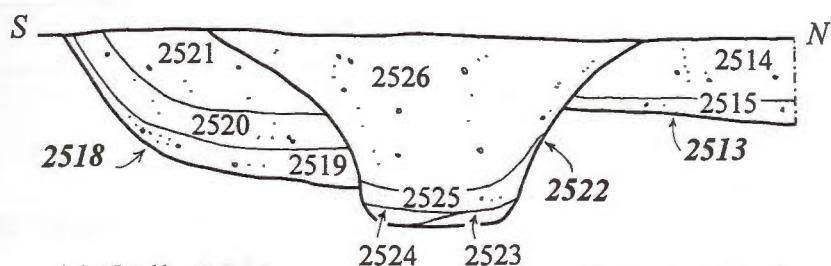
(a) Ditch 2516/2582



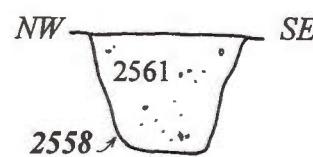
(b) Gully 2535



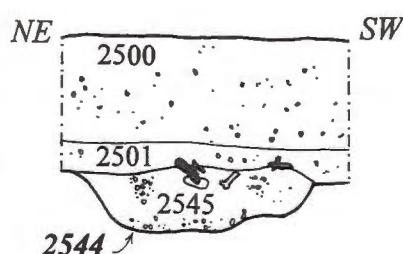
(c) Ditch 2522,2518,2513



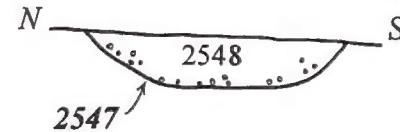
(d) Posthole 2558



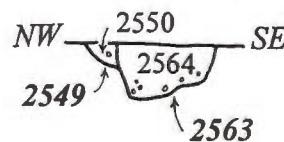
(e) Gully 2544



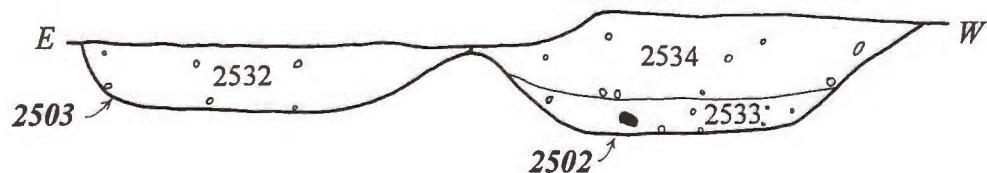
(f) Gully 2547



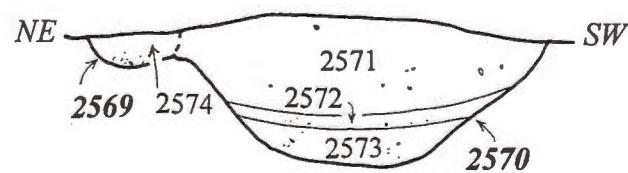
(g) Gully 2549 and posthole 2563



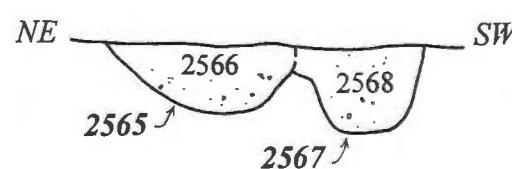
(h) Ditches 2503, 2502



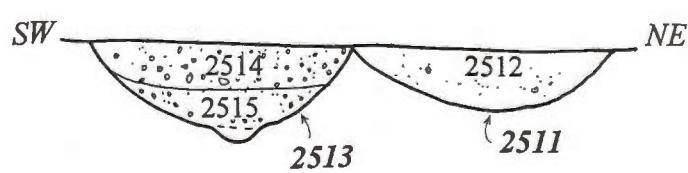
(i) Ditch 2570 and gully 2569



(j) Gullies 2565,2567



(k) Ditches 2513,2511



(l) Posthole 2527



Pottery  
Bone

0 2  
Metres

Figure 20: Site 22, Section Drawings

Posthole [2558] was located just north of gully [2535]. This was 0.52m wide and 0.39m deep, and contained a single fill, (2561), with no evidence of a former post (Figure 20 (d)). The fill (2561), a mid-red/brown sandy silt with frequent, small, rounded and sub-rounded stone, contained occasional flecks of charcoal but no artefacts. The posthole may well form part of the entrance complex.

### Phase 2 Discussion

This second phase saw the establishment of a substantial single-ditched enclosure with a controlled entrance. The curvilinear gully may represent the former position of a fence, whilst the adjacent posthole might have held a post. Together, these features could have controlled access to and from the enclosure. The function of the enclosure is not certain, but it could well have contained a settlement, the remains of which lay outside the easement to the south. The apparent need for a controlled entrance suggests that stock were kept within one part of the enclosure. The animal bone recovered certainly suggests that the settlement contained a variety of livestock, including cattle, sheep, horse and pigs. This site was the only site to have significant quantities of scored ware pottery, although a few possibly late scored ware sherds were found at Site 18 (Appendix 3, Dr. 80-81/ 83-86).

### Phase 3 : Middle to Late Iron Age

This phase saw the consolidation of the enclosure, via the re-cutting of the enclosure ditches, and the digging of a new gully alongside one of the existing ditch to create a double-ditched enclosure. The nature of the entranceway also changed. A number of other features have also been allocated to Phase 3 (Figure 19 (b)).

The re-cut ([2582]) of original ditch butt-end [2516], was shallower than its predecessor, though followed the same course (Figure 20 (a)). It was 0.35m deep and 1.75m wide, and contained two fills (2551 and 2517):

- The primary fill, (2551) represented a period of deliberate backfilling within the ditch. The fill consisted of a darkish grey sandy silt with occasional small, medium and large, rounded and sub-rounded stones. It contained a high concentration of charcoal and heat-shattered stones, as well as a large number of finds including early-middle Iron Age pottery, animal bone (a complete cow skull, numerous cow and sheep bones, horse and pig bones, a mallard-sized duck bone, and a large number of cow- and sheep-sized bones), a fragment of possible triangular loomweight, and a mussel shell.
- The upper fill, (2517), appears to have silted naturally. It contained a number of finds, two middle-late Iron Age pottery sherds, animal bone (pig shoulder blade and a cow-sized bone), and piece of a possible triangular loomweight. One or two other possible triangular loomweights were recovered from the site, both of these unstratified.

A large amount of rubbish had therefore been dumped into ditch re-cut [2582]. The high charcoal content and presence of burnt stone suggests that much of it derived from a fire or hearth.

Re-cut [2522] of ditch [2518] also followed a similar course as its predecessor, but at the entrance, it continued beyond the earlier terminal and curved slightly inwards, where it just clipped Phase 1 entrance gully [2535], before terminating itself 1m from the squared-off butt-end of ditch [2582]. This later ditch was 0.75m wide, 0.33m deep (Figure 20 (c)), and contained four fills (2523 - 2526):

- The primary fill, (2523), an orange sand, represented initial silting. It contained no finds.
- The secondary fill, (2524), was a mid-grey sand, and like that below was the result of natural silting, and contained no finds.

- The third fill, (2525), a mid-dark grey sandy silt with moderate-frequent amounts of sub-angular and sub-rounded gravel, produced a number of finds, including a single sherd of middle Iron Age pottery, and a horse bone.
- The fourth fill, (2526), contained a number of finds including several sherds of middle Iron Age pottery and numerous animal bones (sheep teeth and jaw bone fragments, pig teeth and jaw fragments, cow skull and teeth, and cow- and sheep-sized fragments). The fill was a mid-grey/brown sandy silt with moderate sub-angular and sub-rounded gravels and limestone fragments.

This phase also saw a gully being dug parallel to the above recut ditch, presumably to reinforce the enclosure system. This new gully, [2547], ran east-west, curving inwards at its west terminal end, exactly like the adjacent re-cut ditch [2522]. The gully was 0.86m wide and 0.16m deep with a flat base, and contained one fill, (2548) (Figure 20 (f)). This consisted of a mid-orange/brown sandy silt with occasional rounded gravel, and produced no finds.

Gully [2575] was a short stretch of gully which ran parallel with enclosure ditch [2582]. It was 1.2m wide, fairly shallow (0.05m deep), and had a flat base. The fill (2576) contained a single cow-sized animal bone and a piece of lava stone (probably part of a quern stone). The position of this gully, parallel to ditch [2582] and within the enclosure, suggests that it had a similar, consolidating function to gully [2547], which was dug parallel to ditch [2522] and also lay within the enclosure.

Curvilinear gully [2549] (Figure 20 (g)) was 0.37m wide and 0.15m deep, with a fairly flat base and a posthole [2563] within it. The gully fill (2550) was a mid-brown sandy silt with very occasional small rounded and sub-rounded gravel, and produced mid-late Iron Age pottery, sheep- and cow-sized animal bone, and a single, possibly Mesolithic, flint blade.

The slightly curving nature of the gully, and the presence of a posthole within it, suggests that it may have represented a structural feature, perhaps the foundation trench for a circular structure, or possibly the former position of a fence.

The posthole within the gully, [2563], was 0.30m wide and 0.18m deep, and contained a single fill, (2564), a mid-brown sandy silt with occasional small rounded and sub-rounded gravel (Figure 20 (g)).

Pit [2542] was roughly oval in shape and located within the enclosure, 6.0m south of the entranceway. The pit was 1.2m long, 0.9m wide and 0.08m deep, with a flat base. The feature appeared to have been almost completely ploughed out although a single fragment of mid-late Iron Age pottery was discovered within its fill (2543). The latter was a mid-orange/brown sandy silt with very occasional rounded gravel and some flecks of charcoal. This feature may have been dug as a rubbish pit, but this is not certain.

Feature [2577] was only uncovered during the pipe-trenching, as it had been covered by a substantial deposit of alluvium (2581, same as 2555). The feature was located 25m north-east of the main site, although its finds suggest a Phase 2 date. The feature is though to have been a substantial pit or well, as it measured 4.20m wide and 0.70m deep below the alluvium. It had gently sloping edges, a wide, flattish bottom, and contained three fills (2578, 2579 and 2580):

- The primary fill, (2578), was a dark grey/black organic sandy clay silt, suggesting the feature was open for some time and had contained standing water.
- The secondary fill, (2579), was a dark grey sandy clay silt with frequent small-medium sub-rounded to sub-angular stones. The finds included four sherds of mid-late Iron Age pottery, and some cow and sheep bone.

- The tertiary fill, (2580), a mid-orange/grey mottled sandy silt, contained no finds and appears to represent natural silting with little or no influx of human occupation debris.

The dimensions of the pit, and its organic lower fill, suggest it may well have been dug to collect water. If this was the case, it does not appear to have been utilised for a long time.

### **Phase 3 Discussion**

This phase saw the maintenance and consolidation of the enclosure ditches, and a change in the nature of the entrance. The opposing enclosure ditches were now much closer together, creating a narrower, 1.5m-wide entrance. If the Phase 2 enclosure was partly for stock, then the creation of a narrower and more simple entrance could indicate that the stock type changed (?less controllable sheep to more easily manageable cattle). Alternatively, it could equally reflect some other, now obscure reasoning. The addition of two gullies within the enclosure, one each parallel with the main enclosure ditches, indicates an increase in complexity. It is quite possible that these gullies housed fences, running along the interior side of the enclosure ditches, and aimed at both keeping domestic animals in, and wild animals out of the enclosure. The faunal evidence shows that cow, sheep, pig and horse were present, supporting the use of part of the enclosure for livestock farming. The recovery of a mallard-sized duck bone suggests that some hunting may have occurred. The recovery of triangular loomweight fragments shows that weaving was taking place.

### **Phase 4 : Late Iron Age**

This saw a major reorganisation in the layout of the system of enclosures. Two pairs of parallel ditches ran across the site, most of them cutting through the earlier enclosure ditches, and perpendicular to them (Figure 19 (c)).

Ditches [2502/2570] and [2503] were the most substantial. Ditch [2502/2570] was 1.40m wide by 0.40m deep, and had two sections excavated through it (Figures 20 (h) and 20 (i)). The ditch contained two fills in the section of [2502] ((2534) and (2533)), and three in section [2570] ((2571), (2572) and (2573)):

- Primary fill (2533) of [2502] was a light brown sandy silt with occasional rounded gravel, and contained several animal bone fragments, including horse bones, and a cow-sized fragment.
- The secondary fill, (2534), was a light orange/brown sandy silt with a moderate amount of rounded gravel, also containing animal bone, including a sheep tooth, sheep bone (complete with butchery marks), cow bones, and a number of cow-sized fragments.
- Primary fill (2573) of [2570] was a mid-yellow/brown silty sand with moderate-frequent rounded gravel, and contained a single sherd of late Iron Age pottery.
- The secondary fill, (2572), contained several finds including an Iron Age pottery fragment, cow- and sheep-sized animal bone, and a few unidentifiable fired clay fragments. The fill was a dark grey/brown clay silt with a moderate amount of rounded gravel.
- The tertiary fill, (2571), contained a single piece of Iron Age pottery and several animal bone fragments (cow- and sheep-sized). The fill was a mid-yellow/brown sandy silt, containing frequent amounts of rounded gravel.

The fills of ditch [2502/2570] were therefore created through natural silting processes, with the occasional artefact being either washed in or dumped as rubbish into the ditch.

Ditch [2503] ran alongside the eastern flank of ditch [2502/2570]. This ditch had one, naturally silted fill (2532) present within the section excavated, a light orange/brown sandy silt with moderate rounded gravel (Figure 20 (h)). It contained a variety of animal bone (cow, sheep, horse, and ?red deer).

At the north end of these two ditches, they merged into one another. This does not necessarily mean that one was dug after the other, it could simply be that they were dug so close together that the thin band of natural sand and gravel between them quickly collapsed, and effectively joined the ditches together.

Further south, ditches [2504] and [2510] ran parallel across the middle of the site, clearly truncating the silted-up remains of the main Phase 3 enclosure ditches. Ditch [2504] measured 1.3m wide, with [2510] narrower at 0.90m, although the former narrowed towards its south end, as it diverged slightly from [2510], which retained its 0.90m width. Ditch [2504] was steep-sided with a flat base, and 0.30m deep. Ditch [2510] was much shallower at 0.1m, and had an irregular, broad U-shaped profile. Each ditch was filled with mid-brown sandy silts ((2506) in [2504], (2507) in [2510]), none of which produced any artefacts.

#### Phase 4 Discussion

This phase shows a significant reorganisation of the enclosure-system, with two pairs of parallel ditches being dug on a completely different alignment to the previous ones. The quantity of animal bone found in Phase 4 features was significantly lower than in earlier features, suggesting that either the numbers of livestock present had dropped, or the focus of settlement had shifted by the late Iron Age. The fairly substantial, double-ditched nature of the boundaries does, however, suggest that stock were still being kept within the enclosure.

#### Phase 5 : Medieval Period

Two furrows, thought to date to the medieval period, were present on the site. Both furrows ran roughly north-south, on the same alignment as the Phase 4 ditches; though this need be nothing more than a coincidence. For a more detailed appraisal of the furrows in this plot see Site 33.

#### Unphased Features

Two parallel gullies at the south end of the site ([2565], [2567]) a posthole nearby ([2527]), and an isolated gully at the north end of the site ([2569]) could not be phased.

Gully [2565] was cut by one of the medieval furrows. It was 0.56m wide, 0.25m long, and had steep, slightly concave sides and a flat base (Figure 20 (j)). It contained (2566), a mid-orange/brown sandy silt with occasional sub-rounded gravel. No finds were recovered. Its former use is not known.

Gully [2567] was located immediately west of gully [2565], and was 0.35m wide and 0.30m deep, with a fairly rounded base (Figure 20 (j)). The fill, (2568), a mid-orange/brown sandy silt with occasional sub-rounded gravel, contained no finds. Again, the gully's function is unknown.

Posthole [2527] was situated next to Pit [2542]. It was circular, with steep straight sides and a slightly concave base, a diameter of 0.33m and a depth of 0.22m (Figure 20 (l)). No finds were recovered from its fill, (2528), a mid-grey/brown sandy silt with occasional flecks of charcoal.

Gully [2569] was located between (and below) Phase 4 ditches [2570] and [2503]. It was 0.32m wide, 0.13m deep, and contained a light yellow/brown silty sand, (2574), which produced no finds (Figure 20 (i)). The gully appears to have silted up naturally; its function is uncertain.

#### Site 22 Overall Discussion

Site 22 represents one of a number of Iron Age sites found along the pipeline to the east of Sleaford, an important centre in the Iron Age period. From the archaeological evidence, the site appears to have consisted of a substantial early or middle to late Iron Age enclosure, possibly containing a settlement,

and which was consolidated and maintained for a certain period before being abandoned in the late Iron Age in favour of a new layout of field boundaries, these later ones again perhaps also enclosing a settlement.

The above interpretation is supported by the evidence of aerial photographs, Figure 17 showing that the earlier ditches did indeed belong to a fairly large ditched enclosure, covering c. 70m by 70m, or roughly 0.5 ha. The aerial photographs also show a smaller enclosure on the north side of the main enclosure. This smaller feature appears to be later in date, since it utilises the north side of the main enclosure. This is backed up by the excavation evidence, with the two pairs of Phase 4 ditches in the north part of the site cutting through the Phase 2 and 3 ditches which represent the north side of the main enclosure. The earlier date of the main enclosure is also supported by the early or middle Iron Age, Phase 1 gully which lay within this larger enclosure. Overall, the balance of evidence suggests that the earlier occupation took place within the more substantial, northernmost enclosure, and that the focus of activity shifted in the late Iron Age, to the smaller, northernmost enclosure.

There is, however, some ambiguity between the aerial photographs and the excavation plan. The aerial photographs alone could easily suggest that when the smaller, later enclosure was 'tagged onto' the north side of the main enclosure, this main enclosure continued to be used. The excavation, though, indicates that the later enclosure ditches cut through the silted up ditches of the earlier enclosure, thereby indicating that the main enclosure had actually been abandoned by this time. This means that the pit-like anomalies situated in the north part of the smaller enclosure may represent the focus of the later settlement, with the earlier settlement in the larger enclosure not showing up on the aerial photographs.

Immediately east of the two enclosures, the aerial photographs show a series of faint cropmarks which could be the remains of further enclosures. This suggests that this particular settlement complex could be much more substantial than the aerial photographs suggest. A number of other cropmarks exist in the field away from the excavated enclosures, to the west and the east. The cropmark enclosure to the west shares the same alignment as the Site 22 enclosures, suggesting that they may be of a similar date and function, whilst to the east, a circular enclosure exists. The field appears to contain a major complex of Iron Age settlement remains.

In considering reasons for the abandonment of the settlement at Site 22, one must look at its topographical position. The site lies on a floodplain between two hills, Bargate Hill and Kirkby Mount. Its low lying nature (5m OD) means that the site was probably prone to periods of seasonal flooding. This is supported by the aerial photographs, which show, in addition to the settlement cropmarks, a series of irregular lines running roughly north-south across the field, thought to be former minor stream channels (Plate 1). The site itself also possessed alluvial deposits, concentrated across the middle portion of the excavation, and demonstrating that the land was prone to flooding.

It may therefore be that flooding pushed the settlement further north (this would explain why the larger enclosure appears to have been abandoned), before eventually forcing the inhabitants to abandon the site altogether in the late Iron Age. The farmers are likely to have relocated further north still, perhaps to where a Romano-British site was uncovered during the watching brief (Site 21).

### 7.11 Iron Age : Discussion

All but one of the Iron Age sites, (Site 6), were discovered along the southern part of the route, east of Sleaford, an important centre during this period (Old Sleaford). This distribution clearly reflects the underlying topography. The sites near Old Sleaford lie within 2-3 miles of what would have been the coastline during the late Iron Age, so would have been on ground just high enough to be habitable. At the north end of the route, the sole Iron Age site there lies on the higher ground of the Lincolnshire Wolds. In between, the low lying fenland region would have been too wet for settled occupation.

The greatest concentration of Iron Age sites was along that stretch of the pipeline west of the village of Ewerby. Here, a definite focus of occupation appears to have existed. The most likely interpretation of these remains is that they represent part of a network of minor settlements throughout the area north-east of Old Sleaford. The other Iron Age sites, discovered further south, are also likely to be part of this scattered settlement. The establishment and development of such settlement is likely to have been in part due to the close proximity of Old Sleaford, which would have been an important source of goods and services, and partly due to the fertile soils of the region.

Excluding Site 6 at Bucknall, none of the sites appeared to have continued into the Romano-British period. Most, however, did produce a few sherds of Roman pottery or tile, suggesting that the settlements persisted into the immediate post-conquest period before being abandoned. This suggests that to some extent it was the invasion itself which precipitated these shifts in the local settlement pattern, the political, economic and social changes caused by the invasion creating the conditions which led to such shifts.

In addition to the above, however, rising sea-levels must have played a significant part. If one looks at the distribution of late Iron Age settlements in Lincolnshire, one sees that nearly all are situated on or above the 15m contour (Elsdon, 1997, 4). Minor middle Iron Age settlements at nearby Heckington, Helpringham and Billingborough, all on the very margins of the habitable land, failed to make it into the late Iron Age. The watching brief sites near Ewerby therefore, which lie between the above settlements and the 15m contour, appear to represent settlements which, being slightly further inland, survived a little longer, before themselves succumbing to the rising sea-level. Throughout the Roman period, settlement was virtually confined to the land at or above 15m OD, which included Old Sleaford itself, which continued to be a major centre at this time.

The only Iron Age site located along the north part of the pipeline (Site 6) was also the only one which provided any evidence for continuity from the Iron Age into the Roman period (second century AD). Given the discussion above, this is not surprising, since this site lies on the edge of the Wolds at around 10m OD, not above the 15m contour, but high enough to avoid the flood waters of the Ancholme and Witham.

Only one of the eight Iron Age sites produced anything other than domestic settlement remains. Site 18, which is discussed in section 9.3, in addition to its Anglo-Saxon cemetery, produced two Iron Age ring ditches and three square ditches, tentatively interpreted as the remains of barrow monuments, similar in type to the Arras Culture burials of East Yorkshire. If true, they would be of major importance, as no other funerary monuments of this kind and of this period appear to have been uncovered in Lincolnshire, and parallels with the Arras Culture in *other* parts of Britain are a rarity. Not only could the Lincolnshire discovery have significant implications for the study of later prehistoric burial/ritual practices in the county, but it might also affect our understanding of the national distribution of 'Arras type' monuments, and the reasons behind this distribution. How, for example, might the people of south Lincolnshire have been introduced to the idea of burying their dead in square barrows? Was it the result of a cultural link with the inhabitants of East Yorkshire, or was it an entirely local tradition? One could also ask the question, are there other Arras type burials lying undiscovered in other parts of Britain, and have previous excavations unknowingly located some but not interpreted them as such? Whilst the precise nature and function of the remains at Site 18 are only likely to be fully understood if the remainder of the site (to the east of the pipeline easement) is investigated, future research and fieldwork in Britain may help provide some answers to these, and other, more general questions regarding this particular kind of burial practice.

## 8. ROMANO-BRITISH

### 8.1 Archaeological Background

The fall in sea-level which had begun in the Iron Age continued into the Romano-British period until approximately AD 375. Up until this time, new tracts of land in Lincolnshire, including the fens, were colonised, although it is unclear how these settlements functioned. Further to the north, away from the fens, there are a large number of sites dating to the Romano-British period. Although the boulder clay here produces fairly heavy soil, there are some stone-built villas and less substantial, but more frequent, rural settlements (Todd, 1991, 82). It is likely that arable and livestock farming would have been common in this region.

The form of the majority of Romano-British rural settlements in Lincolnshire probably changed little from the earlier Iron Age farmsteads. Indeed, the typical Iron Age roundhouse continued to be the dominant building form across much of early Roman rural Britain. The lack of excavated examples of such sites within Lincolnshire, though, makes it difficult to provide evidence for this continuity. One example, on the edge of the fens at Mill Drove, near Bourne in South Lincolnshire, shows occupation from the mid-late Iron Age into the Roman period (LAS Report No. 127, 1995).

### 8.2 Pipeline Results

Fieldwalking of the initial pipeline route in 1993 detected only one significant Romano-British artefact scatter. This consisted of a slight concentration of pottery located to the north-west of Greenfield Farm (TF 171750, Plot 8, O.S. Field 0006). Within the areas available for fieldwalking in 1997, no significant concentrations of material were detected. It is significant, however, that two of the more extensive Romano-British sites encountered during construction, Sites 6 and 9 (Plot 20 and Plot 88), had not been available for fieldwalking during either the 1993 or 1997 surveys.

Geophysical survey in 1998 detected Site 21 (Plot 149), which was situated on the more magnetically responsive Sleaford sands and gravels. Of the four sites subsequently discovered during the watching brief, three were on less responsive boulder clay.

The five Romano-British sites recorded (see Figure 2) were :

- **Site 2 Plot 8, Greenfield Farm, Minting, TF 17176 74842**  
Mid-third to late fourth century AD field system, pits and well.
- **Site 6 Plot 20, Moor Farm, Bucknall, TF 17064 70624**  
Settlement site and associated field system with four main phases of activity from late Iron Age to late fourth century AD.
- **Site 9 Plot 88, Bogle Holt, Martin, TF 10770 58928**  
Field system with probable stock enclosure, artefactual evidence dating principally from mid-second century AD to the later third century AD.
- **Site 11 Plot 125, Anwick Fen, TF 12600 49974**  
Mid-third century AD pottery scatter, probably related to ditch and posthole seen during pipe-trenching activities.
- **Site 21 Plots 147-149, south-east of Kirkby la Thorpe, TF 10440 45320 - TF 10356 45090**  
Field system dating from mid-third to fourth century AD; associated cropmarks suggest it is part of more extensive system.

Each site will now be discussed individually.

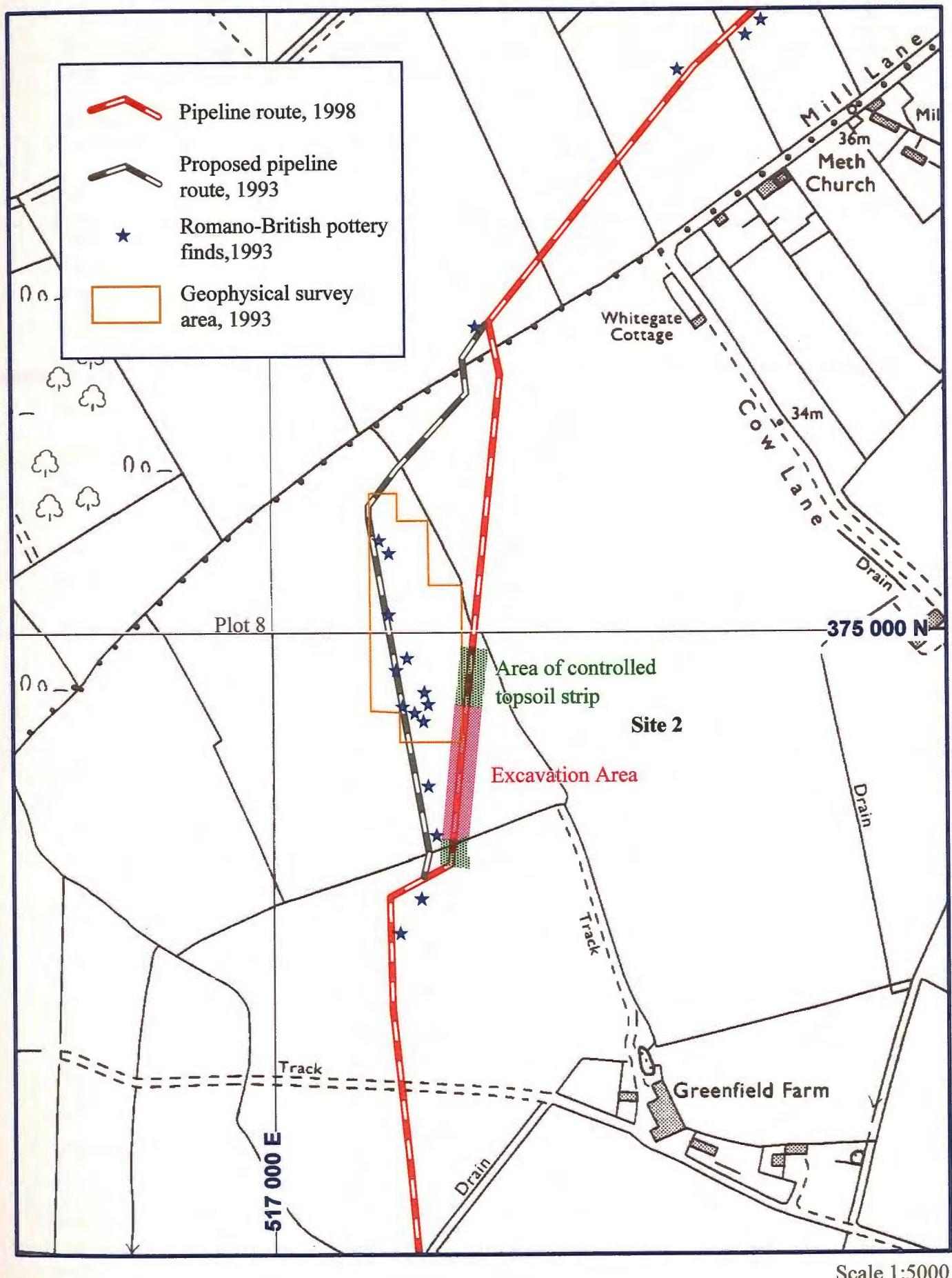


Figure 21: Site 2, Romano-British Field System, Pits and Well

### **8.3 Site 2 Field System, Pits and Well**

Plot 8, Greenfield Farm, Minting, TF 17176 74842

#### **Summary**

*Excavation in the vicinity of Greenfield Farm, Minting, produced the remains of a Romano-British field system. A minimum of six enclosure ditches were identified along with a probable well and six smaller pits. Generally, the ditches were laid out at right angles to each other, being orientated either north-east to south-west or north-west to south-east. The site extended some 130m north-south along the pipeline easement, and was 25m wide. Many of the features produced pottery and animal bone fragments, with the well being extensively sampled for environmental evidence. Analysis of the soil samples suggests a disturbed habitat in the immediate vicinity of the well but no definite economic plants were found. The pottery dates between the mid-third and late fourth centuries AD, consisting primarily of locally-produced grey wares. Few animal bones were recovered, most of these of cattle, including a calf burial from the north end of the site. It is likely that the enclosures were used for the husbandry of such animals. Evidence of a later medieval field system identified as a series of furrow bases running north-east to south-west was also apparent at the site.*

#### **Introduction**

Site 2 lies approximately 1.5km to the north-west of the village of Minting (Figure 2) on an area of heavy boulder clay. The site is situated on an area of slightly higher ground, at 30m OD, within Ordnance Survey Field 0006, some 250m north-west of Greenfield Farm (Figure 21). Topsoil depths from the modern ground surface were generally about 0.3m. The field in which the archaeology was found is intensively ploughed and cropped, and has an extensive drainage system.

Fieldwalking in the area in 1993 produced eighteen sherds of Romano-British third to fourth century AD pottery, largely comprising domestic coarse wares (Figure 21). A geophysical survey was also carried out on the site, but only identified three parallel features which were interpreted at the time as modern field drains. Engineering considerations meant that the pipeline was moved 100m to the east of this original route. Fieldwalking and geophysical surveys undertaken in 1997/1998 on this new area did not detect any activity; the lack of geophysical anomalies was probably a reflection of the unresponsiveness of the boulder clay geology, whilst the lack of fieldwalking finds may have been due to the fact that archaeological deposits were not being significantly disturbed by the plough.

During the construction watching brief, a number of distinct linear features and Romano-British pottery fragments were noted. After consultation with Transco and Laing Engineering Ltd, an area approximately 430m in length was topsoil-stripped by back-acting excavators under archaeological supervision (Figure 21). Within this area, a 130m stretch contained archaeological features (Figure 22). Having assessed the overall distribution of features, a 5m-wide strip of the easement was fenced-off along the western edge to allow construction traffic to continue. The site was then cleaned of any remaining topsoil by a mini JCB fitted with a smooth-faced ditching bucket, in order to clarify the layout of features. Continuous wet weather during the investigations meant that visibility was generally poor, and time constraints prevented the re-cleaning of some waterlogged areas (Plate 3).

#### **Results**

All features discussed below are located on the detailed site plan, Figure 22.

#### **External Enclosure Ditches**

The limits of the visible field system were marked by two very similar linear features, [2076] and [2013], which lay at right angles to each other. If both ditches continued on the same alignment they would have met roughly at right angles, approximately twenty-four metres to the west of the easement. Linear [2076] ran north-east to south-west and varied between 0.82-1.29m in width and 0.20-0.24m in depth. Linear [2013] varied between 0.64-1.24m in width and had a depth of up to 0.22m. This latter ditch was orientated north-west to south-east. Both features had gently sloping profiles, usually with a flattened base (Figure 23 (a)-(d)). Both contained a single homogenous sandy fill, context (2014) within

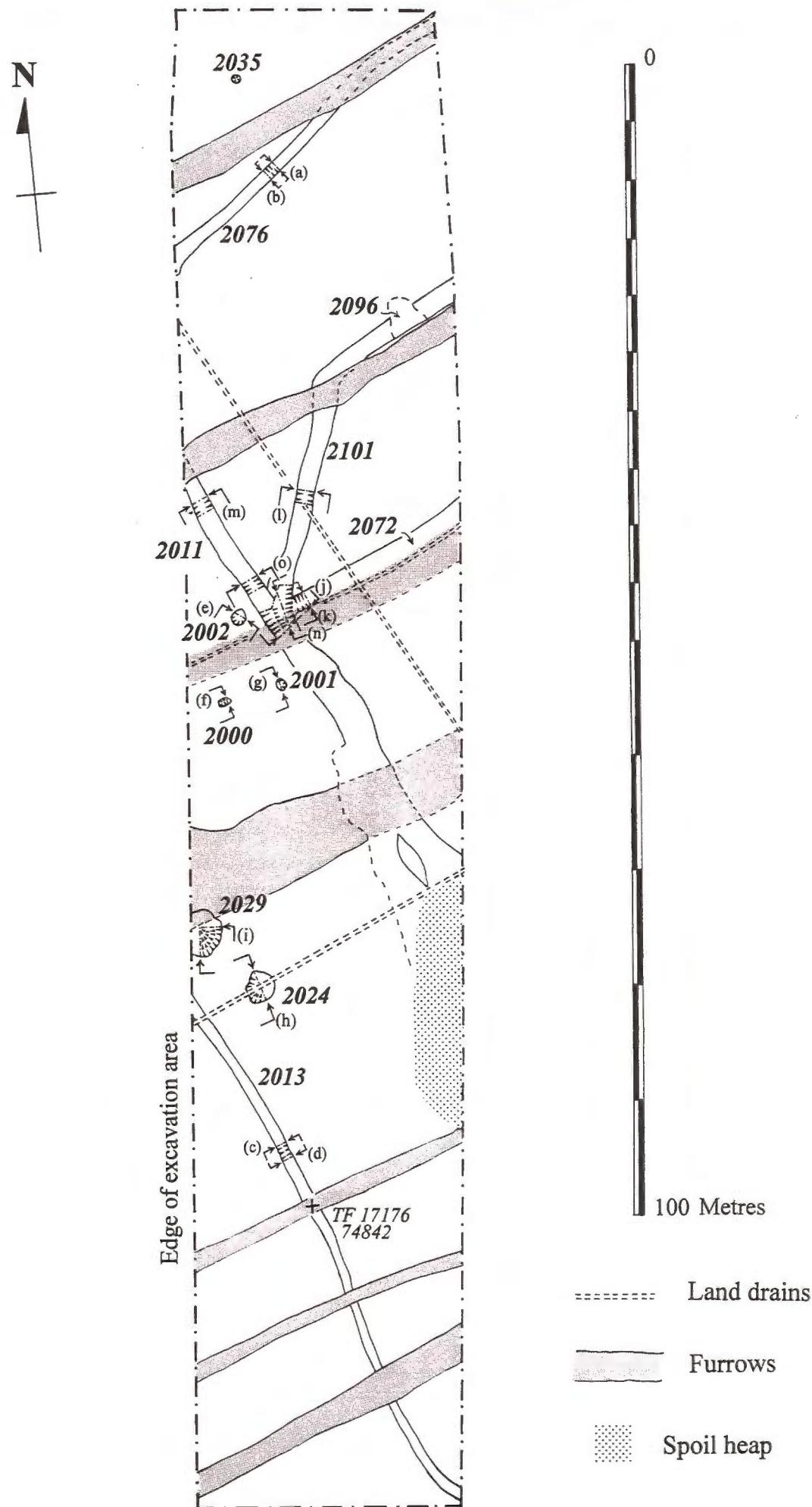


Figure 22: Site 2, Plan of Romano-British Field System, Pits and Well

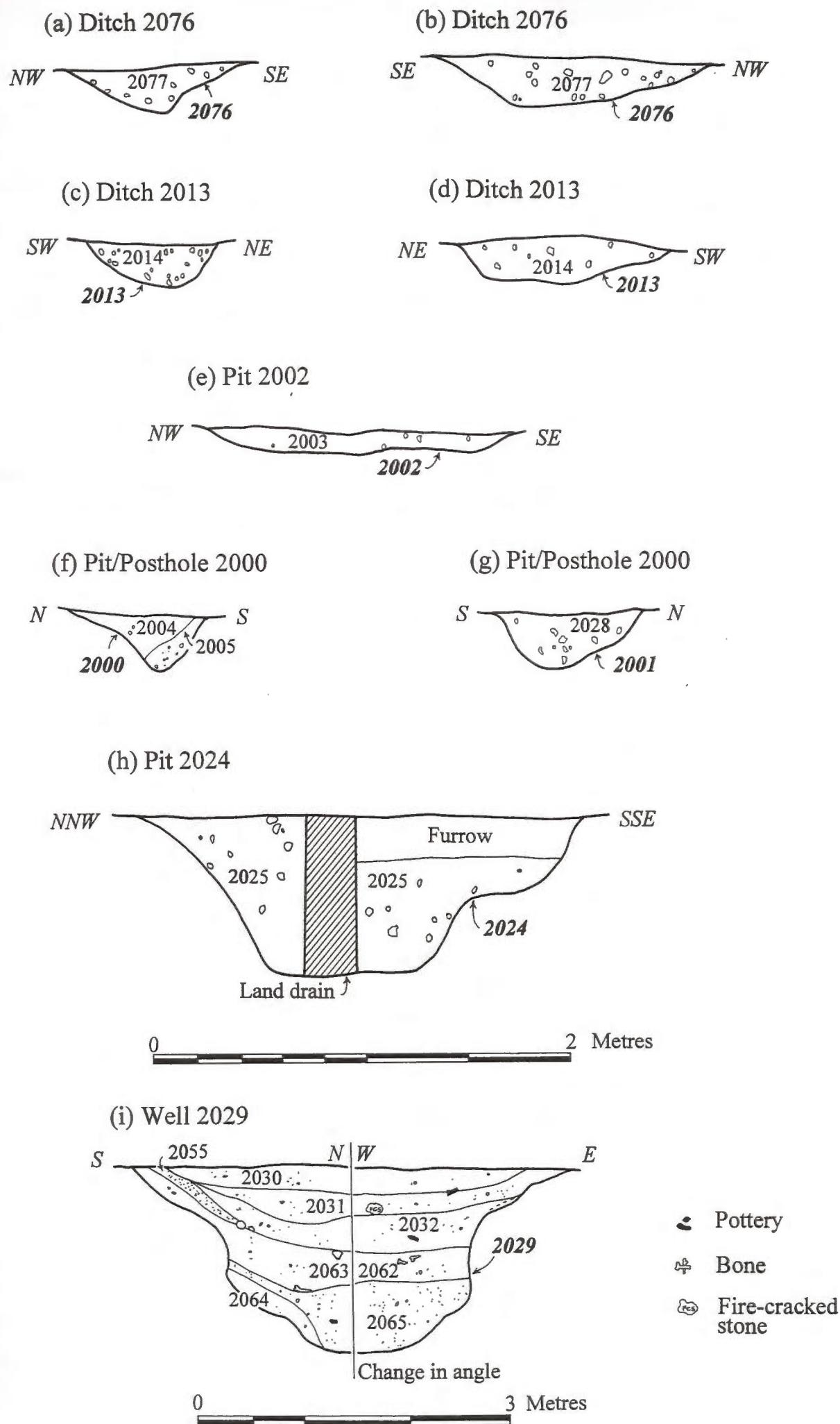


Figure 23: Site 2, Section Drawings

ditch [2013] and context (2077) within ditch [2076]. Ditch [2076] produced one sherd of late third to fourth century pottery whilst ditch [2013] produced three sherds of possible third century pottery and three broadly dated Romano-British fragments. Ditch [2013] also produced a small piece of pig bone and one unidentified shaft fragment.

### Internal Enclosure Ditches

Three further linear features were located within the area defined by the above. These three features, ditches [2011], [2101] and [2072], were slightly more complex. Ditch [2101] was the northernmost of the three and apparently the earliest. It was first recorded emerging from the eastern edge of the easement, orientated north-east to south-west. It continued in this direction for approximately 13m, staying parallel with outlying ditch [2076] which lay 16m to the north-west. It then turned to follow a south-south-west course for roughly 20m before rapidly increasing in depth and turning towards the south-east.

Ditch [2011] was first seen emerging from the western edge of the easement, orientated north-west to south-east. If it were to have continued 16m further to the north-west, outside the limit of excavation, it would have met the northern most linear [2076] at right angles, suggesting that it was contemporary. As it was, ditch [2011] continued in a south-easterly direction for approximately 15m, where it reached the south-easterly turning point of ditch [2101], and continued along this course, re-cutting the path of the earlier ditch.

Ditch [2072] was badly damaged by both land drains and a substantial furrow running along its length. This made the recording of this feature tentative. It appeared to emerge from the eastern edge of the easement, orientated in a north-east to south-west direction. It continued towards the south-west for approximately 16m until it reached the aforementioned junction of ditches [2102] and [2011]. It was not clear from the section dug whether ditch [2072] terminated at this point or whether it made an almost ninety degree turn to the south-east where it may have run alongside, or later combined with, ditch [2011] in re-cutting the course of the earlier [2101]. Although it cannot be proved, a terminal seems more probable, which would suggest a contemporary date for [2072] and [2011].

Because of time limitations, it was not possible to dig a further section to the south-east of the above junction to clarify these relationships. It did, however, appear in plan that approximately 12m further to the south-east the combined feature seemed to divide into two similarly-sized linear features which continued in a south-easterly direction. A collection of artefacts from the surface of these two linear features included three late third to fourth century pottery sherds from the western branch and six late fourth century sherds from the eastern branch. Assuming that ditch [2072] did in fact terminate at the junction, these two linear features could possibly represent the slightly varying paths of ditches [2011] and [2101].

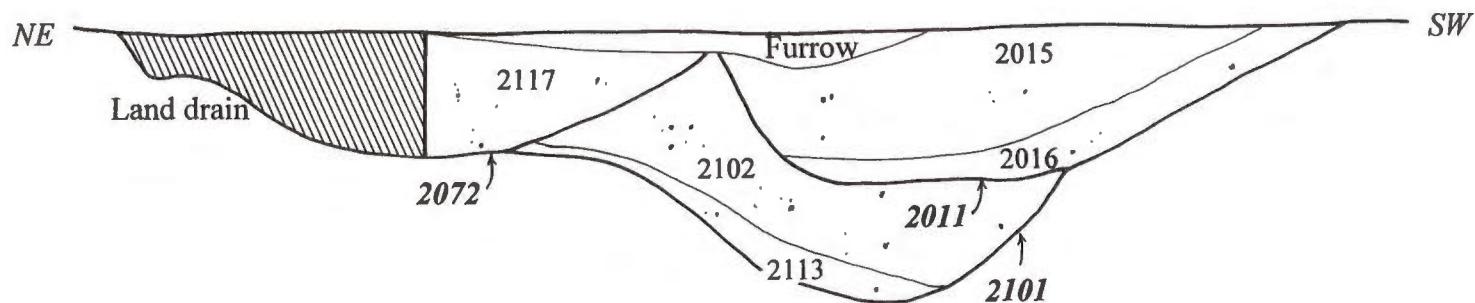
The physical characteristics of these three internal ditches were very different. Ditch [2011] measured between 1.50m and 1.6m wide and 0.22m-0.38m deep (Figure 24 (j), (m), (o)). It had moderately steep concave sides and a rounded, flattened base, and contained two brown-grey silty-sand fills. The primary fill, (2016), varied between 0.10m and 0.21m in depth. Five sherds of mid-third century pottery as well as two pieces of Romano-British *tegulae*, two *imbrices*, two *tegula*/brick fragments and one unidentified brick/tile fragment were recovered from (2016) (Figure 24 (m)). Two cow-sized rib fragments, two *imbrices* fragments and three post-medieval tile fragments were recovered from another part of context (2016) (Figure 24 (j)) indicating a certain amount of intrusive damage in this area.

The secondary fill of [2011], context (2015), also contained moderate amounts of cattle and cattle-sized bones and a sawn-off antler tine, probably from a roe deer. Antler is easily sawn when fresh and was widely utilised in antiquity as a raw material for the production of small items such as combs, dress fittings and gaming pieces (Appendix 7). No such by-products were recovered from this site during excavation.

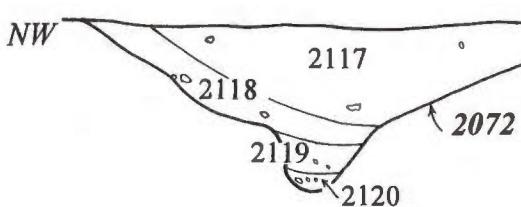
Ditch [2072] measured approximately 1.5m wide and 0.58m deep (Figure 24 (k), (j), (n)). Where sectioned immediately prior to the junction, it had shallow concave sides with a sharp break of slope

Figure 24: Site 2, Section Drawings

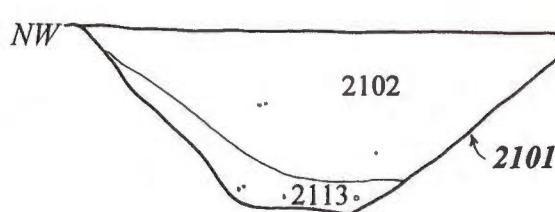
(j) Land drain/Furrow/Ditches 2072, 2101 and 2011



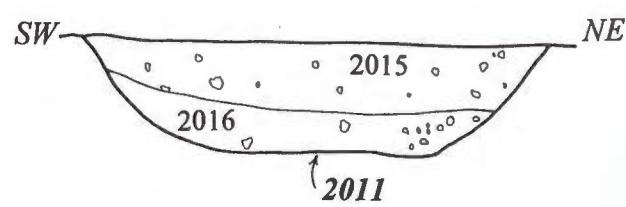
(k) Ditch 2072



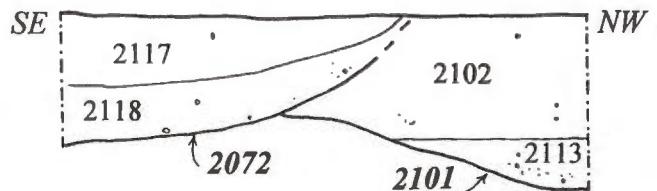
(l) Ditch 2101



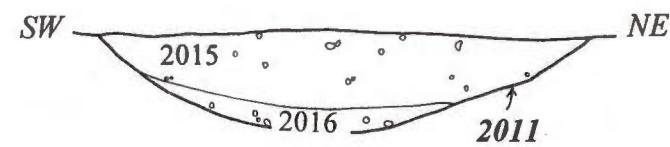
(m) Ditch 2011



(n) Ditches 2072 and 2101



(o) Ditch 2011



0 5 Metres

below and a narrow, steep sided slot, measuring roughly 0.33m wide at the top reducing to approximately 0.14m at the base. This slot was about 0.18m deep and had a very slightly concave base. The slot was probably the result of water action in the base of the ditch, indeed the two fills within the slot, (2120) and (2119), were very similar to the surrounding natural clay. It was not possible to record the profile or full dimensions of the ditch within the junction due to extensive land drain damage. There was, however, no indication of a slot. The main body of the ditch contained one main fill, (2122), a light grey-brown sandy silt. No artefacts were recovered.

Ditch [2101] was more informative. Where sectioned approximately 10m north of the junction with ditch [2011], it was seen to have steep sloping sides which broke sharply into a wide flat base (Figure 24 (l)). It measured 1.61m wide and 0.60m deep (Figure 24 (f), (j), (n)). It appeared to measure around 0.60m deep at Section [2101]/[2072] (Figure 24 (n)), but by Section [2011]/[2101]/[2072] (Figure 24 (j)), over a distance of approximately 1.20m, it had reached a depth of 0.90m. It was not possible to compare further characteristics as it had been truncated by later ditches [2072] and [2011], and was also slightly distorted by its change in direction. There appear to be two main fills, numbered in Section [2011]/[2101]/[2072] (Figure 24 (j)) as contexts (2113) and (2102). The primary fill, (2113) was made up of a mid-grey silty-sand, whilst the bulk of the ditch was filled with an orange-grey/brown silty sand. No finds were recovered from this ditch, and it would appear to have entirely silted-up prior to being cut by ditches [2011] and [2072].

#### Pits

Five pits were recorded at the site : [2000], [2001], [2002], [2024], [2035], as well as one unexcavated pit-like feature, [2096], in the north-east part of the site.

The most northerly was pit [2035], situated 8m to the north of outer enclosure ditch [2076]. This measured 0.72m long, 0.51m wide and 0.11m deep. It contained the remains of a partially articulated calf skeleton which had been placed inside the pit before being immediately backfilled. It is likely that the remainder of the skeleton was accidentally removed during topsoiling or as a result of earlier agricultural activities. The remains comprised the forelimbs, much of the spinal column and rib and part of the left hind-limb. The bones were all very small with no fusion of the long-bone epiphyses and with the arches of the vertebrae not yet ossified, showing the animal to be very young, either new-born or in its first months of life. A calf dying by injury or disease at this age could have been conveniently disposed-of within such a pit.

Of the pits investigated within the enclosure system, pit [2002] was the most northerly, situated less than a metre to the south-west of the multiple ditch junction. It was sub-circular in plan, measuring 1.42m by 1.35m, falling to a depth of 0.11m. In profile it had moderately sloping edges and a flattened base (Figure 23 (e)). It had only one fill, (2003), which appeared to consist of re-deposited natural clay, and contained no finds.

Pit [2001] was situated a further 6m to the east and was circular in plan. It measured approximately 0.68m in diameter and was 0.24m deep (Figure 23 (g)). It displayed a 'U'-shaped profile with a rounded base. Its single fill, (2028), was made up of a light grey sand, and it contained no finds.

Pit [2000] was situated roughly 4m to the west of [2001]. It formed an elongated oval in plan and measured approximately 0.40m wide, 1.10m long and 0.30m deep (Figure 23 (f)). It had steep convex sides and a narrow 'V'-shaped base. It contained two fills: primary fill (2005), a light yellow-grey sand, was overlain by (2004), a dark brown-orange sandy-silt, the latter including charcoal flecks and one sherd of broadly dated Romano-British pottery.

Pit [2024] was situated approximately 4m to the south-east of well [2029], which is described below. It appeared sub-circular in plan, measuring roughly 2m in diameter. The north-western edge was steeply convex in profile whilst the south-eastern edge appeared to be stepped half way down, possibly as a result of the slumping of the original cut (Figure 23 (h)). The base was flat and 0.70m wide, with a

maximum depth of 0.75m. Apart from extensive intrusion from a medieval furrow and a modern land drain, this pit contained a single, fairly homogenous mid-dark grey sandy fill (2025). This produced two sherds of broadly dated Romano-British pottery and a single horse ulna.

The function of the pits is uncertain. They are, however, clustered together, suggesting a specific, localised activity within that area, which was not carried out elsewhere. It is possible that features [2000] and [2001] were postholes rather than pits, perhaps representing the position of a former structure such as a drying rack or other agriculture-related timber construction.

### **The Well**

The only other, and perhaps most interesting, feature within this enclosure was possible well [2029] (Plate 2). This feature was situated at the western edge of the excavation, approximately 1.80m north-east of the southernmost linear [2013]. Approximately one quarter of the feature appeared to lie outside the excavated area. The feature was circular in plan, with a diameter of approximately 3.80m. In profile it was almost bell-shaped with moderately sloping upper edges breaking into vertical sides and ending in a wide, rounded base at a depth of 1.70m (Figure 23 (i)). It was quarter sectioned and dug in two steps for safety purposes. Frequent rainfall and groundwater problems made excavation and recording difficult. Five principle stages of silting were recorded, as well as evidence for the erosion and slumping of the well walls.

The primary phase consisted of the simultaneous slumping of the natural clays and gravels (2064) at the base of the southern edge, and the build up of a highly organic, black-brown sandy silt deposit, (2065), measuring up to 0.60m in depth. These deposits filled the entire base of the feature. The highly organic fill contained approximately 50% wood remains, consisting of twigs and split round wood. Fragments of a cattle radius and a pig scapula were also recovered. Environmental Sample No.37 was taken from context (2064) and Sample No.35 from context (2065).

The secondary fill, context (2062/3), consisted of a 0.45m deep mid-grey sandy-clay. Two fragments of cattle scapula were retrieved from this fill. Environmental Sample No. 36 was taken from this context.

Following another brief episode of slumping of natural material along the southern edge, context (2055), a third substantial silting phase was noted. This consisted of a light-grey sandy-silt, context (2032), which produced one sherd of possible mid-third century AD pottery and six sherds of third to fourth century pottery. Once more it appeared to fill the whole width of the feature, and had a maximum depth of 0.38m. Environmental Sample No.34 was taken from this context.

Following the above was fill (2031), which consisted of a mid-grey sand with mottled iron staining falling to a maximum depth of 0.30m. Eight fragments of late third to fourth century pottery and a fragment of Romano-British *tegula* were recovered, as well as a large quantity of animal bone. This weighed 1340g and included horse, cattle, pig, ?deer and numerous cow and sheep-sized fragments (Appendix 7). Amongst this assemblage was an articulated right horse foreleg exhibiting slight surface charring, indicating that it had been subject to heating. Age estimates can also be made for two of the cattle from this context due to the presence of teeth. The considerable wear to the molars indicates that they were both mature individuals, probably five years or more old. Environmental Sample No. 33 was taken from this context.

The final silting phase was represented by context (2030). This consisted of a light-grey sand with iron stained mottling which had a maximum depth of 0.25m below the base of the topsoil. It produced two sherds of broadly dated Romano-British pottery and 370g of animal bone representing cattle, horse, dog and cow-sized animals. The dog skull was mineralised, with heavily worn teeth, indicating a fairly old individual. It would have been a small to medium-sized canine, perhaps comparable to a modern fox-terrier or foxhound. No environmental sample was taken from this context because of the high probability of contamination.

## **Environmental Evidence**

A series of five samples were taken from the fills of the well (Appendix 12).

Three samples (Nos. 33, 34 and 36) produced several unidentifiable charred cereal grains. Only Sample 37, context (2064), produced a single charred barley grain along with a small number of un-charred weed seeds.

Frog or toad bones were found in Sample 34, context (2032), along with the bones of field vole, cow and horse. Sample 36, context (2062), also contained cattle-sized bone fragments.

Sample 35, of context (2065), contained abundant waterlogged plant and insect remains along with several molluscs. The seeds and fruits present came from plants that grew in the following range of habitats: disturbed (including cultivated) ground and waste places, e.g. nettles, black nightshade, *Polygonum* species, goosefoots and chickweeds; wetland habitats, e.g. hemlock and sedges; grasslands, e.g. buttercup; and hedgerow/shrub environments, e.g. blackberry/raspberry and elder. Fragmented wood, charcoal, stem and occasional leaf fragments were also present.

The wood from this sample was separated into larger pieces of roundwood and twiggy pieces, and more comminuted debris consisting of thin twig pieces and degraded wood fragments. The larger fraction, probably brushwood, was predominantly blackthorn; segments of well-preserved roundwood still retained bark and measured up to 18mm in diameter. Several of these bore oblique tool marks clearly demonstrating severance. Numerous spines and twiggy pieces of blackthorn were identified along with several possible pieces of oak, although these may have been roundwood as the wood was very degraded. The smaller wood fraction was largely composed of thin twigs and spine tips from blackthorn with several narrow stems being identified as either willow or poplar.

Most of the woody material from this sample appeared to be young stem or brushwood. Tool marks on the wider pieces of blackthorn tend to implicate an artefactual origin for the wood rather than a natural accumulation of debris within the well. However, the great abundance of narrow twigs (which are of minimal economic value) suggests that this was probably unlikely. It is more likely that the wider, more useful parts of the stems had been cut away for use elsewhere or that the twigs were the by-product of scrub clearance, leaving the twiggier material to be disposed-of within the well. Blackthorn does not attain any great dimensions but it is hard and dense and has various applications such as for fuel, or narrow sails in hurdles, tools, domestic items and other artefacts.

There were no true aquatic plants in the assemblage to suggest standing water although water flea eggs were present in moderate numbers; these crustacea lay their eggs in water in the months leading up to winter. A fairly high number of beetle remains were also noted.

## **Medieval Field System**

The Roman enclosures were overlain by a later field system probably dating to the medieval period. The remains of at least seven furrows could be identified, of varying widths, and running north-east to south-west.

## **Discussion**

The presence of animal bone, the paucity of cereal evidence and the apparent smallness of the enclosures all suggest an emphasis on stock farming rather than arable farming. In this case, the well would have been important for watering the animals. Although the animal bone sample is small, it is interesting to note the domination of cattle within the sample, with a minimum number of three individuals present. The calf burial is also suggestive of cattle breeding. Even so, the bone assemblage contained surprisingly few sheep, only two fragments being from this animal. Differential preservation and collection rates may in part be responsible for this shortage, since preservation was poor and the more robust cattle bones survives better. However, the presence of pig bones suggests that sheep bones,

if originally present, would have been similarly preserved. Given the small size of the assemblage, any conclusions should be regarded as tentative.

The botanical assemblage probably reflects conditions both within and in the immediate vicinity of the well. It suggests a disturbed habitat, possibly indicative of human activities nearby. This is supported by the presence of charcoal and cut wood in the sample. The wild fruits may have been from hedgerow plants growing close-by, the fruits being gathered and used while in season.

A total of 101 datable pottery sherds came from the site, placing it into the later Roman period, from the mid third century onwards. They include a distinctive dales ware jar in a gritty fabric (Appendix 3, Dr. 3. 47), together with specifically later fourth century sherds, such as those from a red-slipped mortarium from the Oxfordshire kilns, a bead-and-flange bowl (Appendix 3, Dr. 3.53), and double-lid-seated jars in a late coarse fabric known from the latest Roman deposits in Lincoln (Appendix 3, Dr. 3.48-9). A rarity is a strainer (Appendix 3, Dr. 3.50). No fine wares existed amongst the pottery assemblage, 77% of the sherds being grey wares, probably mostly from the late Lincoln Kilns at Swanpool. This suggests that the field system was related to a rural settlement presumably existing in the locale.

The full extent of the field system cannot be ascertained, nor the location of the associated settlement, although the small collection of pottery and Romano-British brick and tile suggests a nearby settlement with at least one substantial brick built building perhaps with a tiled roof. The lack of high status pottery and finds traditionally associated with wealth, such as expensive building materials, metalwork and coinage, all suggest a fairly basic rural settlement, possibly even a single farmstead.

#### 8.4 Site 6 Settlement and Field System

Plot 20, Moor Farm, Bucknall, TF 17064 70624

##### **Summary**

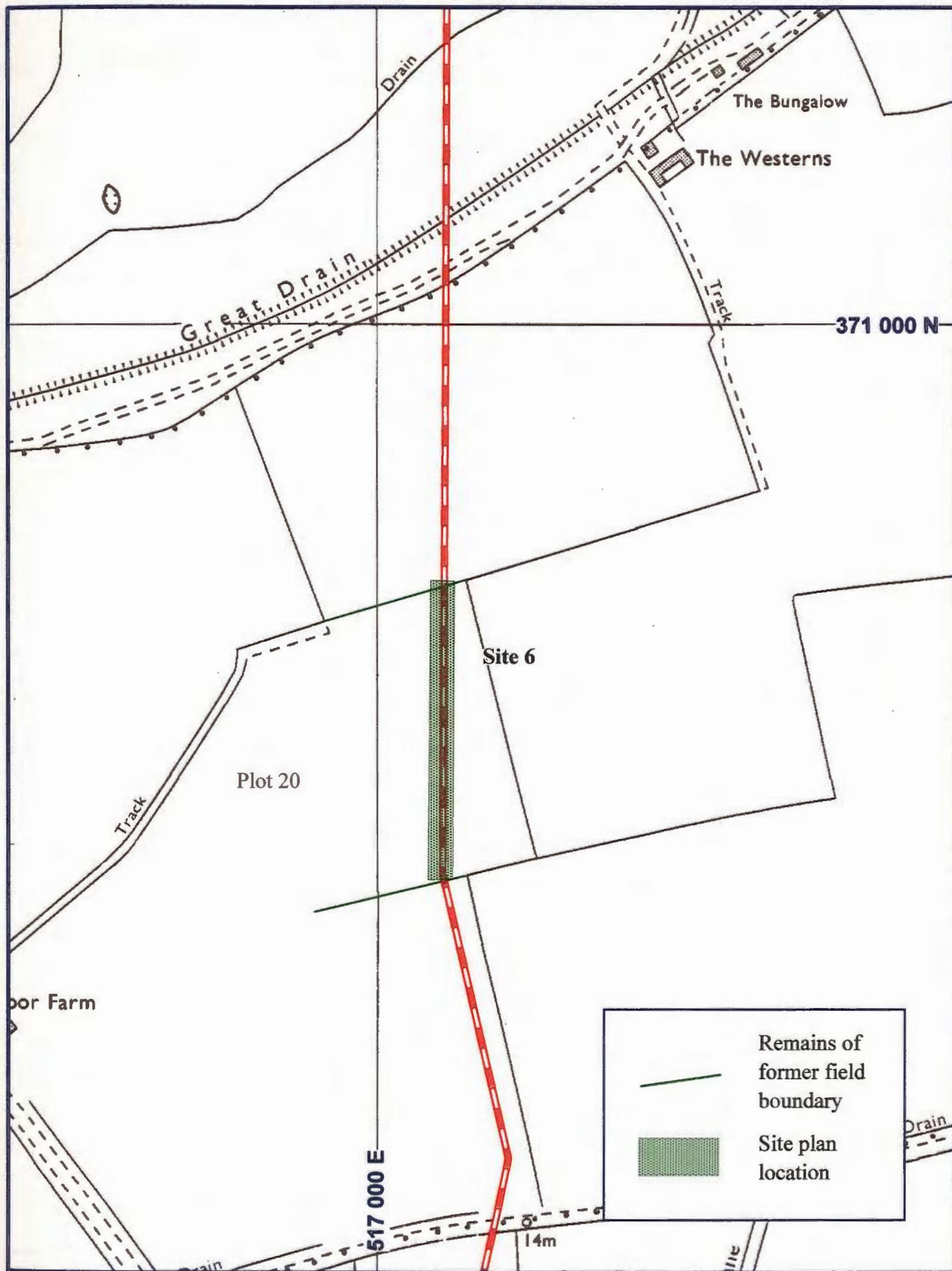
*Discoveries made during the 1998 watching brief led to the excavation and recording of extensive settlement and field system remains at Site 6, dating to the late Iron Age and Roman period. Excavation was centred on two separate areas approximately 100m apart. The northernmost area has been called Site 6A and the southernmost 6B. Activity has been divided into five principal phases:*

Phase 1	Late Iron Age
Phase 2	Late Iron Age/1st Century/Early 2nd Century
Phase 3	2nd Century
Phase 4	Late 3rd/4th Century
Phase 5	Late 4th Century

*A phase plan summary, Figure 26, has been produced to give an overall impression of the site's evolution as summarised below.*

##### **Phase 1**

*The earliest features are concentrated within Site 6A and at the northern end of Site 6B. These consisted of three definite circular gullies, between approximately 8m and 17m in diameter, and a number of smaller gullies, possible postholes and enclosure ditches. The ditches were laid out on a roughly north-north-west - south-south-east / east-north-east - west-south-west axis. The ring gullies and associated features will be discussed as separate groups - Group 1, Group 2 and Group 3. The smallest ring gullies (Groups 2 and 3) have been interpreted as roundhouse eaves-drip gullies whilst the larger example (Group 1) had dimensions more indicative of an enclosure. Although some of the pottery forms could continue into the early Roman period, the dominant presence is late Iron Age. Artefactual evidence suggests domestic occupation with weaving and possibly iron working taking place. However, the latter may represent debris from the more large-scale smithing activities evident in Phase 2. Limited environmental analysis detected only a tiny amount of unidentifiable charred grain.*



Scale 1:5000

Figure 25: Site 6, Late Iron Age/Romano-British Settlement

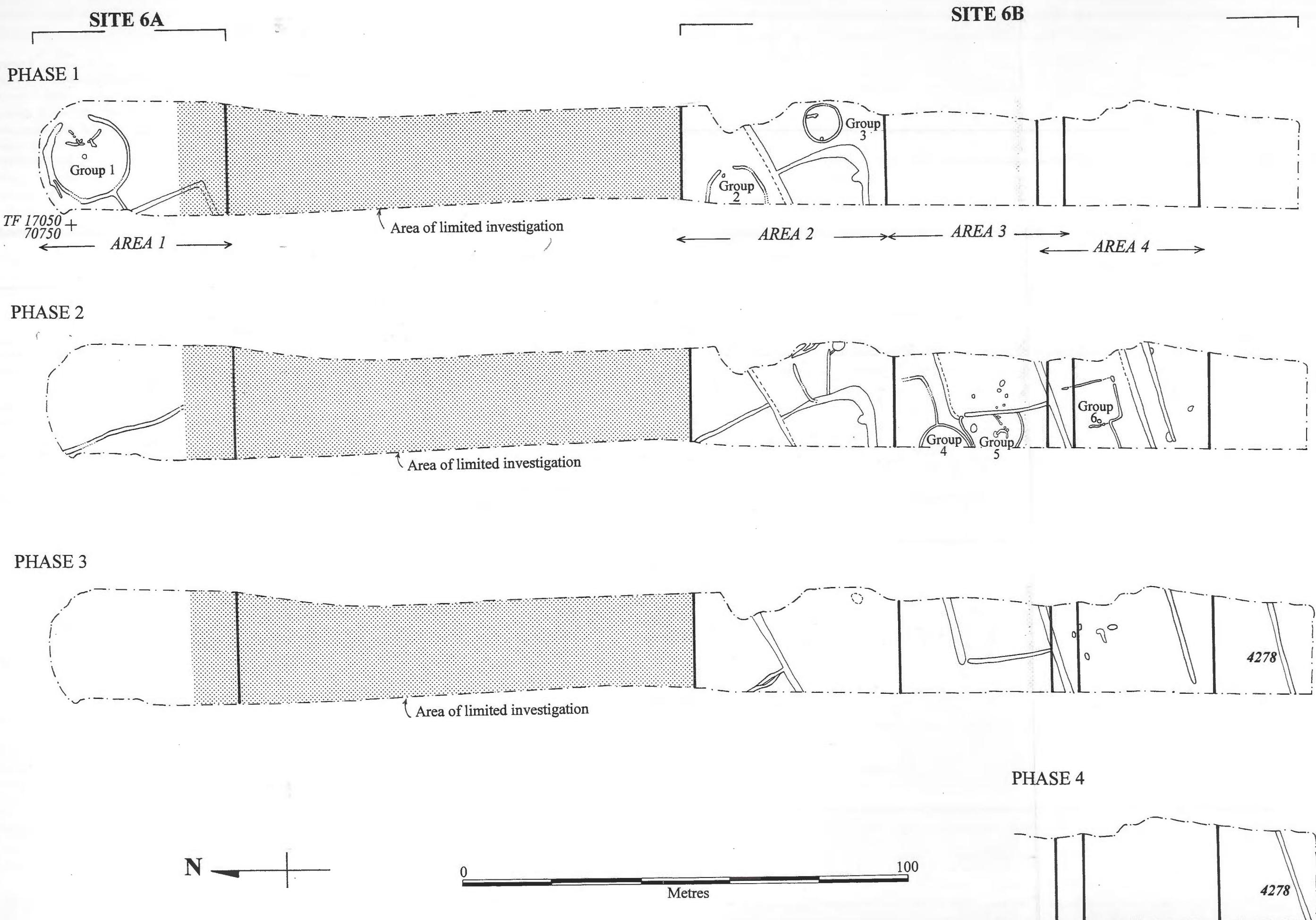


Figure 26: Site 6, Plan and Phase Plan of Late Iron Age/Romano-British Settlement

### **Phase 2**

*There was no obvious evidence of discontinuity of settlement between Phase 1 and Phase 2. The second phase continued on a similar layout but with additional enclosure ditches, one more circular gully (Group 4) and an area of possible industrial activity (Group 5). The diameter of the additional ring gully was approximately 11m and has been interpreted as a probable roundhouse eaves-drip gully. These additional features appear to have gradually replaced those of Phase 1. The earlier Phase 1 ring gullies are cut by enclosure ditches and features belonging to the 1st century. The possible enclosed area of industrial activity was identified by the presence of large amounts of iron smithing debris. Small amounts of this debris were found scattered throughout various features from this phase. In addition, a potential rectangular structure, Group 6, at the southern end of the site, has been tentatively assigned to the end of this phase.*

*The predominant pottery forms and fabrics from this phase are mid- to late-first century AD, with occasional early 2nd century influences. All artefacts are indicative of domestic occupation. Limited environmental analysis detected only a tiny amount of unidentifiable charred grain and two weed seeds indicative of disturbed grassland and wetland.*

### **Phase 3**

*Evidence for domestic structures and occupation appeared to decrease in the second century. A number of the ditches were still open and additional ditches may also have been dug to the south to form more regular, possibly rectangular, enclosures. Later in this period a quantity of higher status building material and pottery was deposited over Site 6B. Some was collected as unstratified material whilst some was recovered from ditch fills and purpose-dug pits. A number of possible oven flues or hearths were also recorded in this area. There was no evidence for continued iron working and the overall impression is primarily of a field system adjacent to a higher status site rather than the settlement core itself.*

### **Phase 4 and 5**

*These latest phases of activity were evinced by the contents of a single enclosure ditch, [4278], at the southern limit of Site 6B, and a large quantity of unstratified fourth century pottery. The enclosure ditch was probably part of the Phase 3 (2nd century) field layout but is the only excavated feature to produce pottery of the late 3rd to 4th century. These sherds were recovered from the uppermost fill of the ditch and probably represent the final stages of deposition. The unstratified 4th century pottery probably represents manuring activity and has no associated features within the area excavated. This combination of factors suggest the continuing occupancy of a Roman site somewhere to the south-east or south-west of the pipeline.*

### **Introduction**

Plot 20 is situated approximately half way between the villages of Gautby and Bucknall in an area of intensive arable farming. It lies just over 10m above sea level in a relatively level landscape of boulder clay geology (Figure 25).

This field was not available for fieldwalking in 1993 due to crop coverage. Only the southern half of the field was available in 1997, taking the survey beyond the main concentration of remains. This produced only one sherd of medieval pottery and a prehistoric flint waste flake. Magnetic scanning in 1997 failed to detect any significant anomalies.

Initial stripping in Plot 20 revealed traces of linear features and fragments of Romano-British pottery. An area of approximately 5700 square metres was cordoned-off for excavation, leaving an access along the eastern edge of the easement for construction traffic. Although this vehicle route did cross archaeological deposits, it appeared, from initial topsoil stripping, to be the least-productive area within the easement and so was sacrificed to protect the remainder from further vehicular damage.

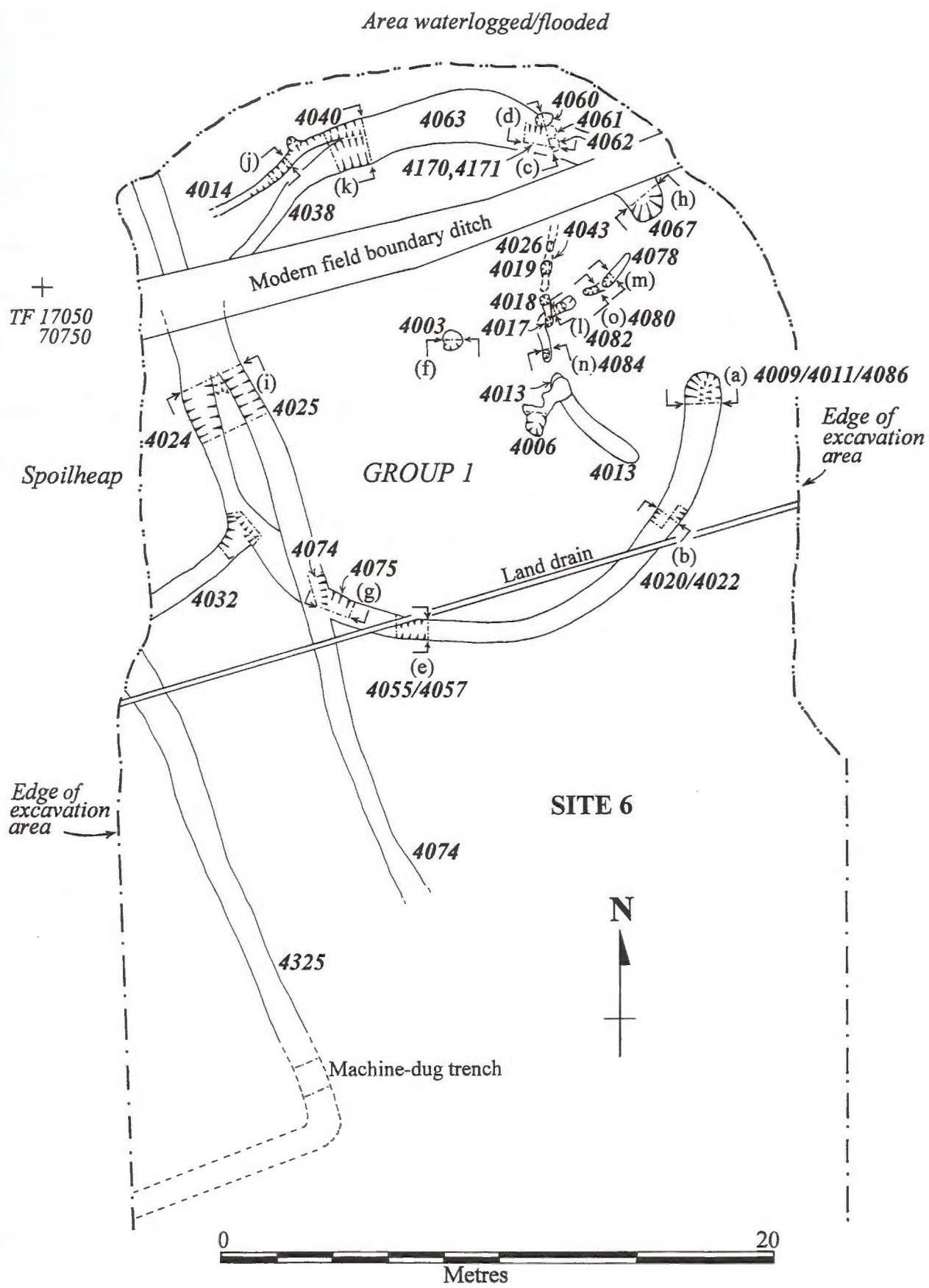
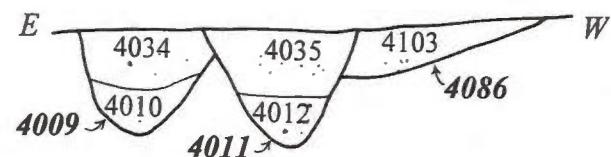
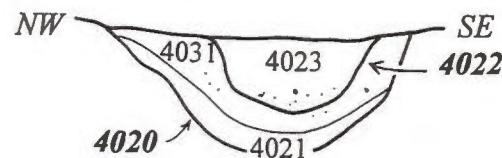


Figure 27: Site 6, Detailed Plan of Area 1

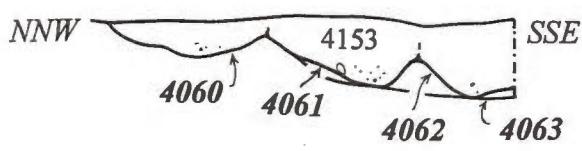
(a) Ring Gully 4009,4011,4086



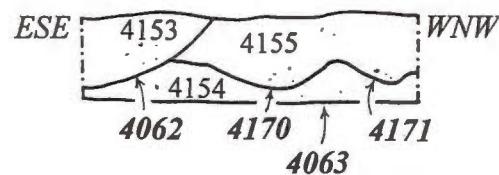
(b) Ring Gully 4020/4022



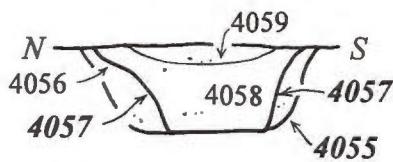
(c) ?Postholes 4060,4061,4062  
within Ring Gully 4063



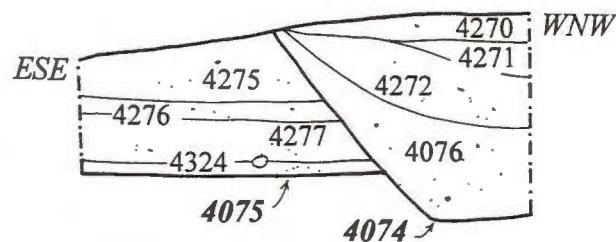
(d) ?Postholes 4062,4170 ,4171  
within Ring Gully 4063



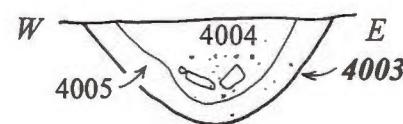
(e) Ring Gully 4055/4057



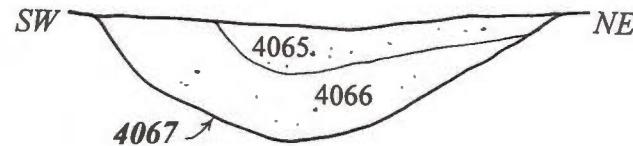
(g) Enclosure Ditch 4074  
and Ring Gully 4075



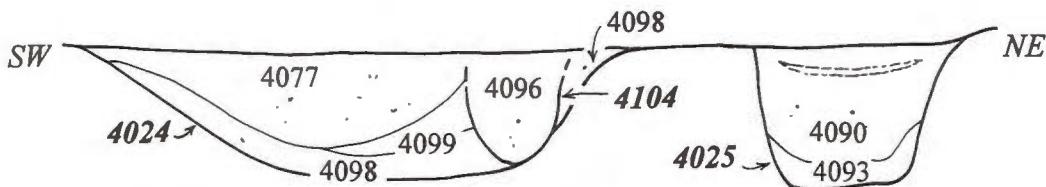
(f) ?Posthole/Hearth 4003



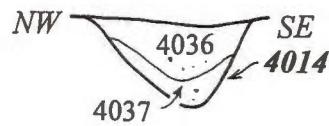
(h) Ring Gully 4067



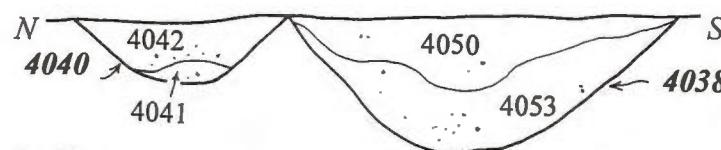
(i) Ring Gully 4024, ?Posthole 4104 and Ditch 4025



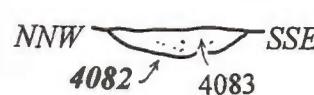
(j) Ring Gully 4014



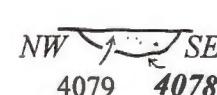
(k) Ring Gullies 4040 and 4038



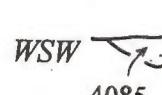
(l) Gully 4082



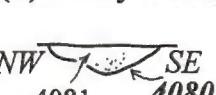
(m) Gully 4078



(n) Gully 4084



(o) Gully 4080



0 2 Metres

Figure 28: Site 6, Section Drawings of Area 1

An additional area of ground between the northernmost group of features and the main body of the site to the south was subsequently surrendered to allow for storage of pipe, effectively dividing the excavation area into Site 6A, at the northernmost end and Site 6B to the south. The area in-between also contained a small number of archaeological features, but time restrictions and sustained rainfall prevented close inspection. Occasional possible features were again seen to the south of the main site but were subject to the same restrictions.

Topsoil depths from the present ground level were approximately 0.30m. Extensive modern land drain systems and almost constant rain made excavation and interpretation extremely difficult with much of the site under standing water. Features reached a maximum depth of 1.2 metres and the majority were excavated by hand from the surface of the subsoil. As time ran out, box sections were machine-excavated across a number of ditches and then hand-cleaned and recorded.

#### *Division of data between Report, Appendix and Archive*

Data on the least important features can be found in the site Archive. Because of the extensive nature of this site it has not been feasible to describe in the report text every context. Full details of each context are therefore listed in the Context Gazetteer (Appendix 14).

### **PHASE 1 : Late Iron Age**

#### **Ring Gully Group 1 (Figure 27)**

This group consisted of a large ring gully [4009/4020/4055 etc.], and several interior features. The latter included a small pit, [4003], interpreted as a post-pit or sunken hearth, a shallow interrupted gully, [4078/4080]/[4082/4084], a possible construction slot, [4013], an alignment of four postholes, [4026]/[4019]/[4018]/[4017], and a small linear feature, [4006].

Only one external feature, gully [4032], could be directly associated with the ring gully.

#### ***Ring Gully [4009/4020/4055 etc.]***

An almost entire ring gully approximately 17m in diameter lay within Site 6A (Plate 4). A modern field boundary cut through the gully at two points along its northern edge, and extensive land and mole drain damage was present throughout. The gully varied in surface plan between 1.90m wide on the northern side and 0.70m wide on the southern side. The curve was very regular with a definite break, approximately 5.80m wide, facing east-north-east. There was no apparent uniformity of cut size or profile along the gully length, although the gully was generally 'U' shaped and between 0.28m and 1.20m wide and 0.14m to 0.40m deep (Figure 28, (a), (b), (e), (h), (i), (j), and (k)).

A number of sections were dug across the gully. Of those suitable for such analysis, half were recorded as containing a re-cut (Figure 28, (a), (b) and (e)). The remaining suitable sections recorded only a single fill, although this may have been the result of more extensive re-cutting having totally truncated any earlier cut.

The separation of the ring gully into two separate gullies at Section (k) indicates two distinct digging episodes. The greater width of the gully east of Section (k) probably represents the combined width of the two cuts dug side by side.

#### ***Postholes within the Ring Gully***

A number of possible post- or stake-holes were recorded within the original gully cut and in the re-cut. These were noted at Sections (c), (d), (i) and adjacent to Section (j). However, considering the overall poor state of preservation of the features, these observations cannot be relied on too heavily.

#### Section (i):

The posthole at Section (i), [4104], where no re-cutting of the gully was recorded, was approximately 0.25m wide and 0.30m deep, with vertical sides and a slightly rounded base. It lay on the inner edge of the gully and appeared to have been cut into the secondary fill prior to the complete silting of the gully.

#### Section (c):

In Section (c) there were three possible postholes immediately adjacent to each other along the line of the section: [4060], [4061] and [4062]. No distinction could be made between their fills so no chronological order is known.

- [4060] was approximately 0.41m wide and 0.10m deep at the section, with a near vertical northern edge and a wide flat base.
- [4061] was approximately 0.32m wide and 0.17m deep at the section, with a gently sloping northern edge, more steeply inclined southern edge and a flattened base.
- [4062] was visible in both Sections (c) and (d), but neither section was extensive enough to provide reliable dimensions for the feature. It appeared to have a minimum width of approximately 0.50m with a depth of 0.20m at the section. In profile it had moderately steeply sloping sides and a flattened base.
- [4060] appeared to have been dug just beyond the outer edge of the ring gully whilst [4061] and [4062] were cut into the primary silting within the gully, exactly matching the depth of the gully cut. It is possible that these features could simply be the result of gully re-cutting or cleaning. [4060], in particular, looked more like a gully or shallow pit in section.

#### Section (d):

Two further possible postholes were recorded in Section (d). [4170] and [4171] were originally believed to be separate postholes, although in the section they were distinguishable only by an undulation at the base of their fill (4155).

- [4170] was approximately 0.35m wide and 0.18m deep at the section, with a rounded base.
- [4171] was approximately 0.30m wide and 0.18m deep at the section, with a rounded base.

In section, [4062] appeared to cut [4170], but this relationship is uncertain as the edges of [4170] were unclear. Both [4170] and [4171] appeared to be cut into the primary silts within the ring gully. Although it is possible that these are posthole remains, an alternative hypothesis of gully re-cutting or cleaning must also be considered.

#### Longitudinal Section between Sections (j) and (k):

Further possible postholes observed in the longitudinal section between Sections (j) and (k) did not appear to cut through the base of the gully. The depth of the gully was between 0.16m and 0.26m here. Mole drain damage ran at right angles across this stretch of the gully and perhaps this may have given the impression of postholes within the section.

#### *Finds from the Ring Gully*

Approximately one sixth of the gully was excavated so artefactual evidence was limited.

#### *Pottery*

The ring gully fill produced 107 sherds of pottery. It is probable that the vessels were hand made, and certainly of Iron Age date. Sherds from a beaker (Appendix 3, Dr. 3.25) were recovered from the upper fill in the area of Section (j) and a vesicular cooking pot (Appendix 3, Dr. 3.3) came from the upper fill

of the re-cut at Section (b). Interestingly 31 sherds from a carinated bowl (Appendix 3, Dr. 3.28) from the later cut at Section (k), were possibly from the same bowl as fragments recovered from the fill of the Group 2 ring gully, 150m to the south. This suggests that the ring gully was probably of late Iron Age origin and contemporary with similar features from Site 6B.

#### *Bone*

Bone preservation was particularly poor at Site 6, so little has survived to be identified. Only five horse teeth and a cattle talus and rib fragment were recovered from the upper and middle fills of the gully at Sections (j) and (k) respectively. With such small quantities of animal bone it is not possible to draw any conclusions about their significance.

#### *Fired Clay*

A fragment of fired clay with a smooth upper surface was recovered from the secondary fill, (4036), at Section (j).

#### *Smithing Debris*

A hearth-bottom fragment was recovered from the upper fill of the ring gully butt-end at Section (h). This was similar to another found within the Group 1 internal gully [4082/4084]. Both were small and compact but neither had the charcoal inclusions which were common on pieces from Site 6B to the south.

### **Group 1 Internal Features**

#### *?Posthole/Hearth [4003]*

[4003] was sub-circular in plan and located slightly off-centre within Ring Gully 1. It was approximately 0.90m long, 0.66m wide and 0.28m deep, with a steep sides and a rounded base (Figure 28, (f)).

The feature contained only two fills, the earlier of which was distinguishable from the surrounding natural clay only by occasional charcoal flecks and a sherd of pottery. This primary fill, (4005), had the appearance of re-deposited natural clay. The second fill, (4004), was considerably darker and heavily flecked with charcoal and burnt clay. It also contained, towards the base, numerous burnt limestone fragments measuring roughly 0.09m by 0.04m.

#### *Pottery*

Twelve sherds were recovered from [4003] representing a cordoned carinated bowl (Appendix 3, Dr. 3.27) in a late Iron Age fabric.

#### *Environmental Analysis*

Soil Sample No. 21 was taken from the upper fill of pit [4003]. This detected a very low count of unidentifiable charred grain, a moderate amount of charcoal and four small unidentifiable pottery fragments.

#### *Discussion*

It may be that both the primary fill and the limestone fragments provided packing for a post which subsequently burnt *in situ*. Alternatively, it could be the remains of a shallow hearth or cooking pit; the presence of such high quantities of charcoal, burnt stone and pottery support this theory.

#### *Gully [4078/4080]/[4082/4084]*

[4078/4080] and [4082/4084] were two consecutive lengths of gully of similar dimensions. Their overall length was approximately 5.50m. They ran northwards for 1.50m from a point approximately 5m in from the centre of the ring gully entranceway, before turning towards the northernmost butt-end of the ring gully.

The eastern segment, [4078/4080], was approximately 0.28m wide and 0.07m deep with a shallow-sided profile varying from 'V' to 'U' shaped (Figure 28, (m), (o)). The western segment, [4082/4084], was approximately 0.38m wide and 0.07m deep with a varying, shallow-sided, 'V' and 'U' shaped profile (Figure 28, (l) and (n)).

Gully [4082/4084] appeared to be aligned with slot [4013], suggesting a possible link. Both contained a single phase of silting consisting of a mid-bluish grey silty clay with occasional charcoal flecks, though [4013] was noticeably wider and deeper.

#### *Baked Clay*

Two fragments of unidentifiable fired clay were recovered from gully [4078]/[4080].

#### *Smithing Debris*

A hearth-bottom fragment was recovered from gully [4082/4084]. Like the fragment recovered from the ring gully, it is small and compact but without the charcoal inclusions which were common on pieces from Site 6B to the south. A single piece of smithing slag lump from [4078/4080] is exceptionally large and dense and has an irregular, racked appearance - often a characteristic of Iron Age slags.

#### *Slot [4013]*

Slot [4013] lay approximately 0.50m south of gully section [4082/4084]. It consisted of a continuous and slightly curving arc approximately 4.25m long and between 0.45m and 0.60m wide. In profile it had near vertical sides and a rounded base. Its varied in depth between 0.25 and 0.35m. It contained a single fill, a blue-grey silty clay with patches of red grit throughout.

#### *Pottery*

The fill produced twenty-nine sherds of probable late Iron Age/early Roman pottery, although many were so highly burnt and fragmented that secure identification of either fabric, form or manufacture was impossible. However, a shell gritted cooking pot (Appendix 3, Dr. 3.2) was identified.

#### *Bone*

Several horse teeth and a fragment of cattle horn were also recovered from the fill of the construction slot. Unlike the pottery, none showed evidence of burning.

#### *Environmental Analysis*

Soil Sample No. 23, was taken from [4013] for environmental analysis. Seven small potsherds, possible fired clay flecks and some burnt stone and chalk were recovered from the sample along with moderate amounts of charcoal. A small quantity of botanical remains was also found. This comprised three poorly preserved cereal grains and two weed seeds: ribwort, which grows in grassy places on neutral and basic soils, and rush, a plant of wetland habitats. Little further comment can be made on the basis of this small plant assemblage (Appendix 12).

#### *Postholes [4026J/[4019J/[4018J/[4017]*

Four postholes were recorded at intervals of approximately 0.85m-1.00m, running on a similar alignment to slot [4013]. Initially it appeared that they might be set along a narrow trench, [4043], which measured up to 0.15m wide and 0.02m deep. However, it seems more likely that this faint linear was caused by, rather than predated, whatever structure the postholes were supporting. The postholes themselves were sub-circular in plan and measured between 0.44m and 0.60m wide and 0.12m and 0.18m deep. All were roughly 'V' shaped in profile with a rounded base.

There was a suggestion, in plan, that the postholes [4026]/[4019]/[4018]/[4017] may have post-dated internal gully [4082/4084].

All contained a single fill of mixed dark grey, reddish brown and yellowish grey silty clay with occasional charcoal flecking.

### *Pottery*

Two of the postholes produced a total of nine sherds of pottery of late Iron Age to early Roman date.

### *Fired Clay*

A large quantity of fired clay was collected from around posthole [4026], all of which was of the same fabric. These have been identified as remains of a triangular loomweight. The angle between two faces, and one 'horn' from the top of the weight were visible (Appendix 6).

### *Feature [4006]*

Construction slot [4013] appeared to be cut by a later feature, [4006], of unclear function. This short, irregular feature, approximately 2.30m in length and varying between 0.18m and 0.50m wide, was orientated south-west to north-east. The cut was approximately 0.18m wide where it cut the northern end of [4013] and expanded, in plan, to form a wider, sub-rectangular cut at its south-western end. Its maximum depth was 0.12m, though it was only 0.05m deep at the section. Two fills, (4015) and (4007), were recorded. Primary fill (4015) and upper fill (4007) were both dark brown-grey silty clay.

### *Pottery*

Fourteen sherds of late Iron Age/early Roman pottery were recovered from the upper fill, and eighty-six from the lower fill. Many of the sherds were so badly burnt that secure identification was impossible.

### *Baked Clay*

Six pieces of baked clay were recovered from the lower fill. These were of the same fabric as those recovered from the ring gully and internal gully [4078]/[4080].

## *Group 1 Discussion*

### *Domestic Function*

Were it not for its large diameter and possible postholes, the ring gully would be comparable with the eaves-drip drainage gullies commonly found outside wooden roundhouses in Britain. More complex roundhouses approaching 15m in diameter are known from the 8th-5th centuries BC in the south, but none has been found from the latter part of the Iron Age (Cunliffe, 1975). Although no definite internal support posts were recorded, adverse ground conditions meant that the interior of the ring gully was not intensively cleaned and features may have eluded detection. It is also possible that a much smaller structure may have existed within the ring gully which has not been detected.

The interpretation of pit [4003] as a possible hearth and the presence of pottery, animal bone and loomweight fragments found scattered throughout the group would certainly seem to suggest domestic activity. However, a satisfactory explanation has not been found for the remaining internal features.

One suggestion is that they were part of an unusually large roundhouse associated with the ring gully, perhaps forming an inverted frontage or inner weather-shield. However, the author is not familiar with any other examples of this type. It is also possible that [4078/4080]/[4082/4084] represent the truncated remains of a run-off drainage gully passing out through the entranceway from the interior of the structure.

Another explanation is that they are fragments of a separate, smaller structure, possibly an earlier or later roundhouse. Examples of roundhouses represented archaeologically by foundation trenches 10-14m in diameter are known at Little Waltham in Essex. Here the walls consisted of vertical posts placed in an evenly curving trench. This trench-built construction has been claimed for many Iron Age houses throughout Britain, so perhaps the posthole alignment and construction slot follow this tradition. They would have formed a circle of approximately 13m diameter if they had continued on their arc. However, no such continuation was visible and the artefacts show no chronological differentiation.

#### *Industrial or Agricultural Function*

Another possibility is that this was a circular enclosure with a fence set into the gully. The relatively small size of such an enclosure might indicate stock control. The presence of smithing slags hints at industrial activity in the vicinity but there is insufficient evidence to confirm its occurrence within this exact area.

#### **Group 1 External Features**

##### *Gully [4032]*

This was a small gully which appeared to lead directly from the south-west section of the ring gully towards a second substantial linear feature, [4325], approximately 5m to the south-west. The exact relationship between gully [4032] and the ring gully could not be established. They did, however, give the overall impression of being broadly contemporary.

[4032] was approximately 0.40m-0.50m wide and 0.20m deep, with 45 degree sides and a shallow, curved base. It may have acted as an outlet for the ring gully, which was approximately 0.25m deep at the point where [4032] joined it. [4032] may then have drained into nearby ditch [4325]. A similar arrangement occurred at Draughton, Northamptonshire, where a circular enclosing gully was found to be linked by a drainage gutter to the main ditch of the enclosure (Cunliffe, 1975). No definite relationship could be established between [4032] and [4325], as the predicted point of intersection lay just outside the area of excavation.

#### **Ring Gully Group 2 (Figure 29)**

This group consists of a partially exposed ring gully, [4027/4118/4181], and a possible internal post-pit, [4124].

##### *Ring Gully [4027/4118/4181]*

Approximately half of a sub-circular ring gully, roughly 12m in diameter, lay at the northern end of Site 6B. It was cut by three later ditches running north-west to south-east and by modern land and mole drains. The gully width varied in plan between 0.36m and 0.45m. The curve was fairly regular with a definite break, approximately 2.70m wide, facing east-north-east. This was probably the access point.

About a quarter of the exposed gully was excavated, including the two butt-ends each side of the entranceway. Three sections were dug across the gully and only one of these, Section (c), showed a re-cut [4120] (Figure 30, Sections (a), (b) and (c)). Only Sections (a) and (c) had reasonably clear edges and these indicated a roughly 'V' shaped profile with a rounded base. Depths varied between 0.17m and 0.29m.

No stake or postholes were identified within the gully and, apart from the probable episode of gully cleaning at Section (c), there appeared to be only one principal phase of silting which varied from a mid- to dark grey silty clay with orange mottling and occasional to frequent charcoal flecks, (4028) and (4182). The earlier fill at Section (c), (4119), was a mid-brown-orange clay with occasional charcoal flecking, followed by a mid-orange-grey silty clay with occasional charcoal flecks, (4121).

##### *Pottery*

A large quantity of pottery was recovered from the butt-ends of the ring gully. Section (c) produced 100 sherds and Section (a) 131 sherds of late Iron Age/early Roman pottery. These included numerous sherds of the following vessels:

- A delicately-rimmed grey-ware beaker (Appendix 3, Dr. 3.26).

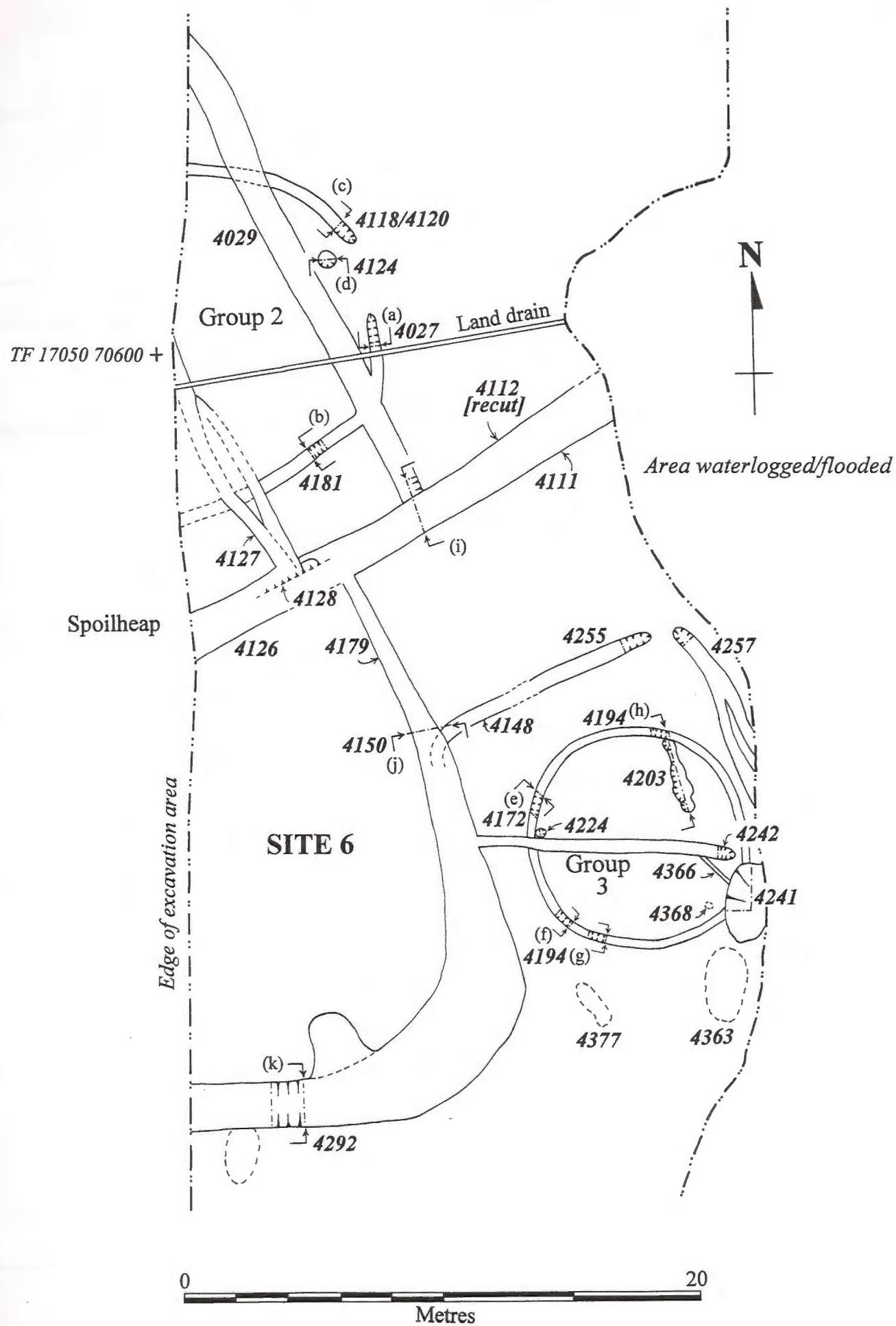


Figure 29: Site 6, Detailed Plan of Area 2

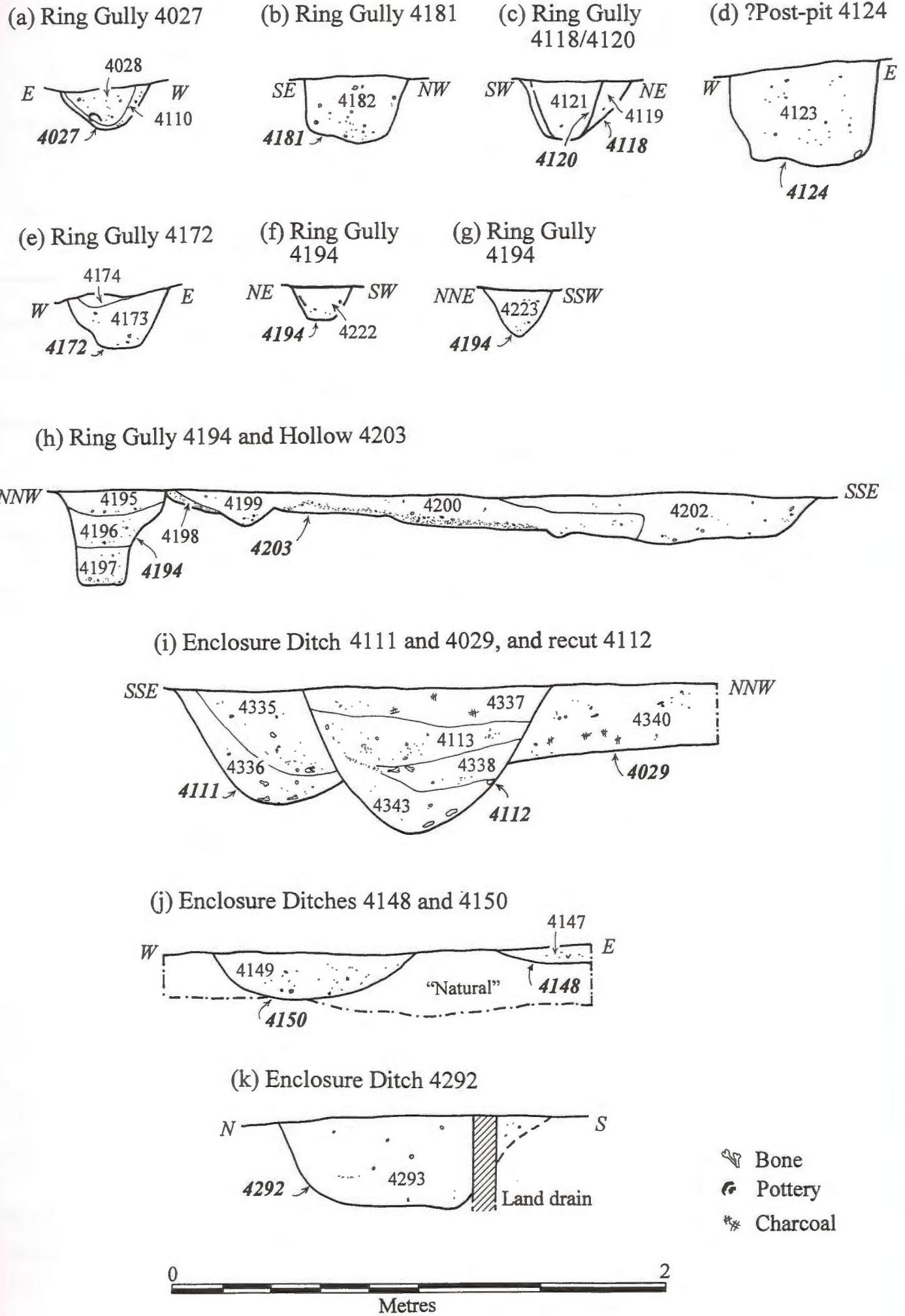


Figure 30: Site 6, Section Drawings of Area 2

- A shell-gritted cooking pot (Appendix 3, Dr. 3.1) which has links with a similar vessel from slot [4013] within the interior of the Group 1 ring gully.
- A carinated cordoned bowl (Appendix 3, Dr. 3.28). Similar fragments had been recovered from Ring Gully 1.

All of these vessels could have been current in the late Iron Age but could equally well extend in use into the early Roman period, particularly the grey-ware beaker.

#### *Other Finds*

Two pieces of unidentified fired clay were recovered from Section (c) and fragments of unidentified animal bone came from Section (a).

### **Group 2 Internal Features**

#### *?Post-Pit [4124]*

This was the only feature thought to directly relate to the ring gully. Poor ground conditions and truncation may have obliterated other internal features. It was set just inside the 'entranceway' and was circular in plan and measured 0.71m wide by 0.41m deep. It had vertical sides with a slightly rounded base (Figure 30, (d)). This feature was half sectioned and contained a single fill of mid-grey silty sand with frequent charcoal flecking.

#### *Finds*

The fill contained a piece of unidentifiable fired clay of a different fabric type to that recovered from the ring gully, and one sherd of Roman pottery.

### **Group 2 Discussion**

This ring gully is comparable in size with the eaves-drip drainage gullies commonly found outside wooden roundhouses in Britain, [4124] possibly representing the remains of a pit for a door post. Examples of wattle-built roundhouses from the middle Iron Age at Danebury, Hampshire, showed that it was only at the doorway that substantial timbers were used, strengthening the entrance gap and giving support to the door. The Danebury buildings varied in diameter from 6m to 9m, which is slightly smaller than the projected diameter of the ring gully (12m). This construction method may well have continued into the later Iron Age/early Romano-British period.

Links with the ceramic forms recovered from the Group 1 ring gully suggest that this Group 2 ring gully belongs to the same early phase. The single sherd of Roman pottery suggests a later date for the pit, but this was collected from near the surface and may well be intrusive.

### **Ring Gully Group 3 (Figure 29)**

This group consists of almost an entire ring gully, [4172/4194], a posthole, [4224], and an irregular hollow, [4203].

#### *Ring Gully [4172/4194]*

Almost an entire ring gully approximately 8m in diameter lay roughly 15m to the south-east of Group 2. The gully varied in plan between 0.25m and 0.42m wide. The curve was regular and apparently continuous. It was cut by later gully [4242].

Four small sections were dug across the gully and none produced evidence of re-cutting. The profile varied along the length of the gully, but sections were generally steep-sided, flat bottomed, symmetrical and between 0.25m and 0.45m wide and 0.14m to 0.37m deep (Figure 30 - Sections (e), (f), (g) and (h)).

Up to three fills were present in the deeper parts of the gully. The shallower fill in the southern half of the ring gully was predominantly a light grey-orange mottled silty clay with only occasional charcoal flecks. The fills of the northern half tended to be much darker, with a higher charcoal content.

#### *Pottery*

Approximately a tenth of the ring gully was excavated, producing a total of seven pottery sherds:

- One sherd, from Section (e), has been given a tentative late Iron Age date .
- Five sherds from Sections (f) and (g) are late Iron Age/early Roman.
- A fragment of stamped mortaria (Appendix 3, Dr. 3.42) was recovered from the middle fill, (4196), of Section (h). Although the date and source are unknown, the fabric resembles mortaria made in the area of Lincoln, but not those from the Technical College kilns (Appendix 3).

An unstratified surface collection of pottery from around the gully produced 22 sherds which were principally 1st century in date, but these are more likely to be associated with later 1st century features in the same area.

#### **Internal Features**

There were only two features within the ring gully which may have related to it. These consisted of a shallow, irregular elongated hollow, [4203], and a possible posthole, [4224].

#### *Hollow [4203]*

The function of this irregular, linear feature is uncertain. In section and plan it appeared to respect the position of the ring gully, suggesting a contemporary date. It ran roughly north-north-west to south-south-east, commencing immediately adjacent to the northern edge of the ring gully and extending into the interior.

It was approximately 2.65m in length and had a varying width of between 0.30m and 0.70m (Figure 30 (h)). The true extent of [4203] was also hard to define and the location of the cut edges was recorded as uncertain. The maximum depth in section was 0.18m although this varied. On the whole the depth increased gradually towards the south.

Contrasting fills within [4203] suggested rapid episodes of deposition, which apparently resulted from dumping or structural collapse, rather than gradual silting. There were five fills in total. The earlier fills, (4198) and (4201), are particularly interesting:

- Fill (4198) was a very light grey clay with frequent limestone inclusions - so frequent in fact that it is suggested that they may represent some form of lime mortar or plaster.
- Fill (4201) was a lens, approximately 0.03m deep, of almost pure charcoal with numerous intact fragments.

These were sealed by brown-grey silty clays with occasional small limestone fragments.

#### *Pottery*

Three sherds of late Iron Age/early Romano-British pottery were recovered from the feature.

#### *Discussion*

A distinct 'V' shaped dip was apparent at the northern end of [4203]. This dip, approximately 0.20m wide and 0.14m deep, may represent the remains of a separate cut. It might be a posthole or other

construction feature associated with an internal structure, though it lies immediately adjacent to the ring gully.

The combination of possible mortar or plaster remains and a substantial layer of charcoal may suggest building debris, but the fact that they were located exclusively within the hollow raises the possibility of more localised industrial or domestic activity. The deeper fills in the northern half of the ring gully had a much higher charcoal content and it is possible that more widespread evidence of burning within and around the ring gully had already been truncated prior to the excavation.

#### *Posthole [4224]*

This possible posthole was situated immediately inside the western arc of the ring gully. It was approximately 0.22m in diameter and 0.07m deep with near vertical, slightly concave sides and an irregular base. It had a dark grey-brown fill and was generally ill-defined.

As a posthole, it would be extremely close to the ring gully, but this would not preclude it from being part of an internal structure. Unfortunately there was no dating evidence from this feature, so it was only its position within the ring gully which suggests a link to this phase.

#### *Group 3 Discussion*

The dimensions of this ring gully again compare with those of eaves-drip drainage gullies commonly found outside wooden roundhouses in Britain. The steep sides (vertical at Section (h)) and flat base may even represent a foundation trench for a ring-groove structure. As with the other ring gullies excavated there was little convincing evidence for any internal structure, although this may already have been destroyed or simply overlooked due to the adverse conditions.

The presence of large quantities of intact charcoal and possible plaster debris may indicate a burnt dwelling structure but could also be indicative of industrial activity. Alternatively, it may represent a stock enclosure or a shelter. The lack of animal bone cannot be interpreted as significant due to the lack of bone preservation over the site as a whole.

The vast majority of the pottery from the ring gully was late Iron Age/early Roman in type, suggesting that Group 3 is broadly contemporary with Groups 1 and 2.

### **PHASE 1 Enclosure Ditches**

One ditch within Site 6A, [4325], and two ditches within Site 6B, [4111] and [4179/4150], have been assigned to this phase.

#### *Ditch [4325]*

[4325] was situated within Site 6A, with only a short length exposed along the western edge (Figure 27). It emerged from beneath the spoilheap in the vicinity of the Group 1 ring gully and headed in a south-easterly direction for approximately 17m. It then made a right hand turn to the south-west and disappeared beneath the spoilheap approximately 6.5m later.

A machine-excavated section immediately to the north of this south-westerly turn showed the ditch to have a width of approximately 0.90m and a depth of approximately 0.60m. It had a rounded, 'V' shaped profile and two principal fills, the lower of which measured approximately 0.43m in depth. No finds were recovered.

#### *Discussion*

As mentioned within the Group 1 Ring Gully discussions, a small gully, [4032], appeared to lead directly from the south-west section of Ring Gully 1 towards [4325], approximately 5m to the south-west. Gully [4032] and Ring Gully 1 may have been contemporary, [4032] possibly acting as an

outlet for the ring gully and draining into [4325]. Unfortunately, their predicted point of intersection lay just outside the area of excavation and so no definite relationship could be established. The general layout of features in this area, however, suggests that ditch [4325] may have originated in this early phase.

#### **Ditch [4111]**

This was situated at the northern end of Site 6B and ran diagonally across the site from north-east to south-west (Figure 29). It had been re-cut, probably during Phase 2, along its northern edge, so its exact dimensions are unknown. An estimated width would be approximately 0.90m, with a known depth of approximately 0.46m. It was not possible to say whether the original cut extended across the full width of the site, but it would seem likely.

[4111] was 'V' shaped in profile with a rounded base. It contained two fills, the uppermost of which was approximately 0.35m deep (Figure 30, (i)). The lower fill, (4336), was a mid-grey-brown silty clay with occasional charcoal flecks. The upper fill was a light grey-orange silty clay.

#### **Finds**

The lower fill produced three sherds of late Iron Age/early Roman pottery as well as two oyster shells and an unidentified mandible fragment.

#### **Discussion**

(see [4179/4150] below)

#### **Ditch [4179/4150]**

This ditch emerged at right angles from the southern side of [4111] and headed south-east for approximately 16m (Figure 29). It then made a gradual right-angle turn to the west and disappeared beneath the spoilheap approximately 10m later. Heavy truncation at its northern end meant it was not possible to ascertain its relationship with ditch [4111].

[4179/4150] showed considerable variation along its length, both in plan and profile, and the extent of the original cut is uncertain. At its northernmost point it was only approximately 0.50m wide and 0.15m deep. It had increased to 0.70m wide and 0.19m deep by a point 6.5m to the south. At this stage (Section (j)), a small 1st century enclosure ditch, [4255], appeared to join the course of [4179], leading to a steady increase in width up to 3m at the southern corner. The width then reduced to approximately 1.60m as the ditch headed west.

The single cut apparent west of the corner, numbered [4292], could have been a substantial later re-cutting of [4179]/[4150]. It had a width of approximately 1.20m and a depth of 0.38m deep (Figure 30, (k)).

#### **Finds**

Pottery from the original narrow stretch of the ditch, [4179], indicated a late Iron Age/early Roman date, in keeping with the finds from Groups 2 and 3 and ditch [4111]. Further south, where the dimensions of the ditch were greatly increased, the surface finds indicated a 1st century date.

#### **Discussion**

Ditches [4111] and [4179/4150] apparently formed enclosures separating the two probable roundhouse structures of Groups 2 and 3. Both ditches appeared to be contemporary, although this was not proved archaeologically. It is not possible to say whether their function was primarily drainage, stock control or delineation. There was no evidence of accompanying fences, but these would not necessarily have survived or been detected. The fact that both ring gullies indicated domestic occupation might suggest the presence of more than one family group at one time, which in itself could encourage the delineation of 'personal space'.

## PHASE 2 : Late Iron Age/1st Century/early 2nd Century

### **Ring Gully Group 4**

This group consists of a partial ring gully, [4178/4239], and an associated linear feature, [4187] (Figure 31). No internal features were recorded but this could be due to truncation, poor preservation or as a result of adverse conditions.

#### *Ring gully [4178/4239]*

Just over a third of a probable ring gully estimated to be approximately 11m in diameter, was partially exposed along the western edge of Site 6B. A modern land drain bisected the gully and extensive mole drainage and machine damage were present throughout. The gully varied in plan between 0.40m and 0.64m wide and appeared fairly regular with no visible breaks.

Two short sections were dug, representing just under a sixth of the exposed area. The cut was moderately steep-sided with a rounded base and was 0.50m to 0.64m wide and 0.21m to 0.24m deep (Figure 32, (a) and (b)). The two sections were similar in profile and dimensions but contained different single fills. Section (a) contained a dark grey-brown clayey silt with occasional charcoal inclusions. Section (b) contained a light to mid-grey silty clay with moderate charcoal inclusions increasing towards the top.

#### *Pottery*

A total of 39 sherds of pottery were recovered, dating principally from the middle to late 1st century AD. These included:

- Fragments of a grey-ware beaker or jar decorated with rouletting, a rim from a similar jar or beaker (Appendix 3, Dr. 3.30).
- A cooking pot in an Iron Age tradition fabric (Appendix 3, Dr. 3.12).
- Fragments of a Roman bowl made of cream fabric and probably carinated (Appendix 3, Dr. 3.31).

#### *Fired Clay*

Nine pieces of fired clay were also recovered from Section (a), all of which were of the same fabric type. These have been identified as fragments of a triangular loomweight, about 65mm thick but of unknown height and width. A single horizontal hole (diameter 9mm) runs through the weight, about 40mm below its top (Appendix 6).

#### *Bone and Shell*

Seven oyster shell fragments and nine small fragments of sheep or goat bone were recovered, five of which were burnt and calcined.

### **External Features**

#### *Gully [4187]*

This appeared to extend at a near right angle from the east-north-east edge of the ring gully for approximately 11m before making a right angle turn to the north-north-west for a further 5m, placing it on the same alignment as ditch [4179/4150]. It then disappeared in an area of heavy machine truncation.

An 0.80m-wide section was excavated near to the ring gully. The gully measured approximately 0.34m wide and 0.10m deep, with shallow concave sides merging into a rounded base (Figure 32, (c)). The fill was a dark grey clay silt, similar to that at Section (a) of the ring gully.

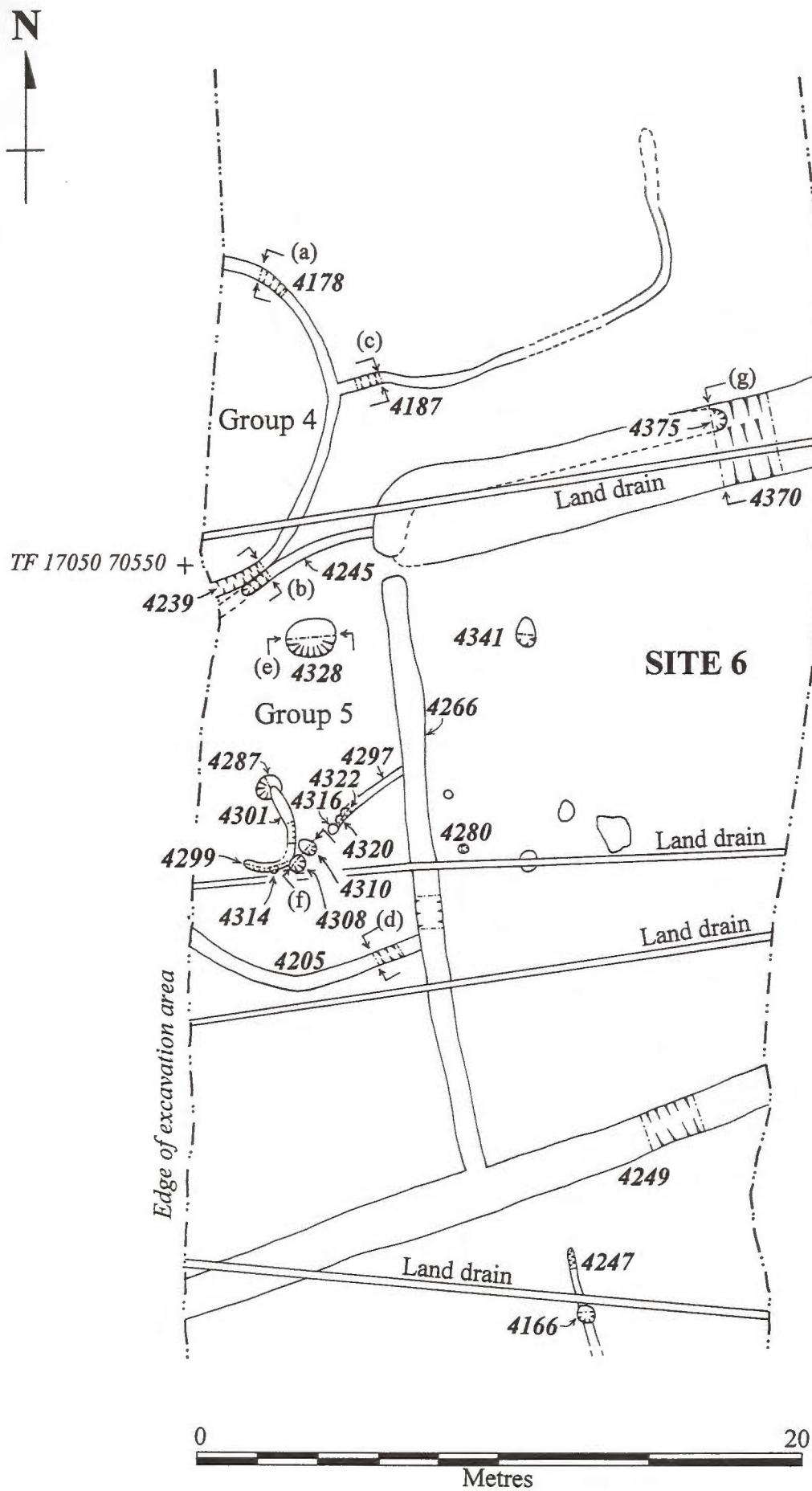


Figure 31: Site 6, Detailed Plan of Area 3

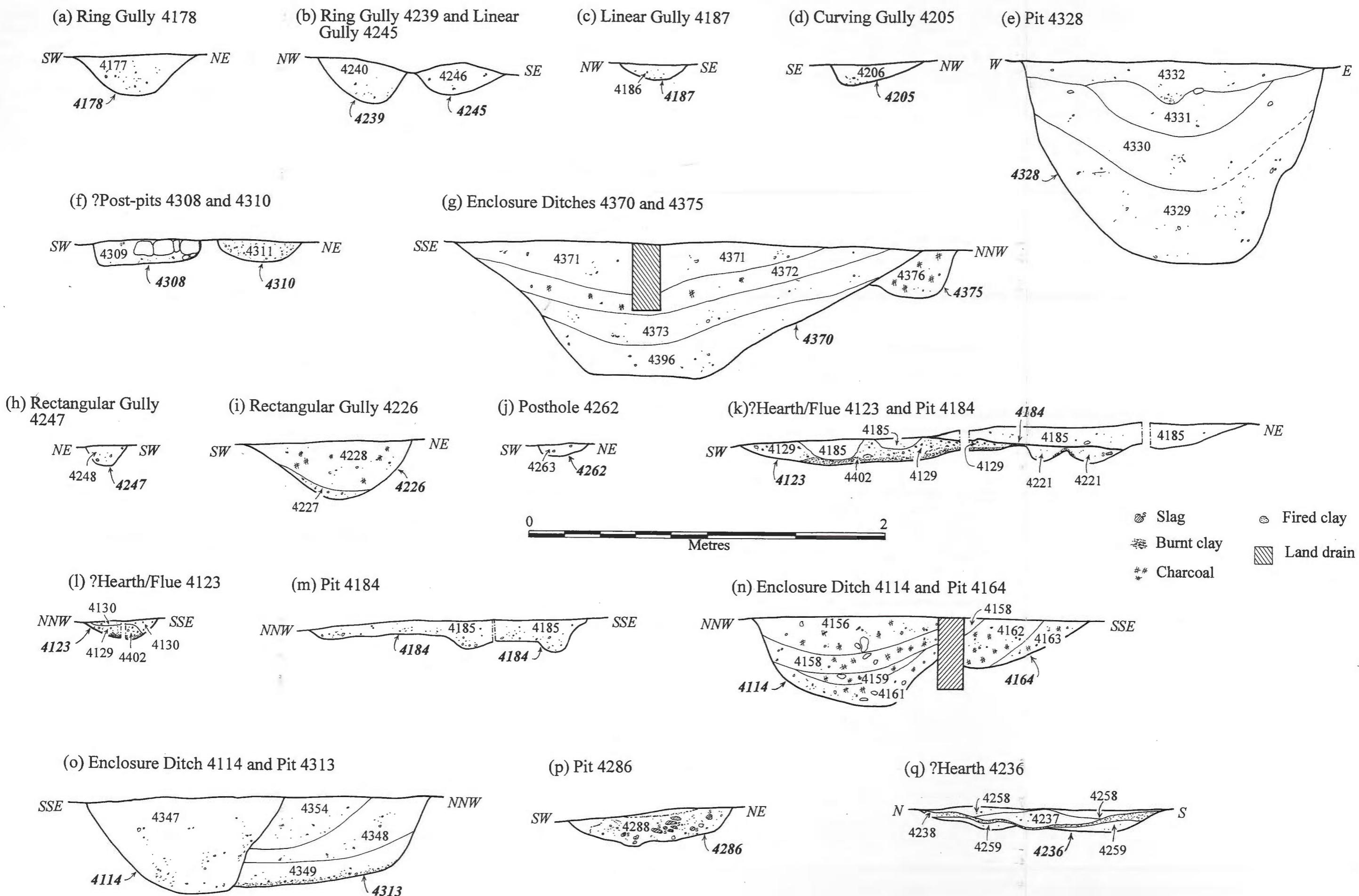


Figure 32: Site 6, Section Drawings of Areas 3 and 4

### *Finds*

These consisted of three sherds of 1st century pottery, a possible quernstone fragment (Registered Find No.3), a small piece of iron sheeting (Registered Find No.69) and a lump of slag. The latter was a product of smithing, possibly even part of a small, thin, hearth base.

### **Group 4 Discussion**

In summary, the pottery, burnt animal bone, loomweight fragments, oyster shells and quern fragment all suggest domestic activity in the immediate area. The ring gully itself is characteristic of roundhouse eaves-drip gullies, with [4187] providing additional drainage and/or demarcation. The presence of smithing slag in gully [4187] is not surprising as there appears to be a contemporary concentration of such activity within the adjacent enclosure (Group 5). The pottery suggests a 1st century AD date.

### **Industrial Enclosure Group 5**

This group was made up of a number of internal features including two small gullies, [4297] and [4299/4301], two ?postholes/pits, [4308] and [4310], two postholes, [4287] and [4314], and a large pit, [4328] (Figure 31). These were enclosed by curving gullies [4205] and [4245] to the south and north respectively.

#### ***Enclosure [4205]/[4245]***

As this group was only partially exposed along the western easement edge, it was not possible to say how far this apparent enclosure continued to the west, nor even confirm that the gullies [4205] and [4245] belonged to the same feature. The eastern limit was obscured by a later enclosure ditch, [4266], beyond which no continuation of the curving gullies was visible. In plan it appeared likely that the gullies would have continued on the east side of [4266], perhaps forming a large, sub-circular enclosure.

#### ***Gully [4205]***

This gully had an exposed length of approximately 8m and formed a fairly regular curving arc. Approximately 0.60m was excavated and this revealed no evidence of internal post- or stakeholes. It was approximately 0.45m wide and 0.15m deep. In profile it had an asymmetrical 'V' shape, the northern edge being steeper than the southern (Figure 32, (d)). It contained only a single mid-orange-grey silty clay fill, (4206).

### *Finds*

This feature produced nine sherds of mid-late 1st century AD pottery, at least seven oyster shell fragments, and three pieces of fired clay in the same fabrics. One piece of clay had a single flat face.

#### ***Gully [4245]***

The northern gully, [4245], appeared to respect the position of ring gully [4178/4239], suggesting they were contemporary (Figure 32, (b)). A length of about 4.75m was visible and in profile it was fairly shallow and 'U' shaped. A section approximately 1m long was excavated and no evidence of internal stake- or postholes was found. The gully measured approximately 0.45m wide and 0.15m deep. It contained one fill, (4246), which was a purple-tinged, dark grey silty clay which included moderate charcoal flecks.

### *Finds*

Nine sherds of late 1st century/possibly 2nd century, pottery were collected, although confusion between the easternmost fills of this gully and a probable later enclosure ditch [4370/4375] meant the pottery could have come from either feature. A single piece of unidentifiable fired clay was also recovered.

## Internal Features

### *Gully [4297]*

The most eastern internal gully, [4297], appeared to be aligned with five suggested ?postholes/pits, [4322], [4320], [4316], [4310] and [4308]. However, post-excavation analysis provided little evidence to suggest posthole functions for features [4322], [4320] and [4316]. It seems more likely that they were merely a disturbed continuation of gully [4297]. In plan they formed a fairly straight north-east to south-west line. The gully was approximately 0.28m wide and 0.09m deep, but only about 3.20m long (including the three discredited 'postholes'). Its eastern end was truncated by ditch [4266]. A longitudinal section was excavated at the western end. It contained a single dark brown-grey silty clay with occasional charcoal inclusions.

### *Finds*

No artefacts were recovered from this fill, but a collection of material from the surface of the gully included one sherd of possibly 1st century pottery, a possible iron nail shank (Registered Finds No.70) and six pieces of slag of various types:

- One piece of fuel ash slag.
- One hearth bottom fragment with hearth lining evidence.
- Two pieces of general slag with vitrified hearth lining.
- Two smithing slag lumps with charcoal inclusions.

### *?Posthole/pit [4310]*

[4310] was circular in plan with a diameter of 0.44m and a depth of 0.14m (Figure 32, (f)). It had fairly steep, concave sides, gently merging into a slightly rounded base. It contained a single fill, (4311), which appeared to have been deliberately dumped. This consisted of a chalky deposit mixed with burnt red clay material.

### *?Posthole/pit [4308]*

[4308] was sub-circular in plan with a diameter of approximately 0.60m and a depth of 0.12m (Figure 32, (f)). It had steep sides and a flat base. It contained only one fill which comprised a mid-blue-grey clay containing six large sub-rounded boulders, 10-15cm in length, and one burnt stone fragment approximately 0.10m long. It has been suggested that these stones may have formed a footing or packing for a post.

### *Gully [4299/4301]*

This gully appeared to be cut posthole [4287] and be cut by posthole [4314]. It formed a tight, almost half-circular arc measuring approximately 3.30m in length. The two ends were fairly clear, but the mid-section was uncertain. It had a maximum width of approximately 0.30m and a depth of approximately 0.14m. The fill was a mixed dark orange-brown, (4300), and mid-grey-orange silty clay with occasional charcoal inclusions, (4302).

### *Finds*

Two pieces of slag were collected. One was a hearth bottom fragment with large charcoal inclusions, the other was a large, dense piece of hearth bottom or tapped-off slag.

### *Posthole [4287]*

[4287] was sub-circular in plan, measuring approximately 0.85m long, 0.60m wide and 0.28m deep. It contained two fills. The lower fill appeared to be re-deposited natural clay and was mid-orange with occasional charcoal flecks. It was packed around a light orange-grey silty clay, (4291), which contained numerous charcoal inclusions.

### *Environmental Analysis*

(4291) was submitted for environmental analysis as Soil Sample No.27. The bulk of the charcoal was identified as oak heartwood; the sapwood content was minimal. In addition, a single piece of narrow stem or twig from blackthorn was present. The remaining unidentified charcoal was superficially similar to the identified oak. The high proportion of oak heartwood suggests that it may have originated from trunk or branch-wood probably in excess of twenty years of age and therefore substantial enough to provide a post or stake. Had the sample consisted entirely of oak it would be reasonable to assume an origin from the post, subsequently burnt *in situ*, and despite the presence of the charred blackthorn twig this origin cannot be ruled out. Although oak-wood was found elsewhere on site as smithing fuel, this mostly consisted of sapwood and was of much smaller dimensions (Appendix 12).

### *Posthole [4314]*

[4314] seemed to post-date gully [4299/4301], although it may have been a post-pipe set into the gully, rather than a posthole cutting it. Alternatively, it could merely be a variation in the gully's fill. It was sub-circular in plan and approximately 0.41m wide and 0.18m deep.

### *Pit [4328]*

The most substantial internal feature within Group 5 was a pit, [4328], containing moderate amounts of both domestic and industrial waste. This pit was roughly oval in plan and measured approximately 1.72m long, 1.2m wide and 1.13m deep. It had near vertical sides and a flattish base.

There were four broad phases of deposition, probably indicative of fairly rapid infilling (Figure 32, Section (e)). The primary fill, (4329), was moderately flecked with charcoal. It contained:

- A single piece of fired clay identified as a possible loomweight fragment (Appendix 6).
- Fragments of a native tradition bowl of mid-late 1st century date (Appendix 3, Dr. 3.17) and two fragments from a fine grey beaker with ring and dot decoration of late 1st to early 2nd century date.
- A small quantity of animal bone, including cattle and pig teeth, unidentified skull fragments and sheep bones, one of which was burnt and calcined.

The second fill, (4330) had frequent charcoal and moderate burnt clay flecks. It contained:

- A cow rib fragment and several small unidentified bone fragments, two of which were burnt and calcined.
- A single piece of possibly Roman pottery.

The third fill, (4331), had moderate amounts of charcoal. It contained:

- Cattle and sheep bones.
- A possible oyster shell.
- Two small pieces of slag, possibly representing fuel ash slag. These were grey and bubbly with a dark surface.

The final fill, (4332), appeared to mark a period of truncation and disturbance, probably post-depositional. Occasional flecks of burnt clay and moderate amounts of charcoal appeared throughout. It contained:

- Sheep and cow bone fragments.

- An oyster shell.
- Four sherds of Roman pottery.
- A piece of very vitrified clay, heavily slagged on all surfaces.

### ***Group 5 Discussion***

#### *Limitations of the Evidence*

There was no overall structure or pattern apparent within the group and much of the dating was by association only. However, it is probable that the majority of the internal features were contemporary, or at least closely dated.

#### *Smithing Evidence*

The most important form of evidence for smithing is generally hammerscale and slag (McDonnell, 1992b and 1992c). However, no hammerscale was identified. The presence of hearth lining is important as it is thought that this usually remains close to the hearth site.

Another important element of the finds assemblage is the iron fragments, representing general waste from smithing. These frequently appear as amorphous lumps, particularly if the iron is badly corroded. Four possible waste fragments were recovered from the immediate area, one being the possible nail shank mentioned above. The other three came from the fill of ditch [4266] which appeared to cut across the area at a later date. These comprised a small strip of iron (Registered Find No.24), an amorphous iron lump (Registered Find No.71) and another possible nail shank (Registered Find No.72).

The comparatively large amount of slag, including hearth bottom slag, possible tapped slag, fuel ash slag, vitrified hearth lining and smithing slag lumps, all suggest that iron smithing took place very close to or within the enclosure. Excepting the tapped slag, all the remaining material was debris associated with the manufacture or repair of iron objects (Appendix 11).

#### *Structural Evidence*

Although the manufacture and repair of iron objects could be undertaken anywhere, permanent forges were often built. Archaeologically, there is nothing that easily characterises a smithy. The main features of a forge are the hearth, a bosh or water container, the anvil and a pair of bellows. However, hearths may often have been built at waist height and therefore little or nothing that is 'fired' and definable survives. Anvils and other tools are portable and valued objects and even the water bosh need not have been a sunken feature.

The internal gullies and postholes may have formed part of a shelter or small structure associated with a smithy. Pit [4328] may originally have served as a water bosh but later became a receptacle for domestic waste. The animal bone is especially interesting as this was the only feature to contain identifiable and diverse species types. The collection of sheep, cow, pig and oyster suggest food debris.

### **Rectangular Enclosure/Structure Group 6 (Figure 33)**

This group focused on an open ended, intermittent, sub-rectangular gully, [4247/4188]/[4152]/[4226/4232]/[4254]. Two probable postholes, [4260] and [4262], appeared to be closely associated with the rectangular gully, as did external gully, [4234], which butted up to it. This group represented the southernmost focus of activity detected within the area excavated. The remaining features to the south were larger enclosure divisions and apparently isolated pits.

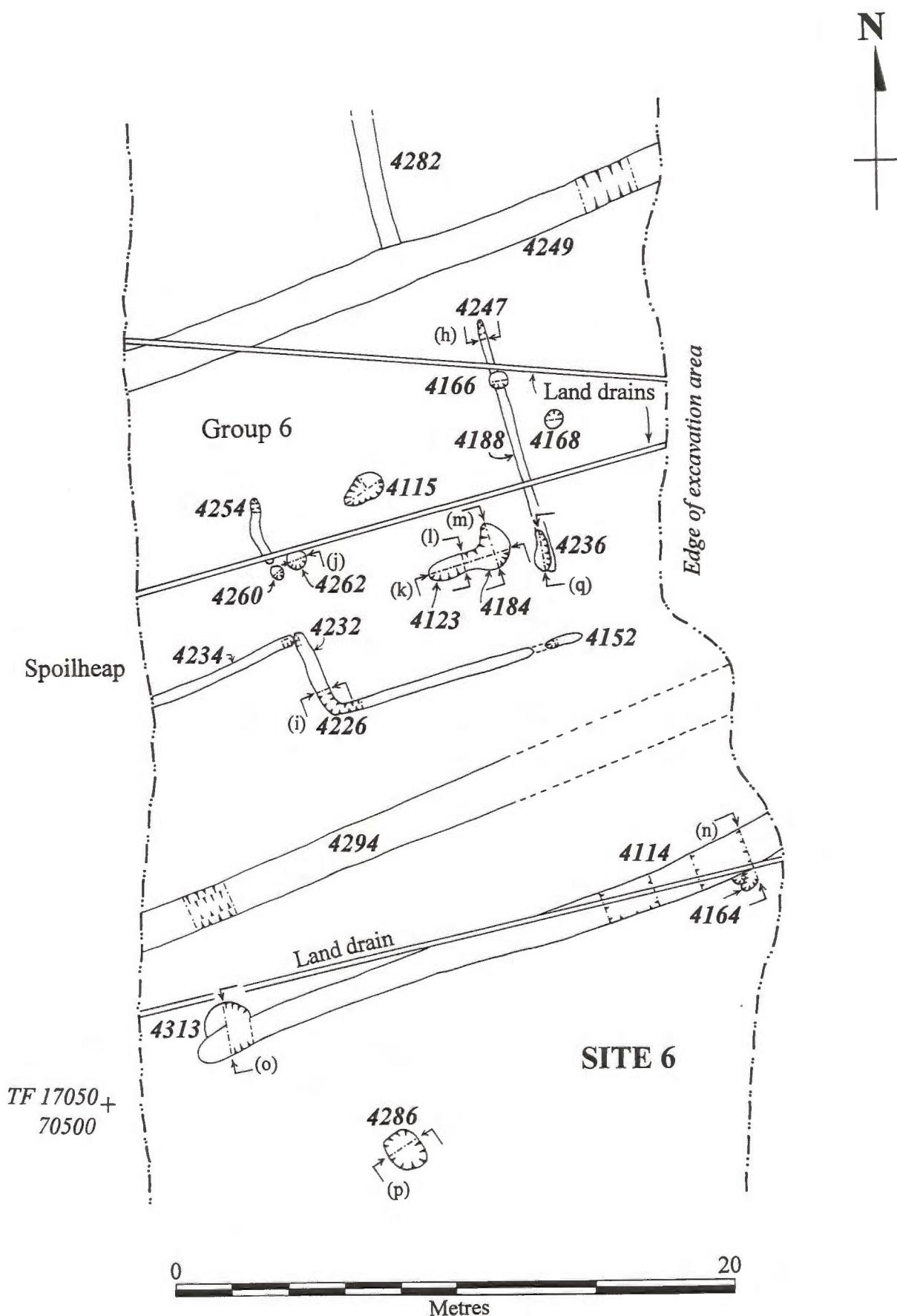


Figure 33: Site 6, Detailed Plan of Area 4

### **Gully [4247/4188]/[4152]/[4226/4232]**

The northern end of the enclosure/structure was heavily truncated, so the gully may originally have formed a complete rectangle approximately 11.5m by 9.5m. However, only approximately 11.5m of the eastern edge, 9.5m of the southern edge and 8m of the western edge survived.

#### **Eastern Edge [4247/4188]**

Along its eastern arm, the gully was between 0.16m and 0.24m wide, with a moderately steep sided, 'U' shaped profile, (Figure 32, Section (h)). The depth varied between 0.07m and 0.17m. The outline was unclear in places, especially towards the southern end. A possible break in the gully of approximately 2.30m immediately north of the south-eastern corner may have been the result of truncation rather than a true opening. This length of gully was cut by two later Phase 3 features, [4166] and [4236].

[4247/4188] contained a single fill, (4248/4189), which varied between orange-brown with moderate charcoal inclusions and grey-brown silty clay with occasional charcoal inclusions.

#### *Pottery*

No stratified finds were recovered but five pottery sherds dating between the 1st and 2nd century were collected from the surface.

#### **Southern Edge [4152]/[4226]**

No depths were noted at the south-western end of the gully but an investigation of the disturbed area at the south-eastern corner showed a width of 0.30m and a depth of 0.05m. The profile was 'U' shaped and the fill was a mid-grey silty clay with orange mottling and abundant charcoal flecking.

#### *Pottery*

One sherd of Roman pottery was recovered from excavation of the south-western corner but it is not known if this came from the southern or western arm.

#### **Western Edge [4226/4232]/[4254]**

This stretch of gully was very fragmented and badly affected by root disturbance. The gully was clearly evident for a distance of approximately 3m from the south-western corner as [4226/4232], but root disturbance obliterated the next 1.80m. Beyond this lay the possible posthole, [4260], and then another 2.30m length of gully, [4254]. It was not possible to say for sure whether the gully had really continued through the area of root disturbance or if there had originally been an opening there.

At the south-western corner, [4226], the gully measured approximately 0.46m wide by 0.16m deep and was 'V' shaped in profile with a rounded base (Figure 32, Section (i)). There were two fills at this point. The primary fill, (4227), measured approximately 0.02m deep and was very similar to the underlying natural clay, being a mid-brown-orange silty clay but containing occasional charcoal flecks. The principal fill, (4228), was a mid-grey-brown silty clay with orange mottling and moderate amounts of charcoal flecking.

The northern stretch of the gully, [4254], measured between 0.20m and 0.35m wide and approximately 0.12m deep with a 'U' shaped profile. It contained only one blue-grey silty clay fill with occasional charcoal flecks.

#### *Pottery*

Three sherds of possibly Roman pottery were recovered from the [4226/4232] stretch of the gully. As mentioned above, one sherd of definitely Roman pottery was recovered from the south-western corner section.

## Associated Internal and External Features

### *Posthole [4260]*

The possible posthole, [4260], was sub-circular in plan and approximately 0.35m by 0.29m wide and 0.08m deep with steep concave sides and a flat base. It contained a single dark blue-grey silty clay with occasional charcoal flecks. It was badly disturbed and cannot be interpreted with much confidence.

### *Posthole [4262]*

Posthole [4262] was located within the enclosure. As it did not share the distinctive fills of later features in the area, it has been tentatively ascribed to this phase. It lay adjacent to possible posthole, [4260], and a possible break in the rectangular gully, so it may have been associated with an entrance structure such as a door or gate.

In plan it appeared sub-circular with a diameter of approximately 0.63m. It was half-sectioned, revealing a 'U' shaped profile with fairly steep sides and a flattish base (Figure 32, (j)). It was 0.12m deep and contained a single dark grey-brown silty clay fill with occasional charcoal inclusions.

### *Gully [4234]*

Gully [4234] emerged from the western side of the enclosure gully, immediately before the possible opening/root disturbance and headed south-west, disappearing beneath the spoilheap after approximately 5m. In plan both gullies appeared to be one continuous feature but a section dug at the junction of [4234] and [4232] indicated two separate cuts with a narrow outcrop of natural clay between them.

[4234] varied between 0.30m and 0.40m wide and was approximately 0.12m deep with a 'U' shaped profile at its eastern end. It contained a single grey silty clay fill.

### *Finds*

It produced six sherds of Roman pottery and one fragment of Roman brick or tile. Unstratified material from around the area of the junction produced two sherds of early 2nd century pottery.

## *Group 6 Discussion*

### *Function*

The exact function of the group as a whole is uncertain. It seems likely that the open-ended rectangular gully was originally complete but it is unclear whether it was associated with an enclosure or a building.

At this early date, simple rectangular buildings often consisted of a timber framework, resting on a narrow sill wall or set into a wooden beam laid in a shallow trench. They were often built using traditional materials such as wattle and daub (Hanley, 1987). It is possible that the sub-rectangular gully reflects this construction method. There was no evidence of internal supports, but then a small thatched structure might not require any.

There were no finds to suggest domestic activity, unlike the abundant refuse associated with the roundhouse ring gullies to the north. This suggests that if there was a structure here it was not used primarily as a dwelling.

### *Date*

The dating of this group is also uncertain. Although it is unlike any of the circular structures previously discussed, there is no strong evidence to suggest it to be substantially later in date. The small amount of stratified pottery suggests only a broadly Roman date. Several unstratified pottery sherds and a fragment of Roman brick or tile suggest activity in the 2nd century AD but these cannot be firmly associated with the rectangular gully and may relate to the Phase 3 features overlying the group.

Orientation cannot be used as a date indicator because all the principal ditches, regardless of phase, follow the same alignment. However, later features, cutting those of Group 6, were found to contain deliberate dumps of high status building materials. These materials have been fairly firmly dated to the 2nd century by association with unstratified high status building materials and pottery across the site. This suggests that Group 6 was no longer in use by the mid 2nd century. It is generally agreed that the adoption of rectangular building forms was characteristic of Romanisation and during the transitional period, circular and rectangular structures may well have co-existed.

## PHASE 2 Isolated Features

This category includes all those features which, either by direct dating evidence or by association, appear to belong to Phase 2 but which are not obvious enclosure ditches (to follow) and do not fall within one of the distinct groups already discussed.

### *Gully [4242]*

[4242] was situated towards the north of Site 6B (Figure 29). It appeared to overlie the Phase 1, Group 3 ring gully, commencing just inside its eastern edge and running westwards to join the larger enclosure ditch [4179/4150/4292]. The eastern terminal was excavated and recorded with a width of approximately 0.45m and a depth of approximately 0.35m. In profile it had near-vertical convex edges and a flat base. It contained an homogenous grey-orange silty clay fill with occasional charcoal flecks.

#### *Finds*

It produced four stratified sherds of broadly Roman date and a large lump of hearth bottom slag with fuel ash slag on the top and massive charcoal inclusions.

#### *Discussion*

No obvious function is apparent for this gully. There is a slight possibility that it was associated with gullies [4255] and [4257] immediately to the north, possibly forming a small enclosure. However, this would have a small, roughly trapezoidal shape which seems awkward and unlikely.

### *Hollow [4241]*

[4241] overlay the eastern edge of the Phase 1, Group 3 ring gully and the southern end of slot [4366] (discussed below), continuing beyond the limits of the excavation to the east (Figure 29). It appeared to be an eroded hollow rather than a deliberate feature and had unclear edges and an uneven base. The area visible was approximately 3m long by 1.50m wide and 0.02m-0.10m deep. It contained a dark grey-brown silty clay fill with occasional charcoal flecks.

#### *Finds*

A small section produced:

- Four sherds of probable mid-late 1st century pottery.
- One oyster shell.
- One piece of unidentifiable fired clay.
- One abraded lump of hearth bottom slag with numerous charcoal inclusions.

#### *Discussion*

This assemblage seems typical of that found in most of the 1st century features across the site. The material that survived in the worn depression was probably the remnant of a more general spread of occupational debris.

### *Slot [4366]*

Slot [4366] was situated within the Phase 1, Group 3 ring gully (Figure 29). It was truncated by gully [4242] and hollow [4241] at each end, so no direct link could be made with the ring gully. In plan, a length of approximately 1.3m was visible. It was orientated roughly south-east to north-west and was

approximately 0.38m wide and 0.70m deep, with vertical sides and a flat base. It contained two fills. The primary fill was approximately 0.18m deep and consisted of a mid-grey silty sand. The secondary fill was a mid-grey-orange silty clay.

#### *Pottery*

The primary fill produced a single sherd of Roman pottery.

#### *Function*

In form this was quite possibly a construction slot but there was no additional structural evidence and it seems unlikely to have formed part of the roundhouse structure.

#### **Pit [4341]**

Pit [4341] was situated roughly 4.5m to the east of the Group 5 features (Figure 31). It was oval in plan and was approximately 0.95m long by 0.53m wide and 0.19m deep. In profile it had a slightly undercut western edge and a steep eastern edge with a flattened base. A half section revealed a single grey clay silt fill, (4342).

#### *Pottery*

This produced two sherds of possibly 1st century pottery.

#### *Function*

Although no exact function can be ascribed to this feature, its proximity to Groups 4 and 5, combined with the artefactual evidence, suggests it is likely to have been contemporary with Group 5.

#### **Pit/Posthole [4280]**

[4280] was situated roughly 2m to the east of the Group 5 features and 6.5m south-west of pit [4341] (Figure 31). It was sub-circular in plan, approximately 0.36m wide and 0.06m deep. In profile it had a vertical southern and a steep northern edge with a flat base. A half section revealed a single brown-orange silty clay fill with moderate charcoal flecking.

#### *Discussion*

Like [4341], its location suggests a possible association with the Group 5 features to the west.

#### **Pit Group**

A group of three pits ([4164], [4313] and [4286]) was situated at the southern end of Site 6B.

#### **Pit [4164]**

[4164] was situated along the eastern edge of the easement (Figure 33). It had been truncated along its northern edge by enclosure ditch [4114], which ran north-east to south-west across the easement. The surviving component was sub-circular in plan, approximately 0.83m long, 0.80m wide with a maximum depth of 0.28m (Figure 32, (n)). In profile it had shallowly inclined edges and an irregular, slightly rounded base. A machine-excavated section revealed two fills. The earliest, (4163), was principally a brownish-yellow silty clay with occasional charcoal flecks. The main fill, (4162), consisted of a darker blue-grey silty clay with occasional charcoal flecks.

#### *Finds*

Fill (4162) contained:

- A concentration of charcoal measuring approximately 0.06m by 0.06m and 0.05m thick.
- One lump of slag, a piece of vitrified hearth lining. This was probably a fragment of tuyere.
- Three pieces of fired clay possibly associated with tuyere remains (a cylinder or block of clay used to protect the bellow nozzle from the heat of the fire). One piece has the remains of the tuyere hole.

This suggests a diameter of approximately 20-25mm, which falls well within the expected range. The colour range for these pieces was orange to mauve-purple, which is also what would be expected (Appendix 11).

#### **Pit [4313]**

[4313] lay close to the western edge of the easement and was truncated on its south side by the enclosure ditch [4114], (Figure 32 (o)) (Figure 33). It appeared to have been circular in plan with near vertical edges and a flat base. It was probably at least 1.50m in diameter and 0.50m deep.

It contained four fills, the lowest of which was a black sandy silt, approximately 0.02m deep and containing frequent charcoal and occasional burnt clay inclusions. The remaining fills were silty and sandy clays with occasional charcoal flecks and some iron staining.

#### *Pottery*

The final fill produced four sherds of 1st century pottery .

#### *Discussion*

There was a relatively small quantity of burnt material in pit [4313] when compared with pits [4286] and [4164], though it seems likely that all three features were broadly linked in function and date.

#### **Pit [4286]**

This was by far the most informative of the three pits (Figure 33). It was located towards the centre of the easement at the southern end of Site 6B. There can be little doubt that it was deliberately dug as a refuse pit. In plan it was sub-rectangular with a steep eastern edge and a more gradually sloping southern and western profile. It was approximately 1.20m long, 0.90m wide and 0.18m deep, (Figure 32 (p)).

It contained only one fill, (4288), which consisted of a dark grey silty clay with occasional small lumps of re-deposited natural clay. Approximately 50% of the fill was made up of carbonised wood fragments. Also present were moderate amounts of slag and burnt clay. Soil Sample No.26 was taken for slag and environmental analysis, the results of which are reported below.

#### *Slag Analysis (Appendix 11)*

A total of 8853g of slag and associated debris was recovered from Site 6A and 6B, all of which was generated by iron smithing, the fabrication of bar iron into objects and the recycling of iron. The majority of this material (6900g) came from pit [4286].

The categories of iron-smithing debris from [4286] by weight and count are:

TYPE	QUANTITY	WEIGHT (g)
Cinder	63	200
Fired clay	35	48
Hammerscale	*	*
Hearth Bottoms	32	3586
Unspecified slag	470#	1262
Smithing slag lumps	101	1537
Vitrified hearth lining	97	267

\* Present but not recorded

# High count due to the number of small pieces from Sample 26.

The plano-convex hearth bottoms are very dense and compact but a number have large frothy blobs of cindery fuel ash slag attached to their bases or tops. A feature of these hearth bottoms is the very small size and consequently weight of many of them, the largest weighing only 706g. Hearth bottoms

weighing over a kilogramme are common on Romano-British sites. Many of the hearth bottoms and smithing slag lumps have rust coloured surfaces, or are partially encrusted with iron and some are actively corroding. A few pieces have started to crack. These features indicate that the slags probably have a high iron content, possibly some in the form of small waste pieces of iron that have become separated from the iron being worked. The greatest loss of iron occurs when smithing at high temperatures, particularly the white heat (1350°C) needed for welding when some of the iron can 'burn' or melt in the hearth. If the smith was doing a lot of welding it may help to explain the small size of the hearth bottoms. It is important to keep the hearth as clean as possible during these operations and in modern practice all slag would be removed from the hearth before making a weld, therefore small hearth bottoms may be more common. Frequent welding may be an indication that some of the iron used at the smithy was 'old iron' being recycled. The broken pieces and small items would be welded together to make a bar before that in turn was converted into a new object.

Plate and spheroidal hammerscale was also recovered from Pit [4286]. (Sample 26 weighed 13 kg and produced a 2.2 kg residue of which 746g was slag, 6g hammerscale and approximately 1280g charcoal.) The spheroidal scale, which is thought to be produced during welding, forms quite a high percentage of the total although plate scale is always the more common of the two. This again reinforces the suggestion that welding may have been a significant part of the smith's work. The paucity of cinder, a silicate rich slag, and the density of the other smithing slags, suggests that the smith was not fluxing the iron with sand before welding. Some smiths use this technique to remove the oxidised iron surfaces of the iron to ensure a clean weld.

Another reason for the small size of the hearth bottoms and their density, could be the date of the site. Although not a reliable date indicator (the late Iron Age hearth bottoms from Sleaford were large) the hearth bottoms from a probable late Iron Age, the 1st century site at Ledstone, Yorkshire, also had an assemblage of unusually small and dense hearth bottoms (Appendix 11).

Most of the pieces of vitrified hearth lining are probably tuyere fragments. The colour range (orange to mauve-purple) for these pieces is also that which would be expected.

The sole fuel used for the smithing was charcoal and large quantities are incorporated within or adhering to the slags. Some of these pieces are large (30mm x 45mm x 10mm for example) and appear, in the opinion of the slag specialist, to be oak (a wood anatomist would be able to positively identify the majority of species.) There was also a large amount of charcoal in pit [4286], presumably also hearth debris, and this again includes some large pieces but there are also some smaller twigs. Charcoal is the expected fuel at this date although occasionally coal was used.

The deposit in pit [4286] appears to consist of the debris from a smithy and its hearth, which suggests that this pit was probably very close to where the smithing was undertaken. Romano-British and medieval slags are very different to those produced by smiths today (on account of the type of iron, fuel and hearth used) so it is difficult to estimate the amount of iron working a slag assemblage represents. This group is, however, likely to be the results of more than a short visit to the settlement by an itinerant smith and on a rough basis of one hearth bottom a day (Cowgill, McDonnell and Mills, 1997) represents an absolute minimum of 24 days work. A built smithy structure would therefore be anticipated within which this work would have been undertaken.

#### *Environmental Analysis (Appendix 12)*

Context (4288), the backfill of pit [4286], is of interest because it produced the bulk of the slag recovered from the site, identified as smithing slag. The sample also contained substantial quantities of slag and hammerscale and a large sample of charcoal. It is presumed that the charcoal from the feature derives from the smithing activity and therefore this was submitted for identification along with a few pieces of slag within which charcoal was embedded.

The large volume of charcoal from this sample consists mainly of fragments of oak (*Quercus*) sapwood. Although the charcoal is mostly fragmented the dimensions of the pieces suggest that they originated from mixed diameter roundwood, ranging from about 20mm to >30 mm. Growth rates also would have varied from fast grown, e.g. 5 growth rings in 17mm, to slow grown, e.g. 17 growth rings in 10mm. Heartwood is relatively sparse. In addition, small quantities of narrow roundwood (measuring up to 10mm diameter) were identified as maple (*Acer*), hazel (*Corylus*), members of the hawthorn group (Pomoideae which includes *Crataegus*, hawthorn; *Malus*, apple; *Pyrus* sp., pear; *Sorbus* sp., rowan; service tree and whitebeam) and possibly dogwood (*Cornus*).

Charcoal associated with the smithing slag was also identified as oak (*Quercus*) and was similar in character and composition to that described above. Many impressions of charcoal are carried in the fabric of the slag and although it was impossible to identify these with any certainty, they clearly show the use of a coarse-grained wood charcoal consistent with that of oak.

It seems probable that comparatively immature oak roundwood, with little or no heartwood, provided the bulk of the smithing fuel. The high calorific value of oak charcoal has ensured its importance for metallurgy, where consistently high temperatures are required over a lengthy period. Thus, when available, oak charcoal has traditionally been the preferred fuel for smelting and smithing (Edlin, 1949). The infrequent occurrence of narrow roundwood from other taxa may be attributable to residues from kindling. It is difficult to assess the use of coppiced oak wood since the growth rates varied so much; certainly some of the charcoal was indicative of such. It may be that the slower-grown oak was from stems initiated on stools already supporting well-developed growth.

One possible barley grain was also recovered from fill (4288).

#### ***Pit Group Discussion***

All three pits contained quantities of dumped burnt material and charcoal connected with smithing activities. It therefore seems likely that all were purpose-dug rubbish pits and were broadly contemporary.

The main concentration of features associated with smithing was found within Group 5, approximately 32m to the north-west. These have a fairly secure mid-late 1st century date. Given that ditch [4114] also produced mid-late 1st century and 2nd century pottery, these pits seem more likely to be middle (rather than late) 1st century.

It has not been possible to prove that these refuse pits were connected with the suspected smithying area around Group 5, although they seem to have been placed just south of the main area of occupation but still within a convenient distance.

#### **PHASE 2 Enclosure Ditches and Gullies**

A total of eleven enclosure ditches and gullies are thought to have either originated in or at least been in use during this phase. They are ditches [4025/4074], [4029], [4112], [4292], [4255/4148], [4257], [4249], [4266], [4375/ re-cut 4370], [4294] and [4114]. They will each be discussed in turn.

#### ***Ditch [4025/4074]***

[4025/4074] was situated within Site 6A, orientated roughly north-west to south-east, parallel to the Phase 1 enclosure ditch [4325] (Figure 26). A length of approximately 27m was visible, cutting the western edge of the Phase 1, Group 1 ring gully, but becoming untraceable at each end due to waterlogging and ground disturbance (Figure 27 (g) for relationship).

In section it appeared to be approximately 0.50m wide and 0.36m deep with a 'U' shaped profile. No evidence of re-cutting was seen. Both sections appeared to show four fills but these were quite varied in

type (Figure 28, (g) and (i)). The principal fill was a mixture of light grey silty clay and a light grey-orange sandy clay with occasional iron staining.

#### *Pottery*

Primary fill (4076) produced seventeen sherds from a single storage vessel of a type which continued into the early Roman period. However, these were recovered from section (g) where [4025] cuts the ring gully and so could easily be re-deposited.

#### **Ditch [4029]**

[4029] was situated at the northern end of Site 6B (Figure 29). It was orientated roughly north-west to south-east, on the same alignment as [4025] above. In plan it extended at right-angles from the northern side of ditch [4111], disappearing beneath the western easement edge after approximately 19m. Its exact relationship to the Phase 1 ditch, [4111], was unconfirmed since a later Phase 2 re-cut, [4112], removed this interface. However, [4029] clearly post-dates Ring Gully Group 2 as it cut directly across the ring gully's eastern edge. If the ring gully were contemporary with the original ditch cut [4111], then [4029] would be later than [4111] but earlier than re-cut [4112] (Figure 30 Section (i)).

[4029] was approximately 0.78m wide and 0.30m deep with a 'U' shaped profile. It contained only one fill, (4030/4340), which varied respectively between a dark grey clay silt with orange mottling (possibly iron staining) and frequent charcoal inclusions, and a mid-orange clay with occasional charcoal flecks.

#### *Finds*

Nine sherds of pottery were recovered, giving a mid-late 1st century date. Nine small fragments of unidentifiable animal bone were also collected along with a very abraded lump of hearth bottom slag.

#### **Ditch [4112] (Re-cut of [4111])**

[4112] was situated at the northern end of Site 6B (Figure 29). It ran north-east to south-west across the site and re-cut the northern edge of ditch [4111].

[4112] was approximately 1m wide and 0.60m deep with a 'V' shaped profile and slightly concave edges (Figure 30 - Section (i)). There were four principal silting phases present.

- Primary fill (4343) was a grey-brown silty clay with frequent iron staining, identical to third fill (4113).
- Second fill (4338) was a band of orange-grey clay, thought to be re-deposited natural clay.
- Third fill (4113) was a grey-brown silty clay with frequent iron staining.
- Fourth fill (4337) was a grey-orange silty clay with occasional charcoal flecks.

#### *Pottery*

Nine sherds of pottery were recovered from the first and third fills. Seven could not be dated closer than Roman whilst two have been given a late 1st/early 2nd century date, partly due to the presence of a stamped Samian sherd. This sherd is Central Gaulish in origin and bears the mark of Marcellinus I of Les-Matres-de-Veyre. Comparisons with similarly-stamped vessels from London and the absence of the stamp from Antonine contexts, suggested a date range approximately AD 115-135 (Dickinson, within Appendix 3). The possible 2nd century pottery also suggests this ditch may have continued in use into Phase 3.

#### *Bone and shell*

Two oyster shells and several animal bone fragments, including a cattle mandible and sheep bones, were also collected.

### **Ditch [4292]**

[4292] appeared to be part of a substantial re-cutting of Phase 1 ditch [4179/4150] (Figure 29). Section (k) (Figure 30) revealed a single cut approximately 1.2m wide and 0.38m deep. This was badly disturbed by a land drain cut along its southern edge but was probably 'U' shaped in profile. It contained a blue-grey-brown silty clay with moderate iron staining.

#### **Finds**

Thirteen pottery sherds, two pieces of unidentifiable fired clay, ten oyster shells, cattle bones and unidentified burnt animal bone fragments were collected. The pottery was given a broad 1st century date. Such a concentration of domestic refuse is unsurprising with Phase 2, group 4 ring gully only 10m to the south.

### **Gullies [4255/4148] and [4257]**

These gullies may have been part of a small enclosure to the north of Site 6B (Figure 29). To the north-east, a gap of approximately 0.8m between the two gullies may have acted as an entranceway; the gullies diverged from this point at right angles to each other. The gullies varied slightly in dimensions.

**Gully [4257]** ran roughly north-west to south-east for approximately 6.5m, continuing beyond the eastern limit of the excavation area. It was approximately 0.4m wide and 0.08m deep with moderately sloping edges and a flat base. In plan it appeared to have been re-cut: approximately 3m south of its northern terminal it divided into two separate gullies which ran parallel to each other. The terminal was excavated and this showed a mid-grey silty clay fill, (4334) with occasional charcoal flecking. No artefacts were recovered.

**Gully [4148/4255]** headed south-west for approximately 8.5m before making a right-angle turn to the south-east, cutting into, and following, the line of Phase 1 ditch [4179/4150], its course becoming unclear after c.1m. It was 0.55m wide and 0.20m deep with moderately sloping edges and a flat base.

Excavation of the terminal of [4148/4255] revealed a single cut with two fills. The primary fill, (4333), consisted of an apparent slump of orange clay along the southern edge, closely resembling the natural clay. The principal fill, (4147/4256), was a mid-grey silty clay with occasional charcoal flecking, identical to the fill of [4257].

#### **Finds**

(4147/4256) produced seven sherds of middle to late 1st century pottery, one lump of stratified slag, two oyster shells and small fragments of cattle bone. The slag contained hearth lining inclusions. Unstratified finds from the surface included a sherd of a broadly 1st century date and a piece of unidentifiable fired clay.

#### **Discussion**

Initially, these gullies, along with the larger enclosure ditch [4179/4150], appeared to form part of an enclosure around the Phase 1, Group 3 ring gully. However, it soon became apparent that gully [4148/4255] actually turned and cut ditch [4179/4150], thereby post-dating it. Furthermore, from a functional viewpoint, such a small enclosure around a dwelling would have impeded movement and been of little practical use. The pottery from the gullies was all 1st century, suggesting these gullies post-dated the Group 3 features.

Whilst the rectangular gully layout in Group 6 may have represented the remains of a building, there is insufficient evidence here to suggest a similar interpretation. The finds offer no additional clues as they are typical of most of the 1st century fills investigated across the site. It seems likely that the gullies formed part of a small enclosure which may have been echoing land apportionment patterns initiated with the construction of the roundhouse in Phase 1.

### **Ditches [4249], [4266] and [4375]**

These three ditches were situated towards the middle of Site 6B (Figure 31). Parallel ditches [4375] and [4249] ran east-north-east to west-south-west whilst [4266] ran at right angles between them to form three sides of an enclosure whose eastern boundary lay beyond the limit of excavation. Limited excavation and artefact collection suggested that, while all three were probably contemporary, [4375] may have been substantially enlarged during Phase 3 to form [4370].

#### **Ditch [4249]**

In plan [4249] appeared to continue beyond the limits of the excavation to the east and west. A machine-excavated section revealed a ditch 1m wide and 0.40m deep. It was flat-bottomed with a moderately sloping southern edge and a steeper northern edge. It contained a single grey silty clay fill, (4250).

#### **Finds**

- Fifty-seven sherds of pottery were collected in association with this feature, including forty-three stratified finds, most of which have been ascribed a middle-late 1st century date. The fourteen unstratified sherds date from the 1st-2nd centuries and include some Central Gaulish Samian.
- A fragment of Romano-British brick or tile was also present amongst the principally 1st-2nd century surface finds.
- Eight oyster shells and a few cow and sheep bone fragments were also recovered from the fill of the ditch.

#### **Ditch [4266]**

This was the smallest of the three ditches. It was approximately 0.70m wide, between 0.20m and 0.30m deep, and had gently sloping concave sides with a rounded base, slightly deeper along the eastern edge. It contained two main fills, the lower of which, a light grey silty clay, (4269), measured up to 0.10m in places. The upper fill, (4267), was a mid-grey silty clay.

#### **Finds**

The upper fill contained thirty-two stratified sherds of middle-late 1st century date.

Thirty-three unstratified sherds of possible 2nd century pottery were collected from the surface of this feature. These included further Central Gaulish Samian sherds, two of which bore potters' stamps. No letters are visible on one of the stamps, and in form it could be either Hadrianic or Antonine. The other was almost certainly stamped with the mark of 'Nammius' or 'Nammus'. This potter seems from his fabrics to have worked at Lezoux. There are two other examples of this stamp from Britain, another from the Rhineland, where Lezoux-ware became rare after the middle 2nd century, and two from the Saalburg. This gives a Hadrianic or early-Antonine date (Appendix 3).

#### **Ditch [4375] (Re-cut [4370])**

A machine-excavated section at the eastern end of the feature revealed a substantial ditch, [4370], which was approximately 2.9m wide and 0.77m deep. This was eventually interpreted as a re-cut of a smaller ditch, [4375].

[4375] was visible in the east facing section (Figure 32 (g)) and was clearly cut by [4370]. The terminal of [4375] was initially thought to be a pit. It was estimated to be 0.5m wide, 0.27m deep and possibly 'U' shaped in profile. It contained a single dark grey clay silt fill, (4376).

In plan this darker 'pit' fill was found to coincide with a darker band of deposits, approximately 1m wide, running along the northern edge of [4370]. This darker band was recorded during excavation as curving around to the south on a similar alignment to [4266], possibly even continuing as [4266]. This

suggested that [4375] was in fact an earlier Phase 2 ditch which had later been re-cut by more substantial ditch [4370].

#### *Finds*

As the section was machine-excavated, the presence of the earlier cut, [4375], was not recognised until the recording stage, so the attribution of the finds may be unreliable.

The darker fill, thought to belong to [4375], produced five sherds of 2nd century pottery, an oyster shell and two unstratified lumps of slag. One of these was a small piece of fuel ash slag which was white-green in colour, contained abundant sand inclusions and was concreted in iron. The other was a large smithing slag lump with fuel ash slag on one side and abundant charcoal inclusions. It is likely that these were re-deposited from the adjacent or underlying 1st century smithing areas.

Ditch [4370] contained only 2nd century pottery. A surface collection produced one oyster shell and thirteen sherds of probable 2nd century date, including a body sherd of a mortarium from the Mancetter-Hartshill potteries in Warwickshire. These results seemed to suggest that ditch [4370] was solely 2nd century in date.

#### *Discussion*

It appears that these three ditches post-date the Group 5 features and are therefore likely to have originated in the late 1st to early 2nd century. The pottery collected from the lower fills of [4266] and [4249] would allow a late Phase 2 origin, whilst their upper fills and the re-cut [4370] indicate a continued presence in Phase 3.

The proposed position of the terminal of [4375] can be aligned with the eastern limits of both ditch [4179/4150] (Figure 29) and gully [4187] (Figure 31). This may imply a shared boundary of some type, possibly a fence line or similarly insubstantial structure which has failed to survive.

#### *Ditch [4294]*

This ditch was situated at the southern end of Site 6B (Figure 33). It ran east-north-east to west-south-west across the full width of the easement, parallel with the other main enclosure ditches. A machine-excavated section recorded a width of 1.04m and a depth of 0.37m with a rounded 'U' shaped profile. It showed three phases of silting:

- The primary fill, (4296), had a maximum depth of 0.06m deep and consisted of a greyish-yellow clay silt.
- The second fill, (4295), had a maximum depth of 0.23m deep and consisted of a grey clayey silt.
- The third fill, (4307), had a maximum depth of 0.13m deep and consisted of a yellow and grey mottled sandy clay.

#### *Finds*

The fills produced five sherds of broadly dated Roman pottery.

#### *Discussion*

This ditch probably originated in Phase 2, but had silted-up and been abandoned by Phase 3. It was perhaps replaced by the adjacent ditch [4114].

#### *Ditch [4114]*

This ditch was situated 3m south of [4294] (Figure 33). It ran east-north-east to west-south-west across the easement, terminating near the western edge. A machine-excavated section at the eastern end indicated a width of 1m and a depth of 0.37m with a rounded 'U' shaped profile (Figure 32, (n)). It contained four fills:

- The primary fill, (4160), had a maximum depth of 0.17m and was a light to mid-grey clay silt with heavy iron mottling.
- The second fill, (4159), had a maximum depth of 0.08m and was a mid-grey clay silt with heavy iron mottling.
- The third fill, (4158), had a maximum depth of 0.12m and was a light to mid-grey clay silt with moderate iron mottling and occasional charcoal flecks.
- The fourth fill, (4156), had a maximum depth of 0.22m and was a blue-grey silty clay with yellow mottling and occasional charcoal flecks.

#### *Finds*

Five sherds of middle-late 1st century pottery were recovered from the top two fills. A surface collection of eight, 2nd century pottery sherds suggests continued use into the 2nd century.

#### *Discussion*

[4114] appeared to cut two earlier Phase 2 pits, [4164] and [4313], on opposite edges of the easement. With such a wide time-span (late Iron Age to early 2nd century) it is quite possible for both the pits and the ditch to belong to the same broad phase.

The proximity of [4294] makes it unlikely to have been contemporary with [4114] because, as enclosure ditches, [4294] and [4114] would have been too close to form a droveway. It seems more likely that one replaced the other; the presence of Phase 2 pits beneath [4114] suggests that it might be the later of the two ditches.

### PHASE 3 : 2nd Century AD

#### **PHASE 3 Pits and Hearths**

This section includes three pits [4115], [4166], [4168] and two 'Ovens or Hearths' [4123] and [4236] (Figure 33). They were concentrated in the area of the Phase 2 Group 6 'rectangular enclosure or structure' and appeared to overlie it. Despite a lack of datable artefactual evidence, the three pits are thought to be contemporary because of the unusual and distinctive nature of their fills, all of which contained a quantity of building debris. The two 'oven or hearth-like' features could not be linked in this way to the pits, but they also post-dated Group 6. Virtually no features later than the 2nd century were found, so these five are unlikely to be significantly later and have been ascribed a middle 2nd century date.

#### *Pit [4115]*

This was the largest of the three pit features. It appeared oval in plan with its long-axis orientated north-east to south-west. It had steep sloping sides, slightly concave along the southern edge, and an irregular pitted base. It was approximately 1.8m long and 1.25m wide with a maximum depth of 0.31m. It was entirely filled with a mixture of dark grey and grey-green silty clay, loose sandy material, charcoal and plaster. Numerous tip-lines were evident suggesting rapid episodes of backfilling.

#### *The Plaster*

Approximately three quarters of the feature was excavated, producing a total of 7979g of plaster, sixteen pieces (1874g) of which were retained for further specialist analysis.

One group of six pieces from a single tipping episode, context (4116), were all manufactured from a consistent dense sandy fabric with occasional stones. The pieces vary in thickness, from 15mm to

30mm. Two pieces appear to have been formed against an irregular wooden shuttering and have traces of whitewash on the shuttering side. A third piece with a smooth surface had also been whitewashed.

A group of ten pieces from a later tipping episode have fabrics ranging from very fine to coarse with distinct differences in colour:

- A fine white plaster, 8mm thick, has a white-painted outer surface and is backed by a layer, at least 11mm thick, of coarser plaster. A second piece of fine white plaster, probably from the same room, is 9mm thick.
- Another piece was made from a coarse, stony, sandy fabric and has reed or fine wattle imprints on one side.
- Two pieces in a fawn sandy fabric have large wattle or pole imprints on the back.

It was evident that this group came from a range of rooms or even buildings (Appendix 11).

#### *Pit [4166]*

This pit lay approximately 5m to the north-east of [4115] and was cut into the gully of the rectangular Group 6 gully feature. It was sub-circular in plan and approximately 0.59m wide and 0.28m deep. It was 'U' shaped in profile with almost vertical sides and a flat base. Like [5115] this pit contained episodes of apparent back-filling, but of a less mixed nature:

- The primary fill, (4204), had a maximum depth of 0.14m and consisted of a grey-green silty clay, with occasional charcoal flecks, mortar, chalk and limestone inclusions. This fill was very similar to some of the components of the fill of [4115].
- The secondary fill, context (4229), was up to 0.09m thick and of the same grey-green clay as (4204), with the addition of occasional burnt clay and stone fragments and a piece of carbonised wood 150mm long, and 30mm by 50mm in cross-section.
- The final fill, context (4167), again had a grey-green clay matrix but contained 80-90% building material in the form of various plasters.

#### *The Plaster*

834g of plaster were recovered from [4166] when it was half sectioned, 504g of which were retained for specialist analysis. The majority (771g) came from the top fill and represented two types of plaster; twenty-two pieces were retained:

- Fourteen pieces are a fine, pale, sandy fabric approximately 7-10mm thick on a coarser, sandier backing. All have been painted white, but the edge of a red band was present on two and a black band on one. A single piece has red and grey splashes over a white base. One plain-white piece was possibly burnished to create a 'gloss' finish.
- Eight pieces were made from a lightweight plaster achieved by the inclusion of organic temper. Three are 7-15mm thick with a coarser backing, the remainder are up to 30mm thick. All eight may have been painted (Appendix 11).

#### *Pit [4168]*

This pit was situated approximately 1.5m to the south-east of [4166]. It was sub-circular in plan, 0.54m wide and 0.17m deep. In profile it was 'U' shaped with steep sides and a flattish base. The pit contained a single fill, context (4169). This was a mixture of blue-grey and light reddish-brown silty clays. It contained moderate amounts of charcoal and plaster or mortar inclusions.

### *Finds*

It produced one iron nail (Registered Find No.23).

### *Discussion*

Although not as remarkable as the fills from [4115] and [4166], these traces of building materials within [4168] suggest the pits were contemporary.

### *Hearth [4123]*

This appeared to be a narrow, 'cigar-shaped' oven flue or hearth. The very eastern end of the feature had been removed by a later shallow pit, [4184], but the remaining cut was 2.10m long, 0.40m wide and was orientated east-north-east to west-south-west. It had a sub-circular base, increasing from approximately 0.10m deep at its western end to approximately 0.20m deep at its eastern end (Figure 32 (k), (l), (m)).

The yellowish natural clay surrounding the cut had been baked to a reddish orange colour and the base was covered with a 10-20 mm thick deposit of charcoal. Two fills were present:

- The lower fill, (4129), was a mixture of white silty clay with a 60% chalk pebble content.
- The upper fill, (4130), was a dark brown silty clay with frequent charcoal inclusions.

### *Finds*

A single piece of smashed and abraded smithing slag lump was recovered from fill (4130) but this was probably residual. One sherd of broadly-dated Roman pottery was also recovered.

### *Hearth [4236]*

This was smaller but very similar to [4123]. In plan it was also 'cigar-shaped' but was only 1.36m long, 0.40m wide and was orientated north-north-west to south-south-east. It lay approximately 1m to the east of [4123]. It was half-sectioned along its long-axis and appeared to have moderately sloping sides and a flattish base (Figure 32 (q)).

Once more the yellowish natural clay, (4259), had been baked to an reddish-orange colour to a depth of 10-50mm around the cut. The primary fill, (4238), was a black, charcoal-rich, silty clay covering the entire base of the feature to a depth of up to 50mm in places. This was overlain by light orange-yellow silty clay, (4237) and (4258), mixed with lumps of burnt, possibly natural, clay.

## **PHASE 3 Pit and Hearth Discussion**

### *Pits*

It is evident that the building material recovered from the pits was not from any of the buildings uncovered during the excavation. The variety of plaster fabrics suggests that they came from a range of buildings, at least one of which was of fairly high status. The discovery of unstratified Romano-British tiles and box-flue fragments, often in association with 2nd century pottery, across the northern half of Site 6B, also suggests a high-status building, possibly a villa, in the vicinity of the excavations. Whilst it is hardly surprising that refurbishment or demolition might result in the removal of old mortar and plaster, there is no obvious explanation as to why some of it should end up within apparently purpose-dug pits on this particular spot.

### *Hearths*

The exact nature of the possible 'oven or hearth' remains is unclear. The archaeologists present during initial topsoil stripping observed at least two further areas of burnt natural clay in the same area, but subsequent prolonged rain and disturbance prevented their detection during excavation. There can be no

doubt that intense heating was taking place within the two excavated cuts. Although there was no evidence of stokeholes, these features may have been the truncated remains of oven flues. Sharp undulations in the base of [4123] (Figure 32, (k)), at its very eastern end, and in the base of the later cut, [4184] (Figure 32, (m)), could be the remains of stokeholes. These could indicate a raised structure, possibly plastered with clay.

Apart from the lump of smithing slag from within [4123], which was probably re-deposited, there were no finds to suggest an industrial function, such as metalworking or ceramic-manufacture. The apparently small size of the features makes commercial production seem unlikely. There was no evidence of grain residue to suggest corn drying, though no soil samples were taken from the burnt deposits within the features, so this cannot be ruled out entirely.

Another puzzling factor is the high quantity of chalk within [4123]. No such concentrations of chalk were found elsewhere on the site. This suggests it may have formed part of an 'oven' structure, for example, corn-driers sometimes had their channels lined with chalk. Alternatively, it may have been a raw material for firing. The production of quicklime could utilise chalk as a component raw material. If these 'ovens' were connected with the production of quicklime, then they may be linked to the deposits of plaster rubble, sand and mortar within the pits.

#### *Pit [4184]*

This pit cut the eastern end of the possible oven or hearth [4123]. It was sub-circular in plan, 1.7m east to west, 1.6m north to south and between 0.06m and 0.20m deep (Figure 32 (k) and (m)). It contained a single orange-grey silty clay fill, (4185), with no traces of the charcoal, burnt clay or chalk pebbles characteristic of [4123].

#### *Discussion*

Sharp undulations in the base at the southern edge of the cut may have been traces of the earlier cut, [4123]. Similar undulations were seen in Section (k), where they were interpreted as possible stokeholes.

No finds were recovered to assist in dating or reveal the function of this feature. Whilst it appears later than [4123], its fill had little in common with the other Phase 3 pits in the vicinity. It therefore seems more likely to date from some point between the two phases of activity, or from a later period.

The function of the pit is obscure. Had it been dug to recover materials from the original 'oven' structure, one might have expected the fill to contain some trace of its components. With no such evidence, a much later and unconnected purpose seems probable.

### **PHASE 3 Enclosure Ditches**

Ditches were assigned to this phase mainly on the basis of pottery dates. This is problematic as contexts with small sherds often cannot be clearly dated between late Iron Age and Roman, and many late Iron Age vessels continued in use into the early Roman period. The positively identified 2nd century pottery came from the linear features crossing the pipeline easement, namely [4370], [4249], [4266], [4114], [4278], and probably [4112] and therefore [4127] (Appendix 3). However, some features were found to contain significant amounts of 1st century pottery at a lower level and 2nd century pottery only at upper or surface levels. Presumably these ditches were dug at an earlier date and simply remained open or were re-cut in the 2nd century.

#### *Ditch [4112]*

Ditch [4112] was situated at the northern end of Site 6B and ran diagonally across the full width of the easement on a north-east-south-west orientation (see Phase 2 discussion for full details) (Figure 29). [4112] and [4127] are probably the most tentatively dated of the Phase 3 ditches. [4112] was probably a Phase 2 re-cut of the Phase 1 enclosure ditch, [4111].

### *Pottery*

The only reason for suspecting that [4112] remained open during Phase 3 was the presence of possible 2nd century pottery sherds within the main fill.

### *Ditch [4127]*

This small ditch was situated on the western edge of the easement at the northern end of Site 6B (Figure 29). It ran north-west at right angles from ditch [4112] for approximately 10m. In plan it was approximately 0.50m wide but there appeared to be more than one phase as the ditch separated into two parallel channels of equal width for a distance of approximately 5m before reuniting and continuing as a single gully. Investigations at the junction with ditch [4112] revealed [4127] to be approximately 0.20m deep with fairly steep sides and a rounded base. [4127] contained a dark brown-grey silty clay, (4134), with frequent charcoal inclusions.

### *Finds*

The ditch produced a cattle shaft bone fragment with evidence of butchery marks and four fragments of pottery given a tentative early Roman date. Given the numerous phases of digging and deposition in this area, however, it is quite possible that these finds could have originated from within [4111/4112].

### *Discussion*

Investigations showed [4127] to be cutting [4112] and suggested that it must terminate somewhere within the earlier ditch. It is solely on this evidence that [4127] has been designated a Phase 3 rather than a Phase 2 date. However, given that the dating of [4112] is very unsure, the dating of [4127] must also be treated with caution.

There was too little of [4127] visible or excavated to be sure of a function. Since there was apparently very little activity in this area in the 2nd century, it may have formed part of a larger field system of enclosure ditches.

### *Ditch [4278]*

This ditch was the southernmost feature recorded (Figure 26). Visibility was poor but it appeared to run across the full width of the easement on the same east-north-east to west-south-west alignment as the earlier ditches. It lay approximately 24m south of the nearest enclosure ditch, [4114]. A machine-excavated section indicated a width of 1.04m and a depth of 0.63m with a roughly 'V' shaped profile. It contained two fills:

- The lower fill, context (4165), had a maximum depth of 0.36m. It consisted of a light to mid-grey clay silt with moderate amounts of iron staining.
- The upper fill, context (4279), had a maximum depth of 0.27m and consisted of a mid- to dark grey clay silt with moderate amounts of iron staining and occasional charcoal flecks.

### *Finds*

The upper fill produced a single horse tooth, a cattle-type shaft bone fragment and eight sherds of a Nene Valley folded funnel-necked beaker in a later 3rd - 4th century fabric.

### *Discussion*

Although no earlier pottery was recovered from the ditch, its alignment suggests that it originated in an earlier phase. It is not possible to say whether this might be Phase 1, 2 or 3, as all these periods produced ditches on this alignment. A Phase 1 date seems unlikely both because of the length of time involved and because no late Iron Age material was discovered this far south. Both Phase 2 and Phase 3 activity is believed to have extended in this direction, though the fact that the ditch was open in the 3rd century means a later Phase 3 construction date is more likely. The absence of 3rd century pottery anywhere else on site could indicate a lack of activity at this time, making a Phase 4 construction date unlikely.

### **Ditches [4370], [4266] and [4249]**

It is thought that ditches [4266], [4249] and [4375] were originally dug to form part of a probable rectangular enclosure during Phase 2 (Figure 31). They continued in use into Phase 3 with the additional re-cutting or expansion of [4375] to form [4370] (see Phase 2 for full details).

### **Ditch [4114]**

This ditch appeared to have been constructed during Phase 2, but the presence of 2nd century pottery on its surface suggested a continued presence in Phase 3 (Figure 33) (see Phase 2 for full details).

## **PHASE 4: Mid-late 3rd Century**

Mid-late 3rd century activity is evinced only by pottery recovered from ditch [4278].

### **Ditch [4278]**

As discussed under Phase 3, this ditch probably originated in the 2nd century (see Phase 3 for full details) (Figure 26). It was the presence of eight sherds of mid-late 3rd century Nene Valley beaker which show that it might have been open at this time. The fact that it remained open into the middle-late 3rd century without any apparent re-cutting would suggest very little disturbance around it, perhaps indicating that this area was no longer intensively farmed. No other stratified or unstratified material of this date has been identified from anywhere else on site, and this also suggests a break in occupation after the 2nd century.

## **PHASE 5: late 4th Century**

A collection of unstratified finds from across the site included 44 sherds of a very late 4th century date. No specific details of this material are available. None of these finds was associated with features and it can only be presumed that they represent refuse from a nearby settlement. This suggests a re-occupation of the area following a virtually complete absence of nearly two hundred years.

## **Site 6 : Overall Discussion**

### ***Limitations***

It seems clear from the quantity and variety of information gathered from the watching brief excavation, that the site is of considerable importance, and has the potential to significantly improve our knowledge and understanding of this area in the late Iron Age and Roman periods. It also seems likely that much of the site is located outside the easement, where the remains of a complex and extensive settlement could lie. Despite the limited nature of the pipeline investigations, a number of conclusions can be drawn from the information retrieved.

### ***Continuity***

Of considerable significance is the evidence of continuity of use through the late Iron Age into the early Roman period. This continuity is primarily evinced by the presence of key datable pottery types. Many of these were directly associated with the enclosures and structural features distributed across the site. The bulk of the pottery belongs to the Roman period, directly overlying the late Iron Age occupation. Given the small size of the samian assemblage from the site, the presence of four relatively rare samian vessels from the kilns at Les-Matres-de-Veyre suggests continuous occupation from the middle to late 1st century until approximately AD160. The later 3rd century beaker from the Nene Valley (from linear [4278] at the southern end of the excavations) and the scatter of late 4th century pottery (from unstratified deposits) also suggested the presence of a later Roman site in the area, perhaps to the south (Appendix 3).

### *Foci*

From the phasing of the excavated features and the attribution of possible functions, it appears that land-use at the site evolved and shifted over time. Within the limits set by the excavation, there appears to have been a concentration of late Iron Age activity within Site 6A and at northern end of Site 6B. It is almost certain that further features belonging to this period were present in the unexcavated block of land between these two areas.

### *Iron Age Economy*

Occupation is represented by a number of roundhouse features, a few simple enclosure ditches and a quantity of domestic refuse. The pottery recovered is mostly from cooking pots or storage jars, mainly in coarse fabrics. Our understanding of this period has been hampered by the poor preservation and correspondingly low representation of animal and plant remains. However, none of the surviving material suggests particular wealth or status, and it is likely that this was a small farming group with a fairly insular economy. This is not to say it would have been an economically deprived or backward community. For this site to have continued to grow and accumulate wealth and status throughout the following two centuries implies at least a modicum of success and a great deal of potential.

### *Transition*

As the settlement continued into the middle-late 1st century, at least one roundhouse structure was in use towards the centre of Site 6B. The earlier dwellings to the north appear to have been abandoned and overlain by additional enclosure ditches. Further enclosure ditches, following the same alignment, were added to the central and southern areas. These appear to have been more regular, possibly reflecting the evolution from smaller sub-square Iron Age enclosures towards the more ordered, sub-rectangular enclosures typical of Romanized field systems. This gradual Romanization is highlighted by the appearance of the possible rectangular structure, Group 6, towards the southern end of Site 6B, probably around the beginning of the 2nd century. The adoption of rectangular building forms is generally seen as an indication of Roman influence and on the majority of southern British sites these replaced round buildings during the 2nd and 3rd centuries (Hingley, 1989). The fact that this structure may have been contemporary with the roundhouse feature towards the centre of the site emphasises how gradual these changes must have been.

### *Industrial Activity*

In addition to the domestic structures and enclosure ditches dated to this early part of the Roman period, there was a highly significant concentration of industrial waste resulting from iron smithing. The quantity of waste material, mainly from a single refuse pit, was consistent with at least twenty-four days' work (Appendix 11). Considering the limited extent of the excavations, it is reasonable to assume that further quantities of this material may be present outside the construction easement, thus supporting the theory of a permanent smithy. It has been suggested that the concentration of slag-rich features within Group 5 might have been associated with these smithing activities. The fact that much of this industrial waste was found in close association with domestic refuse and features, suggests that the smithing was not deliberately set apart from the occupied areas.

### *Status*

The occurrence of a number of South Gaulish samian vessels, including decorated bowls, as well as the Verulamium mortarium, early Dressel 20 amphorae, and sherds of fabrics known from early levels in Lincoln, all indicate significant 1st century activity of a higher status than would normally be found on a rural site of this period (Appendix 3). The combination of imported, high-status ceramics and the continuing development of buildings and enclosures points to increasing affluence. The fact that a permanent smithy may have been sited here would suggest either sufficient local demand or an element of incoming trade to make it viable.

### *End of Occupation*

The area within the easement appears to have fallen out of occupation as the 2nd century progressed, although the enclosure ditches apparently remained open and, in most cases, were probably still in use.

However, there is evidence of conspicuous consumption in the form of high status building materials. These may have been associated with the general later 4th century pottery scatter, but the lack of additional features attributable to this period makes this unlikely.

#### *High-status Buildings*

It is evident that the material recovered from pits [4115], [4166] and [4168] was not from any of the buildings uncovered during the excavation. The range of plaster fabrics suggests that their source was likely to be a range of buildings, one of which was of fairly high status because of the painted plaster (Appendix 11). This agrees with the discovery of small amounts of unstratified Romano-British tile and box-flue fragments, often in association with 2nd century pottery (rather than 4th century pottery), across the northern half of Site 6B. These reinforce the suggestion of a high-status building standing in the vicinity of the easement. The relatively small quantities involved and the effort required to excavate these pits suggests episodes of renovation rather than demolition, and certainly not abandonment. It is unclear where these materials originated and why they were buried here.

The date of construction for these more elaborate structures and their possible duration is unknown. The apparent increasing wealth indicated by the high status imported wares of the later 1st century suggests a feasible start date. The presence of a roundhouse and simple rectangular structure at this time may even represent workers' accommodation and outbuildings associated with the landowner's more grand establishment nearby.

#### *Pottery Evidence for an Abandonment Date*

One indicator of subsequent decline may be the date range associated with the higher status pottery, namely the samian wares, which would probably have been used by the inhabitants of these wealthier buildings. Twenty-five sherds of Central Gaulish ware were recovered from the site, mainly from the central area of Site 6B. These include four vessels from the Les-Matres-de-Veyre kilns, of Trajanic date, including the dish stamped by Marcellinus, with other sherds from the Lezoux kilns. Some are the sherds from three decorated vessels, but most are from dishes of Dr 18/31 form (which comprise nine separate vessels), and two Dr 33 form cups. Where these sherds have been dated, the emphasis is on the earlier part of the 2nd century, the Hadrianic to early Antonine period. The absence of common later forms suggests a closing date of approximately AD 160 (Mills and Darling within Appendix 3).

The lack of later pottery forms until the isolated find of the late 3rd to 4th century Nene Valley vessel, followed by the scatter of unstratified late 4th century material, indicate almost two hundred years of near total abandonment. The 4th century scatter is sufficient in quantity to suggest the presence of a later, Roman site nearby, but no further evidence was found.

#### *Links with Lincoln*

Several pottery sherds are useful in relating the site with Lincoln, as similar examples came from deposits associated with the legionary fortress there. Many of the cooking pots from Site 6 are of types well known from military and early *colonia* contexts. Two body sherds in a Lincoln fabric came from a rusticated jar, with the typical 'web' type rustication well known from Lincoln. Bowls of the type shown in the pottery report (Appendix 3, Dr. 3.33-35) and a dish (Dr. 3.39) are well known in 2nd century contexts at Lincoln. The later Roman period was represented by:

- An unstratified rimsherd from an inturned bowl (Appendix 3, Dr. 3.37) of a type made at the late Swanpool kilns in Lincoln.
- An unstratified sherd from a bead-and-flange bowl (Appendix 3, Dr. 3.36) in a burnt fabric, possibly slipped, but of a type more commonly found in colour-coated versions.
- An unstratified double lid-seated jar (Appendix 3, Dr. 3.18) of a fabric and type known from the Swanpool kilns, and normally only occurring in the latest Roman deposits in Lincoln.

## **Conclusion**

It is clear that this site merits further investigation. A great number of further questions would have to be answered before one could begin to see how exactly this site fitted into the local and regional late Iron Age and Romano-British economic and social structure. Until its full extent and status is ascertained, one will never be able to gauge its significance within Lincolnshire. It is sites of this type, rather than the often more frequently studied *villa* sites, that are the key to understanding the gradual changes brought about by the 'Roman Conquest' in the daily lives of the majority of the native inhabitants.

## **8.5 Site 9 Field System**

Plot 88, Bogle Holt, Martin, TF 10770 58928

### **Summary**

*A number of ditches, gullies, pits and postholes were uncovered, 1km south-west of the village of Martin, close to a small copse known as Bogle Holt. The features comprised a trapezoidal enclosure with an internal division probably for the containment of stock, and portions of at least seven small rectilinear enclosures which once formed part of a field system. They ran for some 90m along the construction easement with excavations being carried out on a width of 25m. Pottery from the rectilinear enclosure ditches dates the site to the Romano-British period, in use from the mid-second century AD to the later third century AD.*

### **Introduction**

This Romano-British site was discovered during the archaeological watching brief phase of pipeline construction (Figure 2). The site is situated some 1.2km west of both the villages of Martin and Timberland, 160m to the north-east of a small copse known as Bogle Holt (Figure 34). The site lies at 10m OD on the fen edge lying upon a drift geology of old river sands and gravels.

The fieldwalking programme undertaken in 1997/98 retrieved no finds as the field was unavailable for survey, being laid to sugar beet. The area also produced no geophysical anomalies.

### **Results**

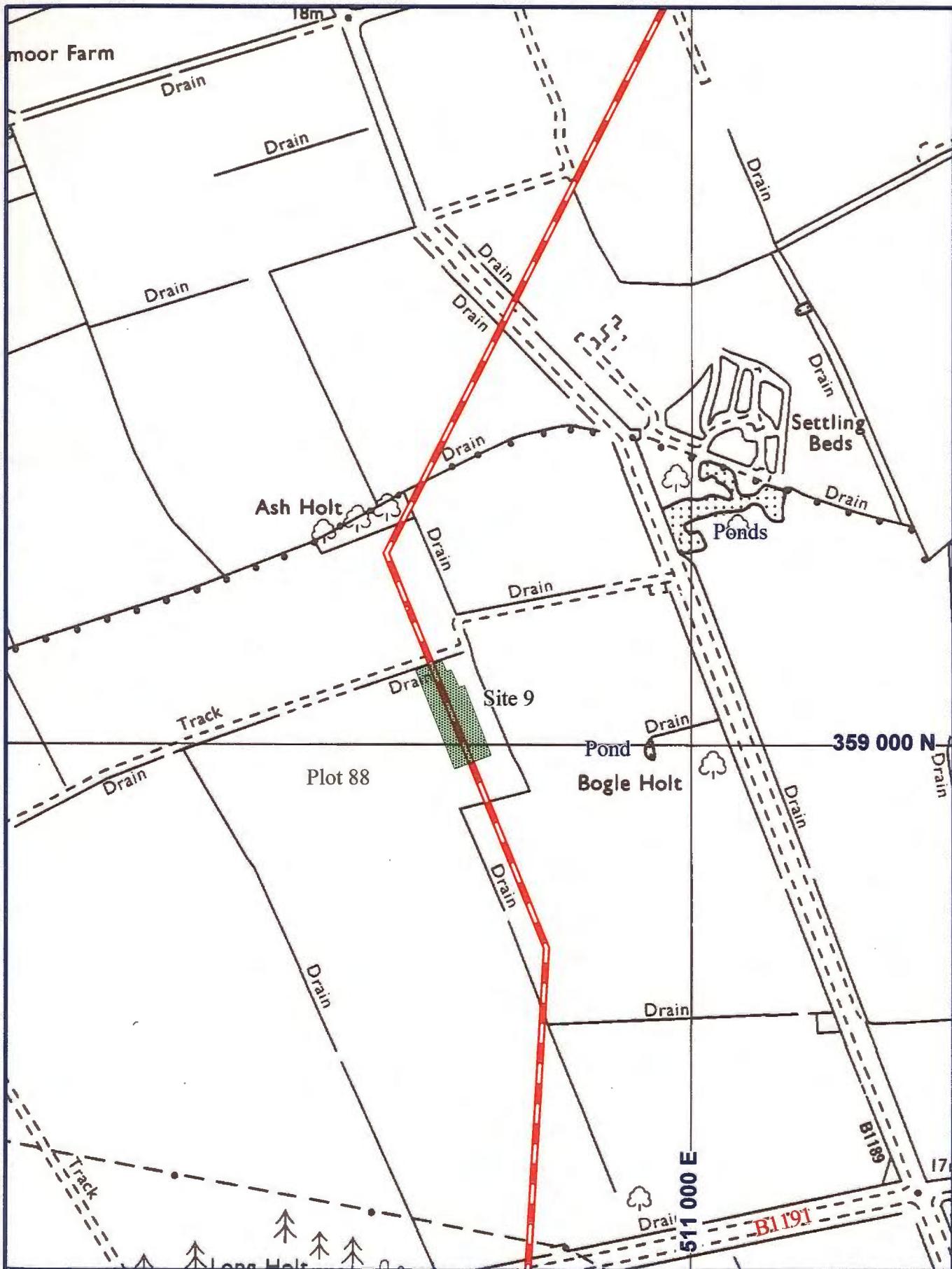
The site was discovered during topsoil stripping by a back-acting excavator fitted with a smooth-faced bucket. After its discovery, the site was further cleaned with a mini JCB similarly fitted with a smooth-faced bucket. The archaeological features covered a 90m stretch of the pipeline route, running north-east to south-west and covering a width of at least 25m. As the majority of the archaeology lay towards the western side of the easement, it was agreed that vehicle access should be reversed and run along the eastern edge where the archaeology was less dense and only comprised the same linear features that could be investigated in the western sector. A plan of the site was made at 1:100 and the majority of the features were then investigated. Excavation was concentrated along the line of the pipe-trench.

Although many of the features investigated produced no dating evidence, the site is believed to date predominantly to the Roman period, mainly from the mid-second century through to the later third century AD. The pottery suggests that occupation could have begun in the late Iron Age, although this is uncertain (Appendix 3).

For ease of description, the site has been divided into three main areas of activity : Areas 1, 2 and 3 (Figure 35).

### **Area 1 ?Stock Enclosure**

The northern most end of the excavated area contained a trapezoidal enclosure distinct from the remainder of the site (Plate 5). Its narrower axis was orientated north-west to south-east, and was defined by two shallow gullies, [1105] and [1109], the latter displaying evidence of a possible re-cut, [1113], in its most easterly corner (Figure 35). The entrance to the enclosure appeared to have been on the southern side, formed by a gap between parallel gullies [1105] and [1109]. An associated posthole



Scale 1:5000

Figure 34: Site 9, Romano-British Field System

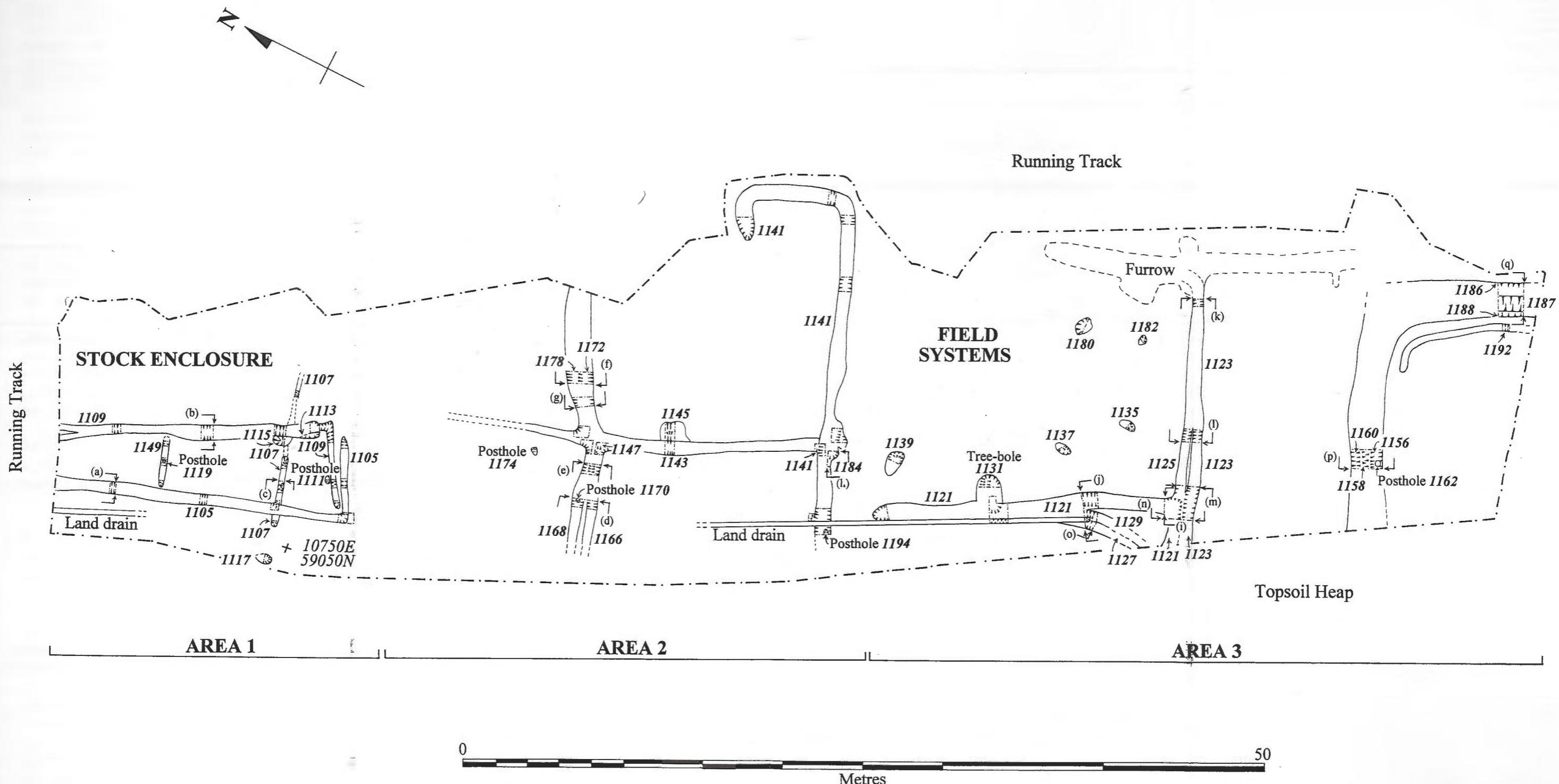


Figure 35: Site 9, Plan of Romano-British Field System

[1111] was located close to this entrance way. The enclosure was not fully exposed, but where it was it had a length of 18m, and tapered in width from 6m at the southern end to 4m at its northern end. No artefacts were recovered from any of the investigated features within Area 1.

Gully [1105] formed the westernmost limit of the enclosure, turning at a right angle at its southern end towards the east before terminating. In profile it was shallow (0.10m-0.20m deep), with fairly steep, concave sides and a flattish base, varying from 0.34m to 0.88m wide (Figure 36 (a)). This width variation is most likely to be the result of plough damage. The gully's homogenous fill, (1106), was a darkish brown sandy silt with orange flecks containing frequent gravels and occasional charcoal flecks.

Gully [1109] formed the eastern limit and also turned at a right angle, this time turning westwards to run parallel with [1105]. In profile it was also shallow (0.08m-0.23m deep), with steep, concave sides, and a flattish base, having a width of 0.34m-0.78m. The fill, (1110), was a mid-dark brown sandy silt with occasional small rounded pebbles (Figure 36 (b)). The south-east part of this gully was re-cut by [1113], which had a width of 0.57m and a depth of 0.23m, with steep sides and a flattish base. The fill of this recut, (1114), was a mid-grey/brown sandy silt with occasional orange sand flecking, containing moderate small pebbles and flint fragments, with very occasional charcoal flecks.

A single posthole, [1111], lay inside the south-west part of the enclosure. This was 0.36m long, 0.27m wide and 0.13m deep, with fairly steep, straight sides and a slightly rounded base. Its fill, (1112), was a dark grey sandy silt with very occasional small stones and frequent amounts of charcoal flecking.

The interior of the enclosure had one visible sub-division. A linear grey-brown sandy silty band (1149), ran north-east to south-west inside the feature for a length of 2.87m. It had a width of 0.32m and a depth of 0.06m deep. Within the centre of this band lay a posthole [1119] cut into the natural gravels. The posthole had vertical sides and a flattish base and measured 0.15m by 0.14m with a depth of 0.27m. It was filled by (1120), a light-mid grey sandy silt with occasional small rounded pebbles.

An earlier gully [1107] ran parallel to (1149). This was cut by the main gullies of the enclosure, continuing outside of it (Figure 36 (c)). This earlier feature was shallow, with gradually sloping, concave sides, and a slightly rounded base. It measured 0.38m wide and 0.11m deep, and contained (1108), a light-mid grey/brown sandy silt containing occasional small rounded pebbles.

Pit [1115], located on the east side of the enclosure, also predated the main enclosure gullies. The pit was fairly shallow, with gradual sloping sides, and an irregularly-shaped base, measuring 0.80m long, approximately 0.61m wide, and 0.12m deep. Its fill (1116), was a light grey/brown sandy silt with occasional small rounded pebbles. This pit is thought to be related to the field system to the east.

An isolated pit, [1117], lay outside and to the west of main enclosure gully [1105]. It was sub-oval in shape, 0.95m long, 0.65m wide, and 0.13m deep, with fairly steep sides, and an irregular base. The fill (1119), was a light-mid grey sandy silt with occasional small rounded pebbles.

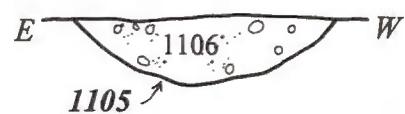
The similarities between pits [1115] and [1117], and their positions in relation to gully [1107], suggests that they were contemporary and part of an earlier phase of activity.

### Area 1 Discussion

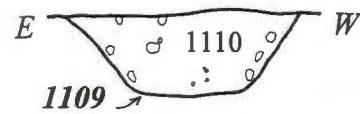
The trapezoidal feature in Area 1 is thought to represent an unroofed stock enclosure. Its architectural form militates against it having been constructed as a building for human occupation, since such a building would presumably have been more regular in plan. The lack of human occupation is further reinforced by the absence of artefacts and interior features. The presence of at least one internal division, which contained at least one posthole, suggests the separation of animals within the enclosure.

It is assumed that the main, outer enclosure would have been enclosed by some sort of fencing, even though no evidence of this kind was identified during the excavations. The fences may have been

(a) Stock Enclosure  
Gully 1105



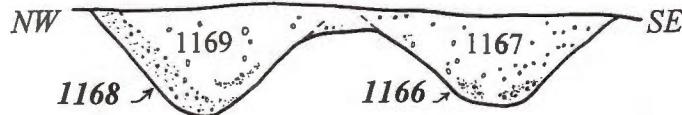
(b) Stock Enclosure  
Gully 1109



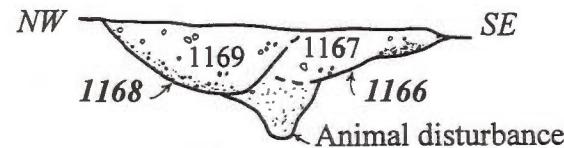
(c) Stock Enclosure  
Gully 1107



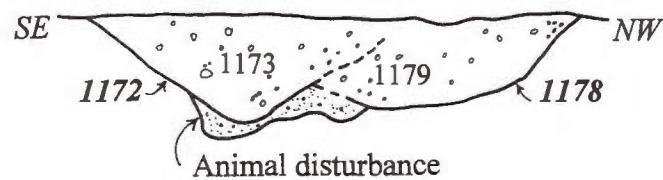
(d) Ditches 1166 and 1168



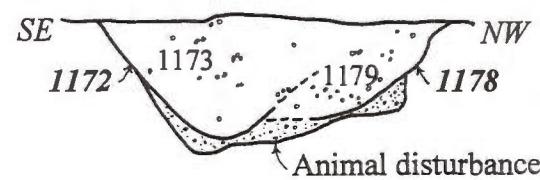
(e) Ditches 1166 and 1168



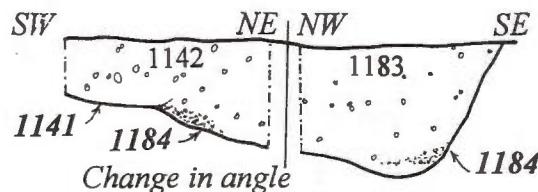
(f) Ditches 1172 and 1178



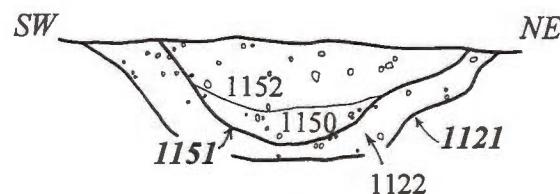
(g) Ditches 1172 and 1178



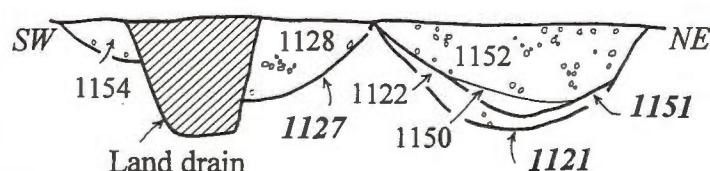
(h) Ditch 1141/1184



(i) Ditches 1121 and 1151



(j) Ditches 1121, 1127 and 1151



(k) Ditch 1123

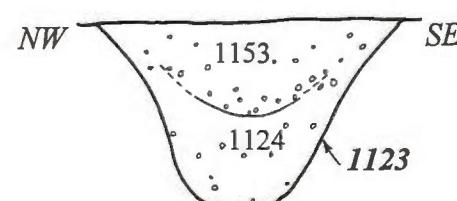


Figure 36: Site 9, Section Drawings

'wattled', that is, flexible branches may have been woven around stakes or posts, with the gully representing the very base of a trench dug to house such a structure. No artefactual evidence survived to ascertain if the walls had been rendered with daub.

A south-eastern entrance into the enclosure was represented by a 0.25m-0.45m gap between its gullies. This tapering gap would have served to channel animals in and out of the compound. Its narrow size suggests that the animals kept within the enclosure were no larger than small sheep.

Several features pre-dating the main enclosure were identified within Area 1. East-west gully [1107] lay on the same alignment and was of similar proportions to the ditches and gullies located further to the south (Figure 35). This suggests that it may have been contemporary with the field systems in Areas 2 and 3, and implies that the trapezoidal stock enclosure was later in date than part of this field system, perhaps even replacing part of it. It is not uncommon for stock-enclosures to have replaced or been additions to fields being used for annual round-ups, for wintering cattle/sheep and for lambing/calving (Wacher, 1986, 111).

## Area 2

### The Field Ditches

This area, located to the south of the trapezoidal stock enclosure, was composed of a sequence of boundary ditches running north-east to south-west and south-east to north-west, and delimiting at least four separate land units (Figure 35).

Ditches [1168] and [1166], orientated north-east to south-west, ran parallel with each other for c.4m before the latter ditch cut the first (Figure 36, d, (e)). It is not certain which direction these ditches then took. It is possible that ditch [1166] turned a right angle and is the same as ditch [1147] and [1143]. It is equally possible that it continued straight, that is, as ditches [1178]/[1172]. Whichever is the case, it is apparent that there were several phases of ditch digging, following similar alignments.

Ditch [1166] was 0.75m wide, and 0.28m deep, with steep, slightly convex sides, and a flattish base (Figure 36 (d) and (e)). The fill (1167), consisted of a mid-grey or brownish/grey sandy silt with some small rounded stones and a single sherd of late Iron Age or Roman-British pottery.

Ditch [1168] was 0.75m wide, and 0.34m deep, with steep, slightly concave sides and a slightly rounded base (Figure 36 (i) and (ii)). The fill (1169), a light-mid brown/grey sandy silt had occasional small rounded pebbles and occasional charcoal flecks. No artefacts were recovered.

Further east, ditch [1178] also ran north-east to south-west, and had a depth of 0.27m and width of 0.78m. A re-cut, [1172], truncated its southern edge. The sides of [1178] were fairly steep and straight, with a flat base (Figure 36 (f) and (g)). The main fill (1179), was a mid-grey sandy silt with occasional small rounded pebbles and charcoal flecks, but no finds. The re-cut [1172] had steep, slightly irregular sides, and a flattish base. It measured 0.80m wide and 0.36m deep, and was filled with (1173), a light grey/brown sandy silt with very occasional small rounded pebbles. Within the excavated fill was a single horse tooth and a fragment of Romano-British *tegula* or brick.

Enclosure ditch [1143] ran north-west to south-east for at least 13m, at right angles to the aforementioned ditches. Again its association with the ditch junction to the north-west is undetermined. However, at its south-east end, it did appear to have been cut by ditch [1141], which lay at right angles to it. Ditch [1143] varied in size, with widths of 0.74m-0.85m and depths of 0.11m-0.30m, having a shallow profile with gradually sloping sides and an irregular-flat base. Its fill, (1144), a mid-grey sandy silt, contained occasional small rounded pebbles and charcoal flecks. Three sherds of late Iron Age or Roman pottery were recovered.

Ditch [1141] cut, and lay at right angles to, ditch [1143], which ran north-east to south-west for 22m before turning two right angles and terminating against the north-east limit of excavation. This ditch

measured c.0.85m wide and c.0.30m deep, and had steep, fairly straight sides and a flat base (Figure 36 (h)). Its fill (1142), was a mid-grey sandy silt, with occasional small rounded pebbles and charcoal flecking. Several finds were recovered from the fill, including a cow's tooth, a number of unidentifiable bone fragments, and a sherd of late Iron Age or Romano-British pottery. Although ditch [1143] seems to have been truncated by ditch [1141], the fact that they form part of the same enclosure suggests that in use they were broadly contemporary, even if [1143] was dug first.

Part of the south-eastern edge of Ditch [1141] had been enlarged. This enlargement, labelled [1184], was 0.68m wide and 0.40m deep, and had steep, straight edges, and a flat base (Figure 36 (h)). It was filled with (1185), a dark grey/brown sandy silt with frequent small rounded stones, which produced no artefacts. It is possible that this feature served a specific purpose, such as a water collection point.

### Pit

A single sub-rectangular pit [1145], was seen to predate ditch [1143]. Its visible dimensions were 1.55m by 1.18m, with a depth of 0.36m. Its north-east edge was steep and convex, whilst the south-western edge had been removed by the later ditch. The base of the pit was slightly rounded. Its fill, (1146), was a lightish brown sandy silt with very occasional small rounded pebbles and charcoal flecking. No artefacts were recovered. The function of the pit is undetermined.

### Postholes

At least three postholes were identified within Area 2. Two lay in the base of enclosure ditches [1141] and [1168]. Postholes [1194] and [1170] had diameters of between 0.25m and 0.28m, and were around 0.10m deep with slightly rounded bases.

An isolated posthole, [1174], was discovered to the north of ditch [1168]. This was oval in plan and measured 0.46m by 0.26m, falling to a depth of 0.29m with vertical sides and a flattish base. It contained a light grey/brown sandy silt.

### Area 2 Discussion

The enclosures in this area form part of a field system which had several episodes of re-cutting, presumably for the cleaning, re-establishment and extension of the boundaries. At least four separate units could be identified within this area.

Several postholes were recorded in the bases of the enclosure ditches, suggesting that at least some of the units were once fenced. It is possible that the ditches contained more such features in the non-excavated areas. The full dimensions of one of the enclosures could be established. This field was bounded by [1141], [1143] and [1178/1172], which formed a rectangular unit of 15m by 16m. The very northern edge of this enclosure fell under the construction running track so it is not certain where the entrance lay. However, it is likely to have been along the eastern side where ditch [1141] turned inwards.

The lack of artefactual evidence from across this part of the site is not surprising, given the interpretation of the ditches as forming part of an agricultural field system. The six sherds of pottery which were found, from [1141], [1143], [1147] and [1166], are all linked to the same fabric and vessel type, broadly datable to the Late Iron Age or Roman period. Seven similar pottery sherds were also found within ditch [1160] in Area 3.

### Area 3

This area comprised similarly aligned north-west to south-east ditches and gullies, forming at least three additional enclosed areas (Figure 35). The remains comprised at least two 'L'-shaped ditch segments, several postholes and a pit.

The northmost 'L'-shaped segment [1121/1127/1129, 1123/1125] had various widths from 0.53m to 1.34m, and depths from 0.08m to 0.38m. Profiles were typically fairly steep sloping with flattish bases.

The various fills comprised mid-grey/brown sandy silts, some containing occasional charcoal flecks. The fills were also fairly homogenous, with only one or two silting episodes. The ditches themselves had been re-cut and realigned several times.

Several artefacts were recovered from these ditch fills. The primary fill of [1121] contained two Roman pottery sherds. This ditch was re-cut by [1151] which was c.0.96m wide and 0.31m deep, with fairly steep, slightly concave sides, and a rounded base (Figure 36 (i), (j)). Its primary fill (1150), also contained two fragments of Roman pottery, with the secondary fill (1152), containing an iron nail, several eroded sheep and cow bones, a piece of Romano-British tile and 34 pottery sherds. The pottery included part of a Nene Valley colour-coated ware rouletted beaker, as well as grey ware wide-mouthed bowls, common in the late third century AD, and a segmented bowl (Appendix 3, Dr. 3.56 and 3.57).

Near its north-west end, Ditch [1121] cut through an earlier tree bole [1131]. This possessed a series of tip-lines, suggesting that it had been deliberately backfilled, and therefore providing evidence of tree clearance prior to the division of the land and establishment of the enclosures.

A smaller ditch, [1127]/[1129], lay close to ditch [1121], running on a slightly different north-south alignment. Ditch [1127] was 0.76m wide and 0.23m deep, with a steep, concave eastern edge, and a steep, convex western edge, with a slightly rounded base (Figure 36 (j), (o)). This ditch contained two fills, the primary one, (1128), containing 19 sherds of third century AD pottery. The secondary fill, (1154), produced the remains of a copper alloy brooch (Appendix 11), probably of a Colchester derivative type (first century AD), as well as three pieces of Romano-British tile, unidentifiable bone fragments, and 43 sherds of middle to late third century pottery. The pottery included a shattered fine ware beaker from Moselle in France, a wide-mouthed bowl, and a Nene Valley mortarium fragment.

Ditch [1127] was re-cut on the same course by ditch [1129], a 0.53m wide, 0.12m deep feature, with gradually sloping sides and a flattish base (Figure 37 (o)). It produced no artefacts.

The north-east to south-west oriented boundary comprised ditches [1125] and [1123]. Ditch [1125] cut through [1123] at the intersection with ditch [1121] (Figure 37, (m) (n)). The ditches then split and ran parallel for some 4m before becoming a single feature at the east (Figure 37 (k)).

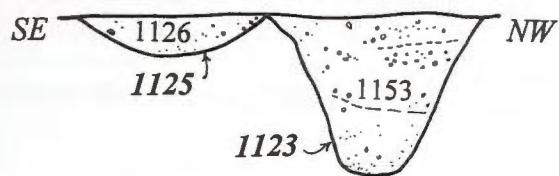
Ditch [1123] was 0.70m wide and up to 0.62m deep, with near vertical, slightly convex sides, and a flat base (Figure 36-7 (k), (l), (m), (n)). It contained at least two fills, (1124) and (1153), the latter containing two sherds of a shell-gritted everted jar or bowl rim of either late Iron Age or Roman date (Appendix 3, Dr. 3.55). The sherds of pottery were similar in date and fabric type to those found in other features across Area 2.

Ditch [1125] was 0.58m wide and 0.08m deep, with gradually sloping, concave sides, and a flattish base (Figure 37 (l), (m), (n) (i)). It contained a single sherd of Roman pottery.

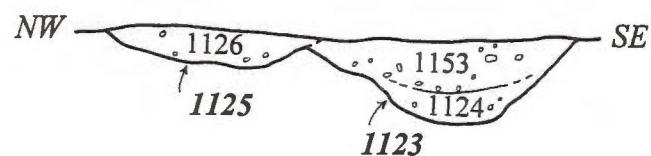
The enclosure complex continued to the south-east with another 'L'-shaped series of intercutting ditches. Ditch [1158] appeared to be the earliest of three ditch cutting episodes, being later cut by ditches [1156] and [1160]. The ditch was 0.45m wide and 0.17m deep, with a flat base (Figure 37 (p)). Re-cut [1160] cut the northern edge of ditch [1158], and was 0.90m wide and 0.28m deep, with fairly steep sides and a slightly rounded base (Figure 37 (p)). The fill, (1161), produced a piece of Romano-British *tegula*/brick, unidentifiable fired clay, and seven sherds of third to fourth century AD pottery.

Re-cut [1156], cutting the southern edge of ditch [1158], was 0.75m wide and only 0.13m deep, with gradually sloping sides and a flattish base (Figure 37 (p)). In the base of this ditch re-cut was a small posthole, [1162], with a diameter of approximately 0.30m and a depth of 0.08m.

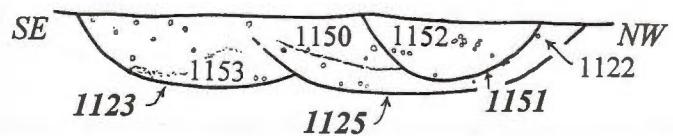
(l) Ditches 1123 and 1125



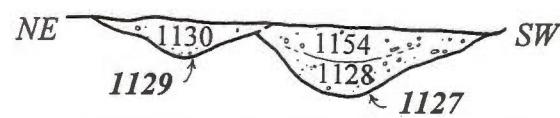
(m) Ditches 1123 and 1125



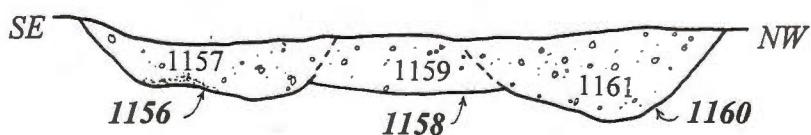
(n) Ditches 1123, 1125 and 1151



(o) Ditch 1127 and Gully 1129



(p) Ditches 1156, 1158 and 1160



(q) Ditches 1186, 1187 and 1188

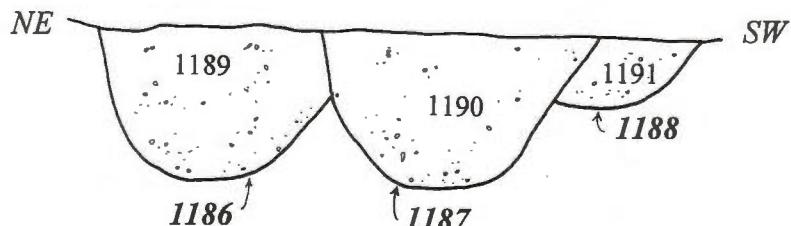


Figure 37: Site 9, Section Drawings

A second section, this time cut by a JCB, was excavated through the above ditches (Figure 38 (q)). This showed that the ditches were much deeper than those in the hand-excavated section, and that whilst the central ditch in the hand-dug section was the earliest, the central ditch in the machine-excavated section actually post-dated the outermost ditches. It is therefore unclear how the ditches in each section correspond to each other. No artefacts were recovered.

A narrow, shallow gully, [1192], was also discovered running parallel with the inside edge of the above complex of three enclosure ditches. This had fairly steep sides, a flattish base, and was c.0.40m wide. Its fill, (1193), comprised a mid-grey/brown sandy silt with a moderate amount of small rounded pebbles and no finds. The fact that this narrow gully followed the same course as part of the main ditches, suggests that it was contemporary with them.

#### **Postholes and Pit**

Four probable postholes ([1180], [1182], [1137], and [1135]) lay within the interior of the enclosures of Area 3. They all had the same sandy/silty fills, and had diameters ranging from 0.42m to 0.90m, and maximum depths of 0.35m. None produced any dating evidence.

A probable pit, [1139], 1.60m by 0.98m with a depth of 0.34m was also investigated. It contained two fills, but again produced no dating evidence.

#### **Furrows**

The south part of the site was truncated by a medieval plough furrow, preventing the full extent of the enclosure boundaries from being established.

#### **Area 3 Discussion**

Area 3 contained at least three further enclosures, following the same alignments as in Areas 1 and 2, and forming at least three fields. This area also produced more artefacts than Area 1 and 2, primarily from ditch [1127]. The number and variety of artefacts suggests that an associated settlement lay close by.

As with Area 2, there is some evidence, in the form of a posthole in the base of ditch [1156], that the ditches were once fenced. For the most part, it is unclear where the entrances to these enclosures were, as their full extents were not revealed, and part of the site was obscured by a plough furrow. The only likely entrance was the 2m space between [1121] and [1141].

#### **Site 9 Discussion**

The excavation at Bogle Holt revealed a series of rectilinear enclosures, as well as one distinctive trapezoidal enclosure. The form and spatial position of the trapezoidal enclosure suggests that it served as an animal compound. Furthermore, its small size, and the narrowness of its entrance, indicate that the stock were probably small animals, such as sheep, goats or pigs. The narrow gap between the parallel gullies would have allowed small stock to enter the enclosure but would have prevented them from getting out, since only one could pass along the passage. If this was the intended effect, then two stretches of additional fencing at the east corner of the enclosure would have helped channel the animals into the narrow passage (though there was no evidence of this). Although no dateable material was recovered from this enclosure, it is assumed to be of similar date to the enclosures in Areas 2 and 3, due to its spatial alignment.

The ditches within Areas 2 and 3 formed at least seven discrete land-units. If, as seems possible, some or all of the fields were once fenced, it seems more likely that at least some of the fields were for stock rather than for the growing of crops. The relatively small size of the enclosures suggests that this housing would have been temporary and seasonal, perhaps for wintering cattle and sheep, or for shearing, lambing or calving. Such stock enclosures or 'ranches' were commonly placed in areas adjacent to large open spaces, and this is true of this particular site with its proximity to the fens where

the animals could be grazed in the summer (Wacher, 1986, 111). The evidence of re-cutting indicates a degree of maintenance.

The use of at least some of the enclosures as stock compounds does not preclude others from having had an arable function. Indeed, most farms would have had a mixture of stock and arable, with stock in the fallow fields feeding off the stubble and weed growth, and maintaining the fertility of the soil through manuring. Enclosures of a similar proportion (17m by 27m) have been excavated at Lechlade, near London (Dark and Dark, 1998, 96).

A slight increase in artefacts and charcoal content, seen within the ditch fills, occurred in the south-west part of the site, tentatively indicating the direction of an associated settlement. Seven tile fragments, four identified as either *tegulae* or brick, were recovered from the enclosure ditches, suggesting the presence of a stone-built structure relatively nearby.

The dating of the site relies on the 117 recovered pottery sherds. This pottery largely dates from the mid-second century through to the later third century. The earliest Roman pottery consists of an abraded samian dish (Appendix 3, Dr. 3.31 from Central Gaul (dated to c.AD160 and later), and a fragment of a carinated jar or bowl of a type well known in the Lincoln area in the mid-second century. It is possible that eight of the pottery sherds belong to the late Iron Age, the majority of these linked by sherds from the same vessel/fabric and associated with Area 2. However, it is equally likely that they are Roman.

### 8.6 Site 11 Pottery Scatter, Ditch and Posthole

Plot 125, Anwick Fen, TF 12600 49974

#### **Summary**

*Two features, a small ditch and a posthole, were recorded during trenching and have been tentatively dated to the mid-3rd century AD by association with a small scatter of mid-3rd century grey ware pottery recovered from the same area. A single bronze buckle pin was recovered from the fill of the ditch.*

#### **Introduction**

The site runs alongside the River Slea to the west of The Harding, on the south-eastern edge of Anwick Fen (Figure 38). The archaeological features lie on marine and estuarine clay deposits between 0m and 10m OD, and are close to the northern edge of an extensive area formerly mapped as bearing peat deposits which have now been almost completely eroded away. The area would probably have been largely uninhabitable during Roman times.

Fieldwalking in 1993 recovered a slight scatter of eight Romano-British pottery sherds from Plot 125 (O.S Field Number 7400) which was interpreted as the by-product of agricultural activity. Fieldwalking in 1997 collected two additional sherds in the same area, but this again was insufficient to suggest significant localised activity.

#### **Results**

A single ditch and a posthole were recorded within the construction pipe-trench.

#### **Ditch [1708]**

Because [1708] was only detected within the pipe-trench, it was not possible to accurately record its true dimensions or extent. Although it appeared to be present on both sides of the trench, there was extensive land drain damage on one side and poor visibility on the other. Compaction of the running track and the proximity of the pipe, also meant that it was not possible to investigate any continuation beyond the trench. Assuming that the opposing cuts were part of the same feature, it would have been orientated east-south-east to west-north-west.

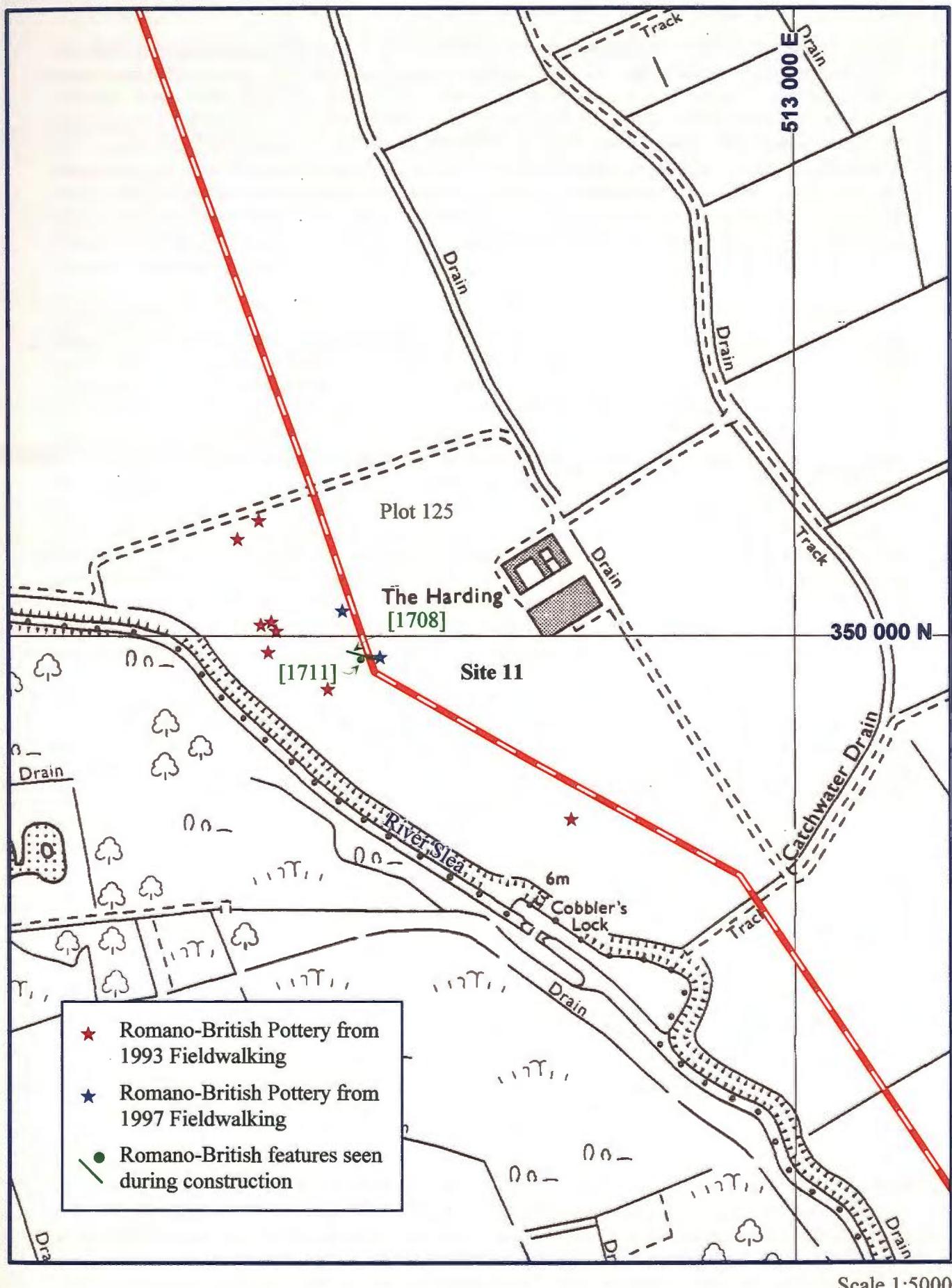


Figure 38: Site 11, Romano-British Pottery Scatter, Ditch and Posthole

The ditch measured approximately 1.30m wide with a maximum depth of 0.60m. At the point sectioned it appeared to have steep sides and a gentle rounded base. Within the base there was a distinct dip at the northern edge. This dip measured 0.14m wide at the top and 0.04m wide at the base, being approximately 0.05m deep. The ditch contained at least two fills, contexts (1709) and (1710). The lower fill, context (1709), contained a large concentration of carbonised branch or tree root within the aforementioned dip. It was not possible to see how far the wood extended into the trench side and no such material was apparent in the opposite section. It seems probable that both the dip and the wood are the result of root disturbance. The upper fill, context (1710), was unremarkable except that it contained a buckle pin, (Registered Find No.47). It is a large pin of a simple plain type made from copper-alloy wire and is therefore undatable. Buckles were common from the Romano-British period onwards.

#### **Posthole [1711]**

Post-pit [1711] was situated approximately 1.10m south of ditch [1708], and had also been cut by the pipe-trench. The remaining portion of the feature appeared roughly elliptical and measured 0.85m wide at the section, with a surviving length of approximately 0.50m and a maximum depth of roughly 0.39m below the base of the topsoil. The sides appeared near vertical and the base gently rounded. From the appearance of the fills, it seems likely that the post-pit had been dissected roughly in half.

The two fills of [1711] undoubtedly show that the post-pit once contained a post. A sharp 'V'-profile of heavily charcoal stained clay, context (1713), was situated at the centre of the pit, extending from the top of the feature to the base. This 'V' measured 0.50m wide at the top and 0.10m wide at the base. The remainder of the pit was filled with an homogenous clay, context (1712), very similar to, but nevertheless distinct from, the surrounding natural clay. It is probable that a pit was dug specifically to receive a post, and was then backfilled to provide support. The post had been burnt at a later stage leaving heavy charcoal deposits. Although wooden posts were sometimes charred in order to preserve the wood, this does not appear to be the case here, as the quantity of burnt material seems too great.

#### **Discussion**

Few conclusions can be drawn from the evidence recovered. The 1993 fieldwalking pottery sherds have been identified as Roman, whilst the two sherds from the 1997 survey have both been dated to the mid-3rd century onwards. No further Romano-British finds were recovered during the watching brief. The spatial association between this pottery and the archaeological features suggests they may be linked and that there was some level of Roman activity at this location.

#### **8.7 Site 18 Unstratified Artefacts**

Plot 145, Kirkby la Thorpe, TF 10647 45772

A small number of unstratified metal-detected finds, as well as a few Roman pottery sherds, were recovered from this field. The latter are presumed to be related to the Roman activity at Site 21 (see below). Site 18 is a multi-period site, which is discussed fully within Anglo-Saxon section 9.

#### **8.8 Site 21 Field System and Pits**

Plots 147 to 149, South-east of Kirkby la Thorpe, TF 10440 45320 - TF 10356 45090

#### **Summary**

*A number of archaeological ditches and pits were excavated within the 'header trench' and evaluation trench approximately 0.5km east of the village of Kirkby la Thorpe. Through the examination of geophysical survey, aerial photographs, evaluation and excavation, it was possible to see that the site formed part of a larger complex, active during the third to fourth centuries AD, after which it was abandoned, being sealed beneath an alluvial deposit, itself cut by a series of medieval plough furrows.*

## **Introduction**

Site 21 lies some 400m to the east the village of Kirkby la Thorpe and south of the A17 within construction Plots 147-149. The ground is low-lying and flat (5m OD), and sits upon a band of Sleaford sands and gravels (Figure 39). The Archaeological Desk-Based Assessment (ADBA) highlighted a series of cropmarks running either side of the pipeline route (DBA.DD; NAL Report 103, 1997). The cropmarks within Plot 149 had been recorded by the Royal Commission for Historic Monuments of England (RCHME) and interpreted as probably relating to a Deserted Medieval Village. Aerial photographs taken by Mr Godson, a local farmer from the Grange at Kirkby la Thorpe, show the cropmarks identified by the RCHME (Plate 6). During the 1993 pre-construction survey, the farmer at Sardenson's Farm to the south-west suggested that a Roman settlement extended from immediately south of the A17, to a point south of the railway line).

As part of the 1993 fieldwalking survey, the pipeline route within the vicinity of these cropmarks was investigated (Plots 147-149, Figure 39). A total of 33 sherds of medieval pottery were recovered, along with four sherds of post-medieval pottery (Brookes, 1994). Twenty-seven of these sherds came from Plot 149. Unfortunately, only Plot 147 was available for fieldwalking in the 1997 pre-construction survey, which only produced a single sherd of medieval pottery.

During the 1998 geophysical survey, a detailed magnetometer survey was conducted within Plot 149 (GSB Report No.98/07). The 40m by 80m survey detected two linear and two pit-like anomalies (Figure 39). The linears formed part of a rectilinear pattern running on the same alignment as the supposed medieval cropmarks. These and the fieldwalking results led to the excavation of two evaluation trenches in this area.

## **Results**

The features found during the evaluation and subsequent excavation were dated to the Romano-British period, and were buried beneath a layer of alluvium which was cut by a series of medieval plough furrows. This report will present the results of the evaluations (Figure 40), followed by those from the excavation (Figure 41).

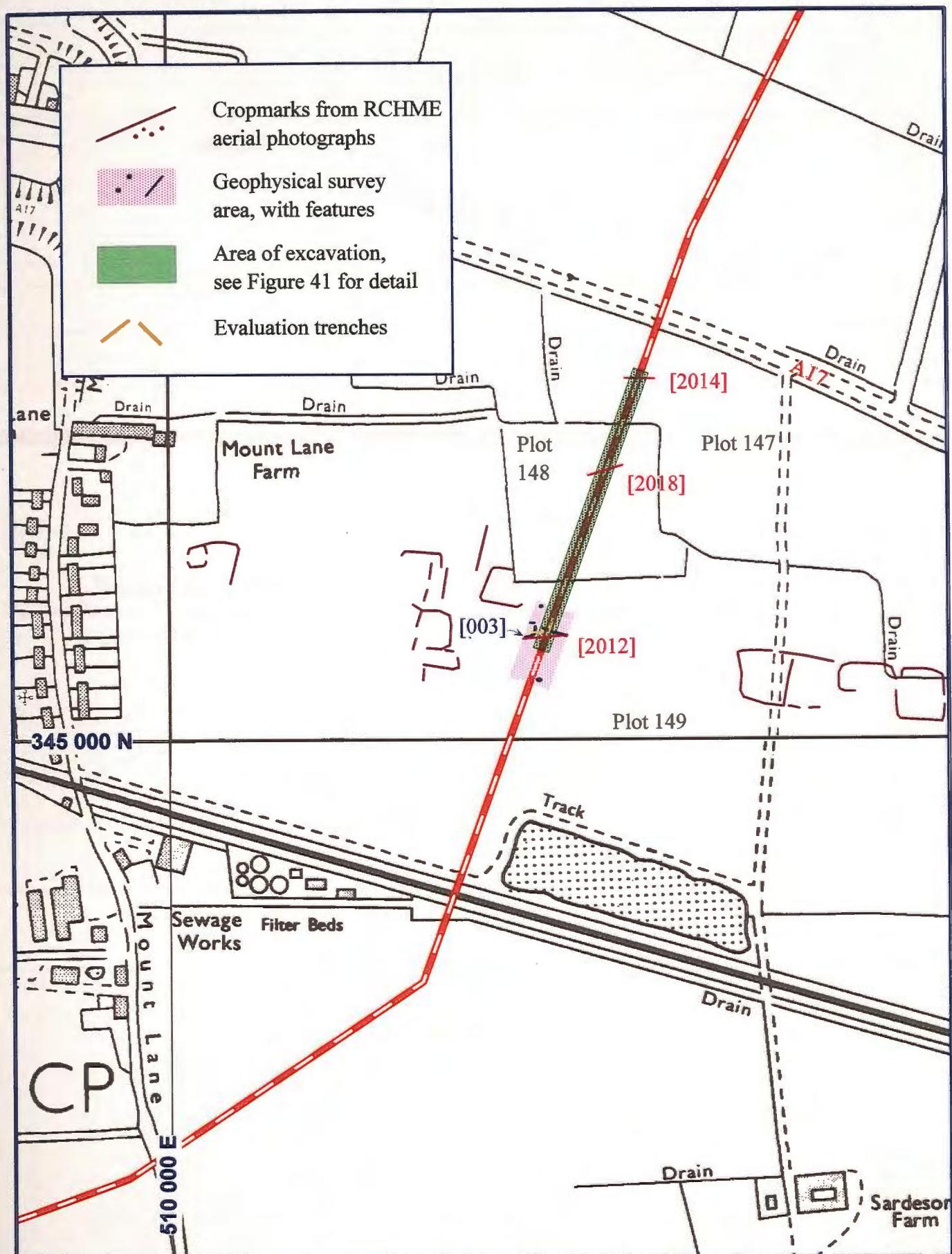
### **Evaluation in Plot 149**

Two trenches each measuring 2m by 10m were placed across the position of the geophysical anomalies (Appendix 13, Figure 24).

The topsoil (001), was made up of a dark grey sandy silt containing a moderate amount of sub-rounded and rounded pebbles, approximately 0.26m deep. Below the topsoil was an extensive deposit of alluvium, a distinctive mid-orange/brown sandy-silt (002), which sealed the archaeology. This layer was 0.20m-0.36m deep, with very occasional rounded and sub-angular stones. It contained nine pottery sherds, broadly dated to the Roman period, a single fragment of unidentifiable Romano-British tile, a fragment each of horse and cow bone, four sheep bones, a few cow-sized bones, and a Late Neolithic/Bronze Age scraper. These finds suggest that the site was abandoned and sealed by waterborne deposits at some point during the later Roman or post-Roman period.

Trench 01 was orientated north-north-east to south-south-west across the easement and contained two modern land drains and a series of natural hollows. The linear geophysical anomaly located during the field survey proved to be of geological origin.

Trench 02 was orientated east-west to investigate the magnetic anomaly identified from the geophysical survey. The trench revealed ditch [003] (Figure 40). This feature was orientated north-south and had a near vertical profile, exhibiting a slightly concave eastern edge and a flat base, with its western edge situated outside the evaluation trench (Figure 42 (b)). The ditch was 0.60m deep, and had a potential width of 1.5-2m. It had three identifiable fills, the primary fill (006), comprising a light green/brown sandy silt with occasional small sub-angular stones, similar to the alluvial deposit (002) overlying the feature. This fill was probably formed through natural silting. The secondary fill, (005), comprised a



**Figure 39: Site 21, Romano-British Field System and Pits**

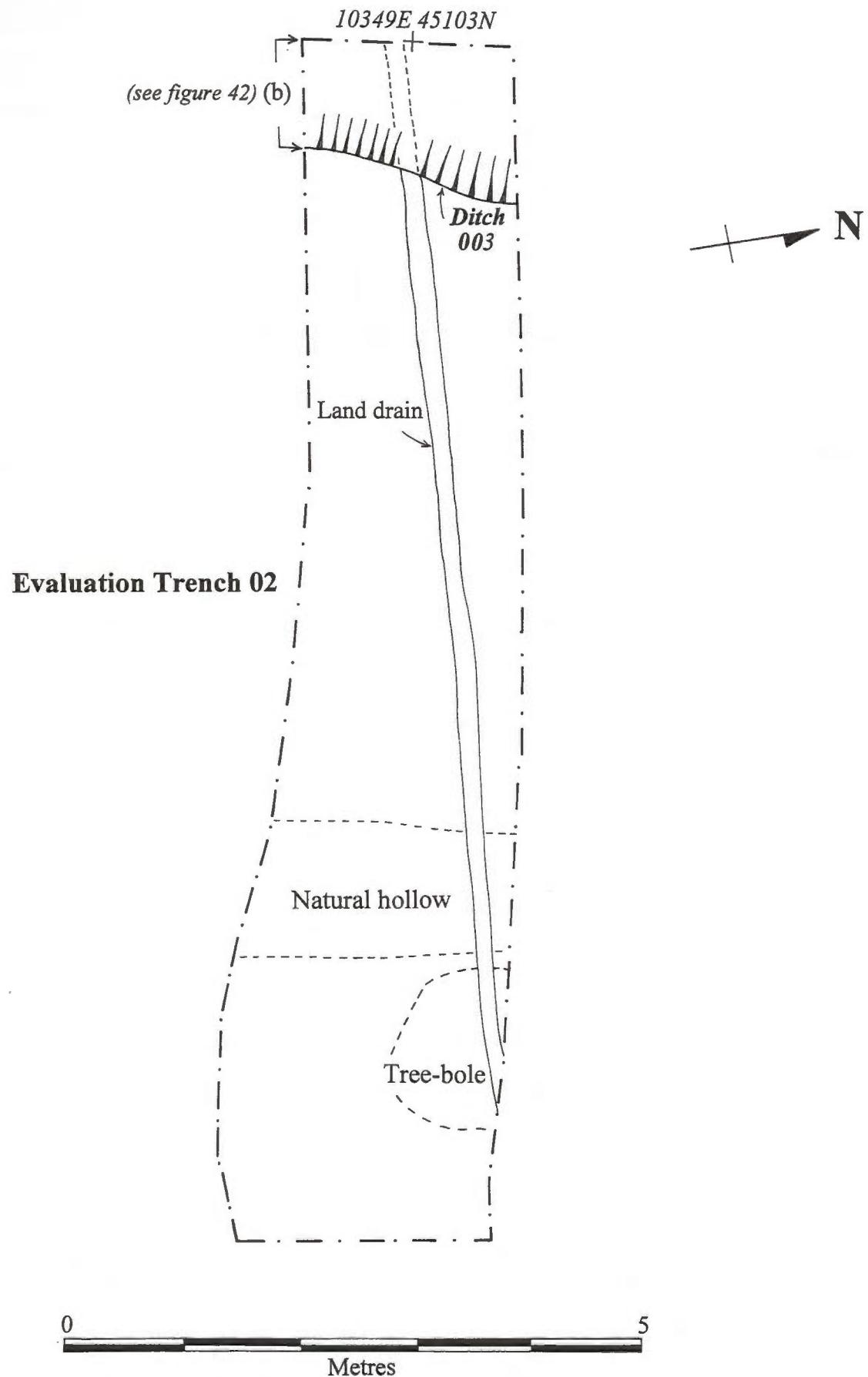
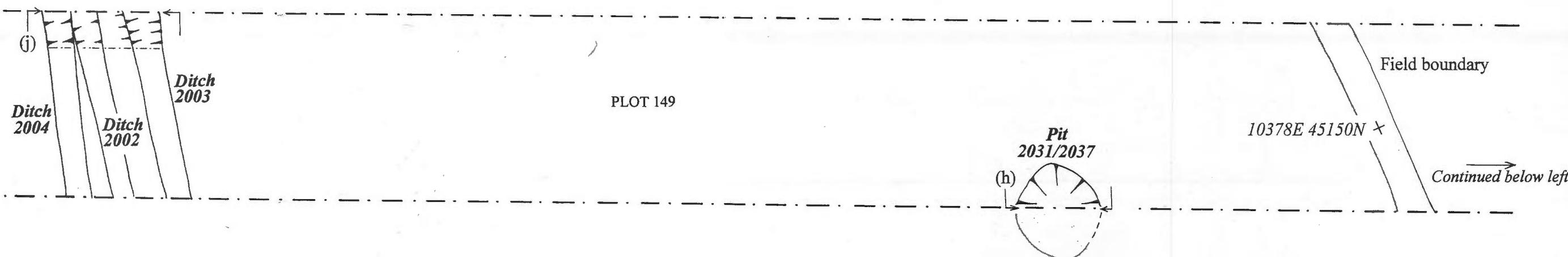
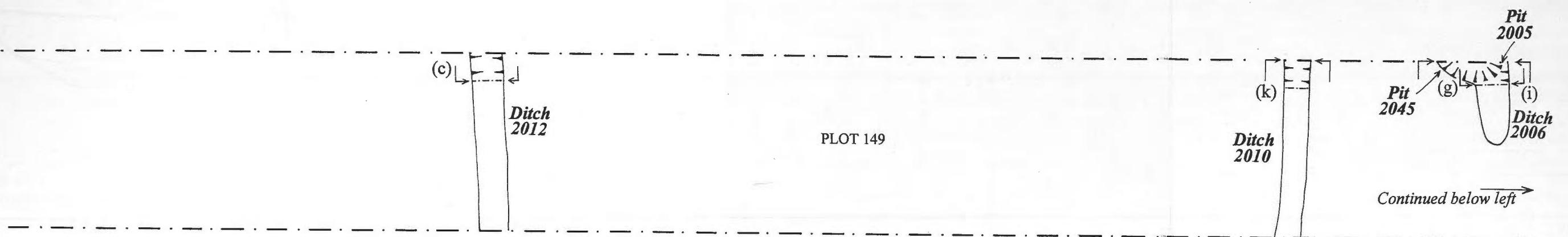


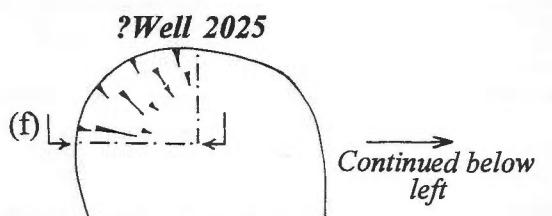
Figure 40: Site 21, Plan of Evaluation Trench 02

N

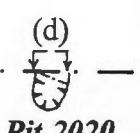
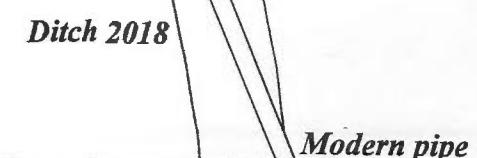


PLOT 148

Represents 50 metres  
of trenching;  
No archaeology recorded



PLOT 148



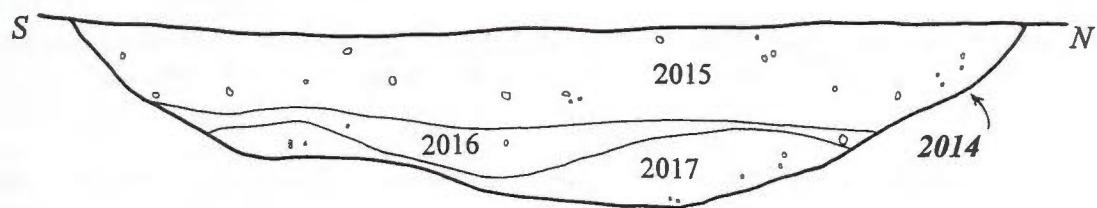
0

Metres

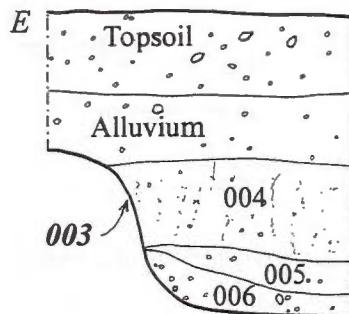
20

Figure 41: Site 21, Plan of Romano-British Field System and Pits

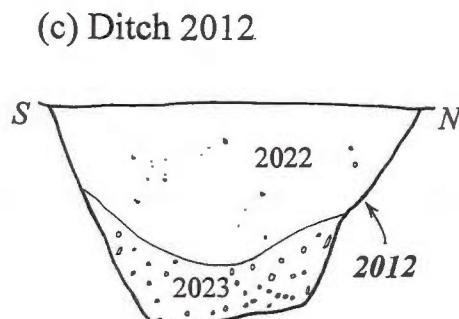
(a) Ditch 2014



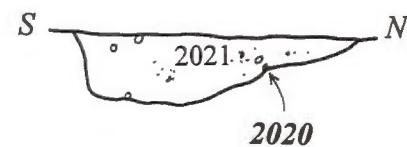
(b) Ditch 003  
(Evaluation Trench 02)



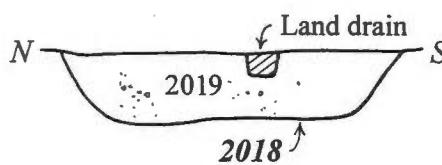
(c) Ditch 2012



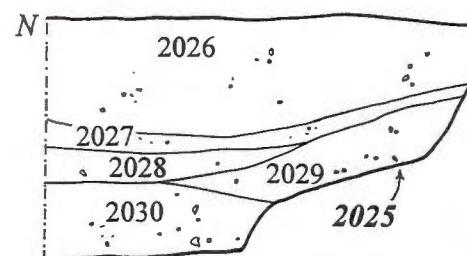
(d) Pit 2020



(e) Ditch 2018



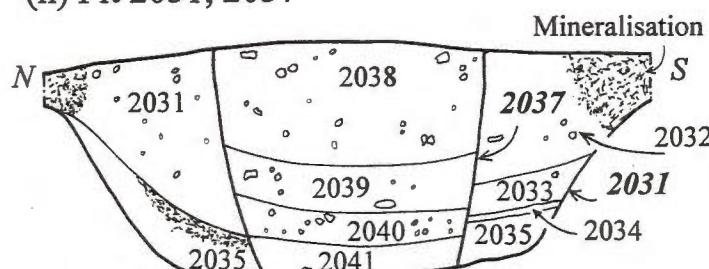
(f) ?Well 2025



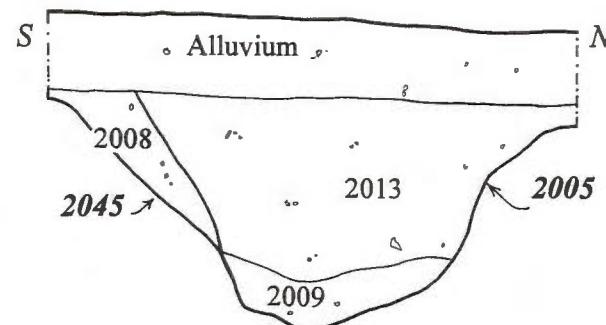
(g) Ditch 2006



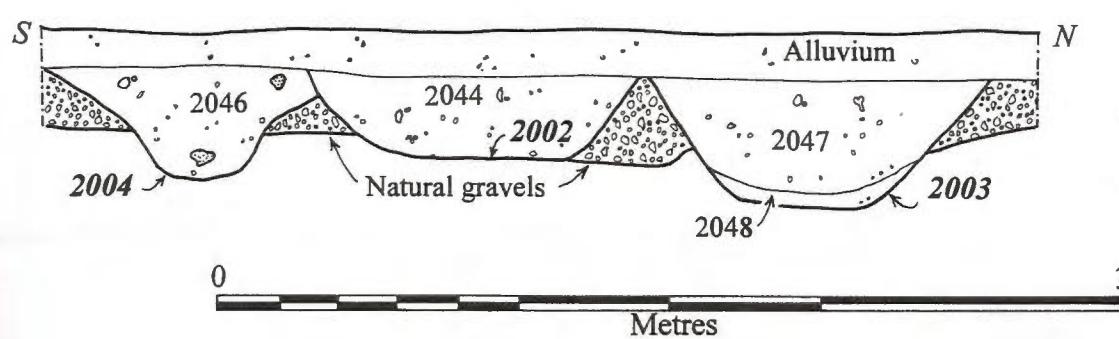
(h) Pit 2031, 2037



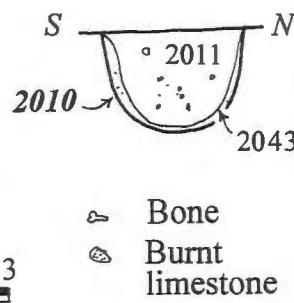
(i) Pit 2005, 2045



(j) Ditches 2002, 2003 and 2004



(k) Ditch 2010



— Bone  
— Burnt limestone

Figure 42: Site 21, Section Drawings

dark grey/black clayey silt with a high concentration of charred material and very occasional patches of red clay. It produced a single shell-gritted sherd, which could be Iron Age, but is more likely to be of Roman date. It also produced a solitary sheep's tooth. The tertiary fill (004), was a mid-greenish/brown clayey silt, containing several artefacts. These comprised ten pottery sherds of mixed date, mostly dating to the third century AD, several cattle bones, and cow and sheep-sized bones. A single piece of Romano-British brick/tile was also recovered.

This Romano-British ditch represented the magnetic anomaly from the geophysical survey, and if set against the aerial photographic evidence, appears to form part of a larger enclosure system (Figure 39). The primary ditch fill suggests that the feature was left open for some time after it had been constructed allowing this layer to form. The secondary fill had a high charred plant content representing deliberate infilling as did the tertiary fill, before the ditch was finally sealed by a layer of alluvium.

Two environmental samples were taken from the enclosure ditch (004 and 005) (Appendix 12). The samples taken from both fills were notably the richest of all the samples taken on the pipeline excavations, particularly as the sample size was only five litres for each. Although charcoal was not abundant, each contained a high charred plant element, consisting mainly of cereal grains with smaller amounts of cereal chaff and weed seeds.

Free-threshing bread wheat was best represented, with glume wheat (*Triticum spelta*) also present, although the majority of the wheat grains were too poorly-preserved for further identification. Large quantities of barley, especially six row hulled barley, and some oat grains were present, although it is most likely that the oats were wild.

The weed seeds included several grasses, bromes and rye-grass. Bromes are characteristic of cereal storage deposits as they are a similar size to the grain, making them difficult to separate other than by hand. Corncockle was also present, being another arable weed typically found in cereal storage deposits. Other weeds included docks and black bindweed, which grow in waste places, arable land and gardens. The weeds may have derived from plants growing nearby, or may have been imported with the cereals.

The plant remains within the samples are dominated by cereal grains from the final stages of crop cleaning, possibly charred during drying or cooking, or from the accidental burning of part of a grain store. Crop-processing debris was also present, suggesting that the nearby settlement was producing its own crops. It is possible, from the lack of other finds within the samples, that the charred material reflects a specific dump near to this part of the enclosure ditch. The snail fauna, although limited, suggests an open country/grassland environment, although a single snail shell of *Planorbis leucostoma* from fill (004) suggests also that the enclosure ditch was seasonally water-filled.

### Further Mitigation

No other features were uncovered during the evaluation stage within Plot 149. However, the discovery of the Romano-British ditch, coupled with the cropmark evidence, made it highly probable that further remains might similarly lie concealed within the path of the pipeline. The probability of this was further increased when, during the evaluations, an additional collection of artefacts was made from the topsoil in Plots 147-9, most of them concentrated in the area between the two cropmark groupings. Plot 149 produced 111 mainly third century AD abraded pottery fragments along with some post-Roman sherds. The presence of a Nene Valley Colour Coated bowl suggests that the date extends into the fourth century. In addition, two pieces of decorative Roman glass were recovered from Plots 147 and 149. That from Plot 147 comprises a piece of a bottle, jug or flask formed in light-green glass with a conical base and a high kick. That from Plot 149 comes from a light-blue vessel with a raised moulded-rib decoration (Appendix 11). The presence of glass suggests that the nearby settlement held some status.

Topsoil stripping in the area revealed medieval furrows cutting into an alluvial layer beneath. As anticipated, no Roman features were seen at this stage, and any that did exist were presumed to lie beneath the alluvium. It was agreed with Transco and Laing Engineering Ltd that a trench would be

excavated to the base of the alluvium in advance of the excavation of the pipe-trench. This four metre-wide 'header trench' was inspected throughout Plots 147, where it began 20m to the south of the A17, and throughout Plots 148 and 149, where it stopped 20m north of the railway (Figure 39). The rest of the site would be protected under alluvial cover, and it was agreed that the easement would not undergo the usual subsoil ripping.

### **Excavation**

Topsoil stripping revealed remnant furrows throughout Plots 148 and 149. They formed very distinctive grey/brown sandy-silty bands with depths of up to 0.15m, running east-west at about 9m intervals. The furrows were cut into the distinctive mid-orange/brown sandy-silt alluvial layer, initially identified during the evaluations at depths of between 0.05m and 0.30m. Several finds were attributed to this alluvium at this stage, including a single fragment of broadly dated Romano-British pottery and a sheep-sized fragment of animal bone. The removal of the medieval ploughsoil and the alluvial layer revealed twelve features consisting of pits and linear features. These spanned a distance of approximately 260m from ditch [2014] within Plot 147 to just south of the evaluation trenches in Plot 149 (Figures 39 and 41).

### **Plot 147**

#### **Ditch [2014]**

A single ditch [2014], aligned east-west, was uncovered in Plot 147 (Figure 39). On excavation it had fairly steep, concave sides, and a flattish base with a width of 3.15m and a depth of 0.60m. It contained three clayey silt fills (2015, 2016 and 2017). The primary fill, (2017) was probably the result of the ditch sides slumping in after construction. The other two fills also appeared to be the result of natural silting of the ditch. Secondary fill (2016) had a distinctively organic, black matrix and contained occasional charcoal flecks. Its organic nature probably reflects a period or periods of standing water within the features. A small number of cow-sized bone fragments were recovered from the fill.

The dating of this ditch is undetermined, but it could easily be Roman because it lay on a similar alignment to the other Roman features and cropmarks, and it was sealed by the alluvial layer. It seems likely therefore that it formed part of a system of Roman enclosure ditches.

### **Plot 148**

A ditch, a pit, and a possible well were uncovered in Plot 148 (Figure 41). All these features were sealed by an alluvial layer which contained several broadly dateable Romano-British pottery sherds.

#### **Pit [2020]**

The most northerly of these features was pit [2020] which had an irregular shape, a steep southern edge, a gradually sloping northern edge, and a flat base (Figure 42 (d)). The pit measured 0.76m by 0.48m and fell to a depth of 0.13m. It contained a single dark grey sandy silt fill with moderate to frequent amounts of heat-shattered small rounded pebbles, and a large amount of charcoal flecking. The pit itself was not burnt so it is assumed that it was used for the disposal of fire material.

#### **Ditch [2018]**

Approximately 15.5m to the south of the above pit lay ditch [2018]. This had been truncated by a modern land drain, and ran east-west across the 'header trench'. In profile it had fairly steep, concave sides and a flat base, with a width of 1.12m and a depth of 0.24m (Figure 42 (e)). Its single fill, (2019), was a mid-brown sandy silt containing occasional to moderate sub-angular limestone fragments. A single sherd of Romano-British pottery was recovered from the fill (Appendix 3). It is most likely that this ditch also formed part of the Romano-British field system.

#### **?Well [2025]**

Twenty-two metres south of ditch [2018] lay a probable Roman well [2025]. Not all of it was visible, but it was presumably circular in shape with a diameter of 3.10m, and a depth of 0.75m. A quarter of the

feature was excavated which showed it to have a steep, step-like profile (Figure 42 (f)). Five fills were identified, ranging from brown to orange to grey sandy silts. The upper fill (2026), produced a single sherd of Romano-British pottery (Appendix 3).

Within the well, it appears that two distinct periods of collapse of the well edge occurred (2030 and 2029), before the process of natural silting began (2028). The well itself was not very deep, although this is not surprising as the site was in a very low-lying position, so groundwater levels were probably very high. The presence of this feature, as well as that of pit [2020], suggests that domestic activity was occurring nearby.

### **Plot 149**

This plot produced the majority of the archaeological features (Figure 41).

Five fragments of unstratified Romano-British tile were recovered during the watching brief from Plot 149. Two of these were pieces of *imbrex* (roof tile), with the remainder fragments of either *brick* or *tile*. The presence of tile fragments suggests that at least one stone built structure could have lain close by (Appendix 5).

### **Pit [2031]**

Seven metres to the south of the present-day field boundary dividing Plots 148 and 149 was pit [2031] (Figure 41). Only half of this feature was uncovered in the 'header trench', but removal of the alluvial deposits outside this area showed it to be roughly circular with a 2m diameter, having a steep 'U'-shaped profile, falling to a depth of 0.80m. The pit had been very steeply re-cut within its central portion (Figure 42 (h)).

The original pit contained areas of slumping on its northern side, and had at least four sequences of silting comprising grey to brown sandy silts, with the primary fill (2035) containing two Roman pottery sherds. The form and character of this pit was quite similar to possible well [2025] in Plot 148, suggesting that this feature may also have been originally dug as a water collection pit. After the feature had completely silted up, it was re-cut as [2037]. This re-cut contained four grey to brown sandy silty fills, producing three probable mid-third century pottery sherds (2039) and two cattle bone fragments. The upper pit fill (2038), contained four pottery sherds probably dating to the mid-third century, eight cattle bones, and a single residual prehistoric flint flake. The final fill shows that once the feature had been part silted up it was used for the disposal of refuse.

### **Pit [2455]/[2005]**

A pit was excavated on the very western edge of the 'header trench'. This feature removed all traces of earlier ditch [2006] (Figure 41). Very little of pit [2455] could be seen, as it had been truncated by a later cut [2005]. The dimensions of the original pit were unknown but it contained a yellowish/brown silty sand with several fragments of possible pig bone and a cow-sized fragment (Figure 42 (h)). The later pit was over 0.47m deep, with a fairly gradually sloping northern and steep southern edge falling to an uneven base. It contained two silty-sand fills both with occasional charcoal flecks, with the primary fill containing a horse jawbone. The function of the pit is undetermined.

### **Ditches [2003]/[2002]/[2004], [2006], [2010] and [2012]**

A series of three parallel ditches lay some 19m to the south of the above pit (Figure 41). The ditches were all aligned east-west and had 'U'-shaped profiles, two with flattish base and one with a more rounded bottom (Figure 42 (i)). Their dimensions were all similar, with widths ranging from 0.90m-1.12m and depths from 0.28m-0.42m. No dating evidence came from the sandy silty ditch fills but they are thought to be Roman as they were sealed beneath the alluvial deposit and aligned to other Roman period features.

The close proximity of the ditches to each other suggests that they represent the re-establishment of a single boundary. Indeed, ditch [2002] cuts [2004]. This reflects continued maintenance of the boundary, and therefore suggests it was of some importance.

Within the next 33m south along the pipeline 'header trench', three ditches were identified (Figure 41). Ditches [2010] and [2012] ran the length of the trench and [2006] extended over half of it, possibly signifying an entrance. These features measured between 0.46m and 1m wide. In terms of depth, the features were also fairly dissimilar, the most northerly ditch [2012], being 0.60m deep, and [2010] and [2006] being 0.33m and 0.19m respectively. The ditches had 'U'-shaped, fairly flat-based profiles, except for [2010], which appeared more rounded (Figures 42 (c), (g), (k)). Each ditch contained two grey/brown sandy silt fills, with [2006] and [2012] producing occasional charcoal flecks. Artefacts were recovered from the upper ditch fills of [2010] (two late third to fourth AD pottery sherds and an unidentified animal bone) and from [2006] (two broadly dated Roman pottery sherds, several cow bones and a sawn section of red deer antler shaft). The latter antler shaft represents a discarded waste piece, probably shed from the deer rather than obtained from a hunted animal. Antler was used as the raw material for a number of items in the Roman period, such as handles, combs, toggles and gaming counters.

The function of the above ditches, like those discussed earlier, appears to have been as part of a Romano-British field system, part of the complex identified by the RCHME from the air.

### Site 21 Discussion

From the investigations carried out and from the information supplied by the surrounding cropmark evidence, it appears that the pipeline passed through an area of fairly extensive Romano-British fields, and that a fairly large Roman settlement must exist somewhere within the vicinity (Plate 6). The photograph taken by a local farmer shows this field system, which appears to extend in all directions. Unfortunately, the photograph is too oblique to define and plot the cropmarks accurately.

The pottery, where datable, suggests a predominantly mid-third to fourth century AD period of activity. Little tightly-dated stratified pottery was recovered. Six pieces were only broadly datable as Roman. Ditch [2010] produced two late third to fourth century sherds, the re-cut of pit [2031] contained seven probable mid-third century pieces, while the ditch investigated during the evaluations produced ten sherds mainly dating to the third century, its secondary fill producing a single sherd which could be Iron Age but more likely to be Roman. The presence of several pieces of Roman fine wares and Roman glass suggest a fairly affluent nearby settlement. Indeed, the presence of some Romano-British brick and roofing tile suggests that this associated Roman settlement may have had at least one brick built structure with a tiled roof (Appendix 5).

It is not possible to say where the associated settlement lay, especially if it is buried under an alluvial deposit. It is possibly that it lies within the cropmark complex (even though it is not identifiable as such) to the west and east of the pipeline, or perhaps under the present site of Kirkby la Thorpe village to the west (Figure 39). Excavations carried out in 1995 immediately west of Mount Lane (TF 0986 4526) within Laythorpe Deserted Medieval Village identified Roman deposits. The occurrence of a single tessera fragment and fragments of box-flue tile suggested this site was close to a high status building, perhaps a villa complex (Lincolnshire History and Archaeology, Vol 31, 1996, 54).

It is not certain if the fields were utilised for stock enclosure, arable or indeed both. However, the presence of cattle, sheep, horse and pig bones is indicative of livestock rearing, whilst the environmental evidence suggests that some arable farming was taking place. This evidence, albeit limited due to sample size, was the richest from the whole pipeline. The two samples taken were dominated by charred cereals from the final stages of crop cleaning which may have been charred during drying or cooking. Even more interesting is the evidence for the early stages of cereal crop processing, indicative of local cultivation. These deposits may reflect both the specific discard of burnt waste and the accidental charring of a cleaned crop. The cereals represented include free-threshing

bread wheat, glume wheat and barley (in particular six row hulled barley). The identified weed seeds were also typical of those associated with arable cultivation.

The site itself is clearly well-preserved, being sealed beneath an alluvial layer which produced ten broadly dated Romano-British pottery sherds. This alluviation, brought about by a period of flooding, may correspond with other recorded episodes dating to the later part of the second and third centuries and found at Fengate, Peterborough. Other Nene Valley, Fen-edge sites suggest flooding between about 230 and 270 AD. Further evidence of increased periods of flooding in the late Roman period can be seen in the Trent Valley, and at Sandtoft, in South Humberside (Brown, 1997, 226).

### 8.9 Overall Discussion

Five Romano-British sites were discovered along the course of the pipeline. At the northern end lay Site 2, north-west of the village of Minting, and Site 6, north of Bucknall. Both were located on boulder clays. Around the mid point of the pipeline lay Site 9, south-west of Martin, located on river gravels. Site 11 lay on the edge of Anwick Fen on marine and estuarine clays, whilst Site 21, south-east of Kirkby la Thorpe, was sited upon river gravels at the southern end of the pipeline (Figure 2).

Site 21 was of particular interest as it was sealed by alluvial deposits, highlighting the importance of the changing environmental conditions, which encouraged or inhibited settlement on lands affected by both freshwater flooding and marine transgression (Whitwell, 1992, xxvii). Flooding must have been a hazard on these low lying sites, although it would have no doubt been localised and possibly area-specific. Fenland sites outside of Lincolnshire appear to have been particularly badly hit in the first half of the third century AD (Whitwell, 1992, 96).

The majority of the Roman sites discovered appear to represent field systems and enclosures associated with nearby rural settlements. The presence of stock enclosures, as seen at Bogle Holt, Martin (Site 9), fits in with the present thinking that much of the lowlands were used for stock rearing (Simmons, 1992, 20). However, some arable farming was occurring at the time, and this was clearly identified through the environmental evidence at Kirkby la Thorpe (Site 21), where nearby crop processing was occurring.

Moor Farm, Bucknall (Site 6), was the only site to provide evidence for actual dwellings. Originally the site was settled in the late Iron Age, with evidence during the earliest Roman period for the occurrence of iron working and the construction of buildings with painted wall plaster. Occupation appears to have continued through until the end of the second century AD, after which there is an absence of activity until the late fourth century AD when a quantity of unstratified pottery suggests re-settlement nearby.

The presence of Roman sites in the lowland parts of Lincolnshire causes little surprise as there is plenty of evidence that the Romans were quick to continue the exploitation of the fertile Lincolnshire soils which had begun in the Iron Age. Aerial photography has shown that the Fens and in particular the Fen edge was fairly densely occupied in the Roman period. Evidence seen from the air suggests native type settlements with droveways and irregular enclosures to either side, which represent the house sites, gardens and paddocks of small settlements. The size of such settlements would have varied, though groupings of farms associated with surrounding field complexes appear to be more common than isolated examples (Whitwell, 1992, 97). The heyday for this occupation and prosperity in the Fens is suggested as being AD 120 until AD 270 (Whitwell, 1992, 93). This agrees with the majority of the material found on the pipeline, and with the dates of Roman road systems and Car Dyke.

The pipeline investigations have highlighted this exploitation of the lowland Lincolnshire during the Roman period, and shown some evidence for continuity from the Iron Age. Linear developments such as this, coupled with aerial photographic research and an understanding of the natural environment, can provide a valuable insight into the settlement patterns and environment of the Fens and Fen edge throughout the Roman period.

## 9. ANGLO-SAXON

### 9.1 Archaeological Background

The Anglo-Saxon period dates from the breakdown of Roman rule and Roman institutions in Britain in the fifth century (traditionally 410AD), until the Norman Conquest in 1066 (Adkins, 1998). Archaeologists commonly divide this period into three: early (up to approximately 650AD), middle (up to approximately 850AD) and late Saxon (up to 1066AD).

The term ‘Anglo-Saxon’ is a convenient label for the people who invaded and settled in Britain in the fifth century AD. In reality, there never was a people called the ‘Anglo-Saxons’. The predominant settlers were Angles (from southern Denmark) and Saxons (from Saxony), but there were also other groups such as Jutes, Frisians, and Franks. The Angles largely settled in East Anglia and northern England, whilst the Saxons settled in the Thames Valley and Wessex. All of the early settlers were divided into tribal groups, but by the ninth century four kingdoms had been established: Wessex, Mercia, East Anglia and Northumbria (Adkins, 1998). Kesteven, which was part of the territory of the Middle Angles, appears to have been under Mercian lordship throughout the seventh century, apart from short periods when Northumbrians were overlords south of the Humber (Sawyer, 1998). The archaeological remains discovered during the construction watching brief in 1998 were of part of a seventh century inhumation cemetery near the present day village of Kirkby la Thorpe, east of Sleaford, in what would have been the territory of the Middle Angles.

### 9.2 Pipeline Results

Apart from the cemetery found during construction, only one additional unstratified sherd of Anglo-Saxon pottery was recovered during the 1997 fieldwalking survey. This sherd was found within the same field as the cemetery site, just 80m to the north.

### 9.3 Site 18 Cemetery

Plot 145, Kirkby la Thorpe, TF 10647 45772

#### Summary

*Site 18 is a multi-period site dating principally to the late Iron Age and Anglo-Saxon periods, but with additional remains from the late Mesolithic/early Neolithic through to the medieval period. The earliest evidence consisted of a scatter of worked flints from the late Mesolithic/early Neolithic period. This was followed by a larger number of worked flints and pottery fragments dating from the late Neolithic to middle Bronze Age period, possibly indicating settlement activity. There was then an apparent lull until the mid-late Iron Age when two possible round barrows were constructed. Three possible rectangular barrows may also date to this period. If these Iron Age remains do represent circular and square barrows, they are extremely rare in Lincolnshire, and may even be of national importance. Several unstratified pieces of Romano-British pottery and metalwork dating to the fourth century AD were recovered from the site and its immediate locale, indicating general activity in the area at this time. This discovery of nine inhumation burials, dated by grave goods to the seventh century AD, reflects the establishment of a formal pagan Anglo-Saxon cemetery. This too is an important discovery, very few similarly dated inhumation cemeteries existing in Lincolnshire. Later medieval activity is demonstrated by pottery and furrow remains.*

#### Introduction

This site is situated on a slight ridge of Oxford Clay, at approximately 10m OD, on the edge of a valley between Bargate Hill (20m OD) and Kirkby Mount (30m OD). The floor of the valley (5m OD) and the surface geology of the ridge consist of free-draining Sleaford sands and gravels (Figure 6).

This plot was first fieldwalked in 1993, when nine prehistoric flints and three sherds of medieval pottery were recovered. During the pre-construction phase of fieldwalking in 1997, a total of five

artefacts were collected, consisting of two sherds of Roman pottery, one sherd of Anglo-Saxon pottery, one sherd of medieval pottery and a single late Neolithic/early Bronze Age flint scraper.

Feature remains were first uncovered during the archaeological watching brief in 1998. Upon completion of topsoiling, a stretch of easement approximately 75m long was highlighted for investigation. The entire easement was then hand-cleaned using hoes and all features excavated by hand. All grave fills were sieved using a 5mm mesh, whilst half of the fill removed from sections within ring ditches [1990] and [1993] was also sieved.

## Results

Uncertainty as to the age of many of the features (excluding the inhumations) has prevented their definite allocation to a specific period. It has not, therefore, been possible to fully interpret the archaeology in terms of phases of activity. Instead the site has been broken down into six distinct feature types : ring ditches, rectangular ditches, postholes, pits, inhumations and furrows. Each feature type will be described prior to discussions regarding function and date.

### *The Ring Ditches*

Two ring ditches, [1990] and [1993], were partially exposed along the eastern easement edge, at the northern end of the site (Figure 43, Plate 12).

#### *Ring Ditch [1990]*

Approximately half of ring ditch [1990] appeared to fall within the easement (Plate 7). It had an external diameter of 9.9m and a width of approximately 1.7m. Five 1m-wide sections were excavated, and all produced similar results (Figure 44 (a) and (b); Plate 8).

The ditch varied in width between 1.26m and 1.70m, with a maximum depth of between 0.50m and 0.62m. In profile it had a fairly symmetrical 'V' shape with a flattish base up to 0.60m wide. The majority of sections showed four main silting phases and, whilst some contexts varied slightly in matrix, the same sequence existed in all sections.

Primary fills consisted mainly of yellow-brown to orange-brown sandy silts and silty sands with moderate amounts of small sub-rounded and rounded stones ((2337)/(2360/1)/(2371)/(2375)/(2382)). Depths varied between 0.14m and 0.21m.

This was followed by grey-brown and orange-brown clayey and sandy silts ((2338)/(2353)/(2369)/(2373)/(2381)). These silts generally contained only occasional sub-rounded and sub-angular stones and varied in depth between 0.13m and 0.27m.

Next came a layer of much stonier material, usually within a mid- to dark grey-brown sandy silt matrix and between 0.16m and 0.26m deep ((2339)/(2354)/(2370)/(2374)/(2380)). This stony layer was evident around the full circumference of the ring ditch and appears to have entered the ditch from the interior. This has led to its interpretation as probable eroded mound material.

The remainder of the ditch, measuring a maximum depth of 0.19m at the time of excavation, was then filled by a mostly mid- to dark brown sandy silt with only occasional sub-rounded and sub-angular pebbles ((2340)/(2355)/(2377)).

All four silting phases contained occasional charcoal flecks and produced finds. The primary fills produced a total of one possible Mesolithic/late Neolithic flint core, four prehistoric flint waste flakes, two undecorated middle Bronze Age pottery sherds, thirteen fragments of mid-late Iron Age pottery, three tiny pieces of unworked fired clay, two pieces of daub and 115g of animal bone. One of the daub fragments weighs 19g and has a 25-30mm diameter impression from a vertical rod (Appendix 6, Dr. 6.2). The other weighs 20g and has three horizontal wattle impressions (Appendix 6, Dr. 6.1). The animal bone consists of cattle, pig and sheep remains, some of which shows evidence of burning.

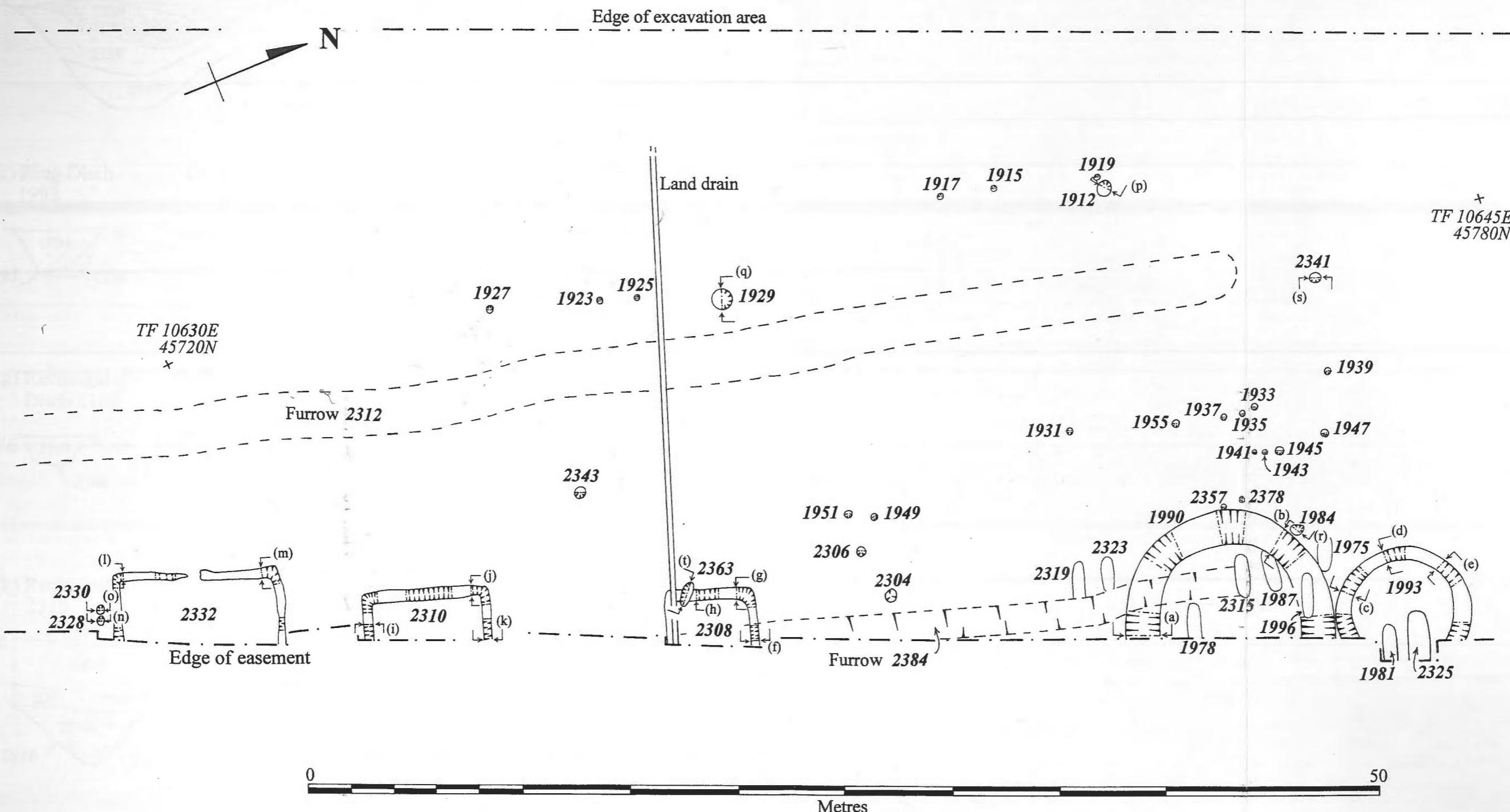
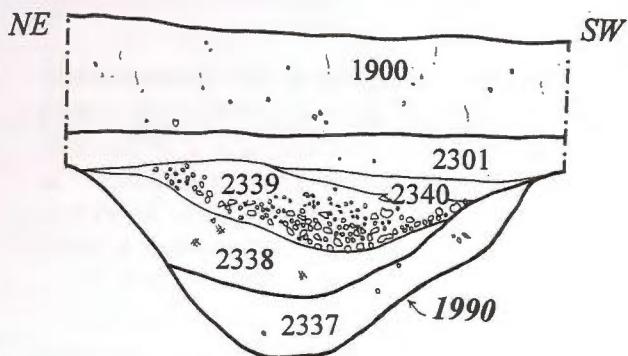
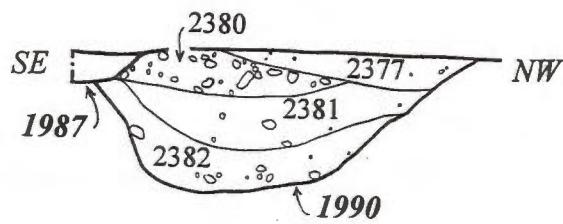


Figure 43: Site 18, Plan of Multi-Period Site

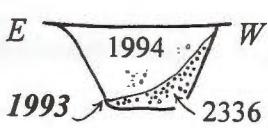
(a) Ring Ditch 1990



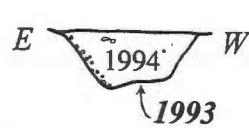
(b) Ring Ditch 1990 and Grave 1987



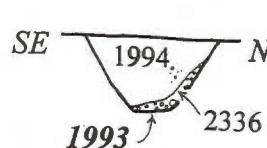
(c) Ring Ditch  
1993



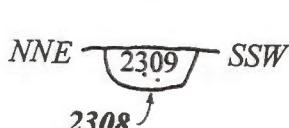
(d) Ring Ditch  
1993



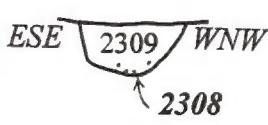
(e) Ring Ditch  
1993



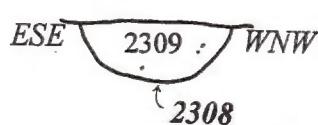
(f) Rectangular  
Ditch 2308



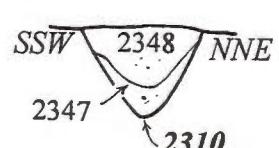
(g) Rectangular  
Ditch 2308



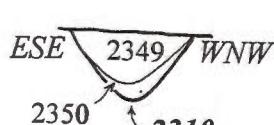
(h) Rectangular  
Ditch 2308



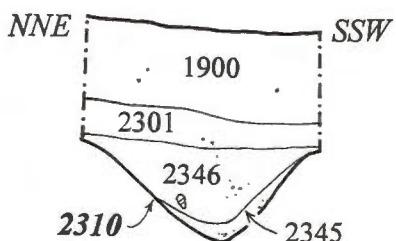
(i) Rectangular  
Ditch 2310



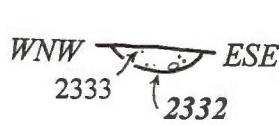
(j) Rectangular  
Ditch 2310



(k) Rectangular Ditch  
2310



(l) Rectangular  
Ditch 2332



(m) Rectangular  
Ditch 2332



Worked Flint

Charcoal

Figure 44: Site, 18, Section Drawings (a)-(m)

The secondary fills produced six prehistoric flint waste flakes, one undecorated middle Bronze Age pottery sherd, twenty-six Iron Age/late Iron Age pottery sherds, two small pieces of unidentifiable fired clay and 485g of animal bone. The bone has been identified as belonging to sheep, cow and pig. Several of the fragments are burnt and two of the sheep bones exhibit butchery marks. Also present was a single bird bone, possibly a gull or wader. In addition, a small quantity of iron-working slag, consisting of a piece of hearth bottom slag and hammerscale, was detected during environmental sampling.

The third phase also contained a large quantity of diverse artefacts. These include two prehistoric waste flakes, one possibly late Neolithic/Bronze Age scraper, 19 sherds of Iron Age/late Iron Age pottery, one small piece of daub with traces of two horizontal impressions, one fragment of unidentifiable worked clay and 325g of animal bone. This bone again includes sheep, cow and pig, some fragments being burnt. Another possible unidentified bird bone was recovered along with either a sheep or a deer bone displaying butchery marks.

The final silting phase produced a single sherd of undecorated middle Bronze Age pottery, one late Neolithic/Bronze Age flint scraper, four prehistoric flint waste flakes, ten sherds of mid-late Iron Age pottery and 920g of animal bone. The bone included sheep, cow, pig and horse remains, some of which are burnt. Also present are several small fragments of copper alloy from an unknown object, and a human finger bone. The latter probably came from the Anglo-Saxon grave [1987], which cuts this fill.

#### *[1990] Environmental Results*

Environmental samples were taken from each fill within Section (b) of the ditch (Appendix 12, Sample Nos. 10-13). All produced similar results. Small quantities of hammerscale and fired clay were present in most of the samples, three produced a few fragments of pottery, and all produced some animal bone. The final phase of silting, (2377), also included some burnt flints. All the samples contained small quantities of fragmented charcoal.

Fragments of hazelnut shell were recovered from (2380), whilst (2381) and (2377) produced a few charred cereal grains. A glume wheat base was identified in (2377) and a barley or wheat grain in (2381). Several seeds of wild plants e.g. dock and medick/trefoil, were also identified. Little can be said of such a small quantity of material, although it is possible that the grains were charred during drying or cooking activities.

In addition to the botanical remains from these fills, the samples contained bones of sheep, lamb and pig. A small number of other animal bones was identified as wood mouse, vole, snake, newt and frog/toad. The snail shells were limited in number but seems to suggest an open country or calcareous grassland habitat.

#### *[1993]*

Ring ditch [1993] was located immediately to the north of ring ditch [1990], with nearly two-thirds of the ditch situated within the easement (Figure 43, Plate 9). The ditch had an external diameter of 6.30m, a width of 0.55m to 0.85m, and a depth of between 0.30m and 0.35m. In profile it was also fairly symmetrical and 'V' shaped, with a flattish base up to 0.26m wide. Five 1m-wide sections were excavated through the ditch revealing two uniform fills throughout (Figure 44, (c)-(e)).

The primary fill (2336) was a yellow-brown sandy silt with frequent small sub-rounded and angular stones. It contained a number of finds consisting of one possibly Mesolithic/early Neolithic flint waste flake, one Mesolithic/early Neolithic flint core, six prehistoric flint waste flakes, five sherds of possible late Iron Age pottery, two tiny pieces of unidentifiable fired clay and 60g of animal bone. The bone included horse, cow and sheep-sized fragments, some of which had been burnt.

Secondary fill (1994) was a darkish grey/brown sandy silt with some small and medium-sized rounded and sub-rounded pebbles. It also contained a number of finds. These included ten possibly Mesolithic/early Neolithic flint waste flakes, seven possibly late Neolithic/Bronze Age flint waste

flakes, eight sherds of middle Bronze Age pottery, eleven Iron Age pottery sherds, ten small fragments of fired clay and 45g of animal bone. The Bronze Age pottery includes five plain body sherds, one base sherd and two decorated body sherds (Appendix 2, Dr. 2.6 and 2.5). The decoration consists of fingernail impressions and incised lines. Amongst the fired clay, one piece appears to have a flat face, whilst a second shows a single possible wattle impression approximately 20mm in diameter. The animal bone includes a cattle tooth and cattle and sheep-sized bone fragments, several of which are burnt

#### *[1993] Environmental Results*

An environmental sample was taken from fill (1994) (Appendix 12, Sample No. 9). This produced appreciably less archaeological material, with only a few tiny fragments of burnt clay, hammerscale, flint and bone present. Charcoal was found, as were two unidentifiable fragments of charred cereal grain and a couple of charred weed seeds. Despite its close proximity to ring ditch [1990], the limited snail fauna in this sample, while still including shells of the open country, produced a greater number of shells associated with shaded or woodland habitats. This suggests that the immediate environment of the ditch was more shaded.

#### *Ring Ditch Interpretation*

The association of abundant later Iron Age artefacts with substantial ring ditches is unusual. Because of the lack of known parallels in Lincolnshire, it is tempting to look to another period for their construction. However, it is clear from the quantity and dates of the finds present that the Iron Age artefacts are unlikely to be re-deposited. Although 16 sherds of Roman pottery were recovered during surface cleaning of ring-ditch [1990], none was found within the fills of either feature, suggesting complete sedimentation had already occurred by this time. This raises the question of whether one might be looking at the re-use of much older features.

The only obvious alternative, more so in the case of [1990], is the Bronze Age, where ring ditches of this proportion are usually the remains of barrow monuments. Although there was no visible surviving mound material associated with either feature, such material would not be expected to survive. The stonier layer within the third silting phase of ring ditch [1990] is certainly suggestive of the slumping of stony material from within the interior.

Surveys of Bronze Age barrows in Cambridgeshire have recorded diameters of between 10m and 70m, with the majority (47 out of the 84 recorded) being between 16m and 30m (NAU, 1981). By way of contrast, in later Bronze Age Wessex, barrows average only 12m in diameter (Grinsell, 1990). Ring ditch [1990], with a diameter of 9.9m, would probably be accepted in either of these areas. In terms of depth, excavations in East Anglia have found the majority of barrow ring ditches to be between 1m and 2m deep (NAU, 1981). Ring ditch [1990] has a maximum surviving depth of only 0.62m, although we cannot be sure to what extent truncation has occurred. Given that the later Anglo-Saxon grave cuts only survive to depths of between 0.05m and 0.18m below the base of the topsoil, one might expect truncation of at least 0.30m to have occurred even if the bodies had been placed in the shallowest of graves. Ring ditch [1993], with a current external diameter of only 6.30m and a surviving maximum depth of 0.35m, is less convincing as a Bronze Age barrow.

The presence of significant quantities of middle Bronze Age pottery, some with very little evidence of abrasion, might seem to support a Bronze Age barrow theory, with the pottery sherds representing damaged cinerary urns or grave goods. The absence of a burial does not exclude this possibility as internments were made below, on or above the original turf-line. It is not impossible that the pottery sherds within the ditch fills represent burials from the original ground surface or from higher levels in the mound which have slumped into the ditches as the mounds have eroded. But with no evidence of burials, and given the fragmentary nature of the pottery, it is the opinion of the Bronze Age pottery specialist that they are more likely to represent the remains of settlement debris, probably over several generations (Appendix 2). This is supported by the presence of additional unstratified and stratified flint and pottery artefacts, most of which are clearly re-deposited, across the entire width of the site.

The presence of significant amounts of Iron Age artefacts alongside the Bronze Age material also makes an earlier construction date seem unlikely. If the ring ditches had been dug in the Bronze Age one would expect a substantial amount of silting to have occurred prior to the incorporation of the Iron Age material. It seems unlikely, given its size, that [1993] would even have remained open over this length of time. Although it is possible that both or either of these ditches were completely re-cut in the Iron Age, leading to the deposition of the Bronze Age artefacts alongside Iron Age artefacts, there is no convincing evidence. For these reasons it is felt that an Iron Age construction date, especially for [1993], is more likely.

The relative dating of the ring ditches (to each other) is somewhat speculative. Upon excavation, the outer circumferences of the two features lay immediately adjacent to one another. Assuming even a minimal amount of truncation, it is inevitable that one must have cut the other. It is tentatively suggested that the construction of ring ditch [1990] preceded ring ditch [1993], as the clustering of smaller barrows around larger ones, if this is indeed what they were, was not uncommon.

Both the pottery forms and the debris within both ring ditches were very similar, although the environmental analysis detected 'appreciably less archaeological material' in [1993] than [1990]. A small amount of possible mid-late Iron Age pottery was recovered from the lower and upper fills of [1990], whilst the less abundant pottery recovered from [1993] was identified only as Iron Age or possibly late Iron Age. However, the mid-late Iron Age pottery in the fills of [1990] was recovered from contexts which also contained positively identified late Iron Age wares. The pottery, therefore, cannot be considered a reliable tool for establishing the relative (to each other) chronology of the two features.

The possible slight variation in local habitat, as detected from analysis of the molluscan fauna within both ring ditches, may suggest a temporal sequence of environmental change. Alternatively, these variations may merely result from extremely localised vegetation cover, such as the presence of more scrub-like plants growing alongside [1993]. The limited presence of shade-loving snails is insufficient to justify claims for a wide-scale alteration of the local habitat over the period in which the ring ditches were open.

There is also still the problem of ascribing a function to the ring ditches. On first glance the smaller dimensions of [1993] might suggest a roundhouse structure but, having allowed for an estimated minimum of 0.30m truncation, this would give the ring ditch a depth of between 0.49m and 0.57m. This seems too deep to make a convincing drainage gully and there is no corroborative evidence to suggest it was a construction trench. Ring ditch [1990] is more obviously too wide and too deep to have been either. Certainly, the amount of effort required to excavate [1990] and the small size of its interior, makes it unlikely to have been designed as a domestic enclosure. Neither is there any indication of a causeway across the exposed circumference of either feature.

Although no other examples of such non-secular features are known in Lincolnshire, they are not entirely unique. In Yorkshire and Humberside, such a site might be interpreted as a burial monument of the Arras culture. These date to between the 4th and 1st centuries BC. This burial practice involved the raising of a burial mound over a central burial pit, usually within a rectangular or square enclosure but very occasionally within a circular ring ditch. The maximum size of Arras type barrows appears to c.10m (NAU, 1981) which would fit well with the two features at Site 18. Again the lack of associated human remains does not necessarily exclude this hypotheses as erosion may well have destroyed any such deposits. It is possible that the three rectangular ditches to the south of [1990] may also represent Arras type features (see below) which would add weight to a religious argument for the ring ditches themselves.

Our lack of knowledge concerning the extent and nature of archaeological deposits to the immediate east of the site makes interpretation harder. It is known that barrows often take advantage of slight rises in the ground, such as at Site 18, although this is also the case for settlements. In Lincolnshire, Bronze Age barrows usually occur singularly or in small groups of up to twelve or more (May, 1976), whilst

Arras barrow cemeteries range from small clusters to larger groups, such as at Burton Fleming where over five hundred were recorded (Cunliffe, 1991). It is possible that the pipeline clipped the very edge of a much larger and more complex site extending along the slight ridge to the east.

Perhaps the most confusing aspect of the Iron Age evidence is the nature and quantity of the finds recovered. It is clear that the material was finding its way into the ditches almost immediately after construction. The fact that the group who excavated these substantial ditches were likely to be the same people who produced the artefactual debris may cast some light on their attitude towards, and use of, these structures. If they did have a religious significance one possible explanation could be the occurrence of feasts and ceremonies, with the remains of these activities either deliberately or accidentally entering the ditches. Such events have been suggested for a number of Bronze Age barrows (Allen and Applin, 1996).

If, however, the refuse was of a more domestic nature, this might imply a less reverent attitude towards, as well as a more secular function for, the ring ditches. There was nothing obviously unusual about the butchered animal bone or the pottery, which includes both handmade and wheel-thrown wares with a number of sherds recognisable as fragments of handmade jars (Appendix 3, Dr. 68 and 69). More puzzling is the presence of small quantities of hammerscale in the fills of both ring ditches and a fragment of hearth bottom slag from the primary fill of ring ditch [1990]. Whilst it is possible, though perhaps doubtful, that the other finds could have been carried to this area, the hammerscale must have been produced near by. In this case it seems not unlikely that the activities producing the other finds were also occurring nearby. Although there were a number of pits and postholes in the immediate area, many of which contained similar material and one of which contained a loomweight fragment, they are insufficient by themselves to demonstrate the presence of structures. However, the recovery of two daub fragments from the primary fill of [1990], one with a vertical rod and the other horizontal wattle marks (Appendix 6, Dr. No. 6.1), are certainly indicative of some type of structure nearby. A further fragment of daub, weighing 25g and exhibiting traces of five horizontal wattle impressions (Appendix 6, Dr. No. 6.2), was recovered from the cleaning layer, (2301), above [1990]. It is likely that this fragment has only recently been ploughed out from the uppermost fill of [1990], as it is unabraded and of the same type as the stratified material (Vince, *pers. comm.*).

Given that this site is known to extend to the east, it is possible that settlement evidence might exist immediately outside the excavation area. If indeed there was habitation and industrial activity occurring around the ring ditches, then the possibility of a more secular function seems more credible. However, with no known parallels to call upon it is difficult to think of alternatives. On balance therefore, it seems more likely that the ring ditches are indeed the remains of barrow monuments.

#### *The Rectangular Ditches*

These three ditches were all located along the eastern easement edge, to the south of ring ditches [1993] and [1990] (Figure 43, Plate 13). All three ditches were only partially exposed, making interpretation of their true form and function difficult. They will be examined individually, beginning with the most northerly, and working south.

#### [2308]

Ditch [2308] was located approximately 17m to the south of ring ditch [1990]. It measured 4.10m along its north-south axis, with approximately 2.60m of the two east-west lengths exposed within the easement. In profile it had steep, slightly concave sides and a slightly rounded base, with a width of between 0.35m to 0.45m, and a depth of between 0.10m and 0.15m. Three sections were excavated through the ditch, excluding the southernmost of the two east-west limbs which was extensively damaged by a modern land drain (Figure 44, (f)-(h)). The ditch was also truncated by undated pit [2363] and medieval furrow [2384].

The ditch contained a single fill, (2309). This was a dark orange-brown sandy silt with occasional sub-rounded stones. It contained one middle Bronze Age and one mid-late Iron Age pottery sherd. The Iron Age rim sherd is in a grey fabric with evidence of slashed decoration (Appendix 3, Dr. 72).

#### *Ditch [2310]*

Ditch [2310] was positioned 8.00m south of ditch [2308]. The north-south axis of the ditch was 6.00m long, with 2.40m of the two east-west limbs extending into the easement. The width of the ditch varied between 0.40m and 0.55m, with a depth of approximately 0.30m. The ditch had steep, straight sides and a rounded base. Five sections were excavated through it (Figure 44, (i)-(k)) revealing two fairly consistent fills throughout. The primary fill (2345/2347/2350/2351) was an orange-brown sandy silt with occasional sub-angular stones. The secondary fill (2346/2348/2349/2352) was a brown sandy silt with occasional sub-angular stones.

Two sherds of middle Bronze Age pottery and a single fragment of animal bone were recovered from the primary fill. The pottery has incised decoration on a raised cordon (Appendix 2, Dr. 2.7l). The secondary fill contained three sherds of late Iron Age pottery, a horse bone, cow-sized bone fragments, a piece of fine sandstone quern and a lump of unidentifiable fired clay which may be a sherd of abraded pot.

#### *Ditch [2332]*

Ditch [2332] was located only 3.50m south of ditch [2310]. The north-south axis of the ditch was approximately 7.90m long, with a break of approximately 0.25m, 3.50m north of the southern corner. The east-west limbs of the ditch extended 3.50m into the easement. The ditch, which was very shallow (0.03m-0.08m deep), had steep, straight sides and a flat base. The width varied between 0.25m and 0.50m. Five sections were excavated through the ditch and a single fill, (2333), identified (Figure 44 (l) and (m)). This was an orange-brown silty sand containing occasional rounded pebbles, and it produced a single Mesolithic/early Neolithic flint waste flake and a cattle humerus. The break in the north-south length of the ditch may be evidence of a west-facing entranceway, although the shallowness of the feature makes it more likely that the ditch had simply been truncated.

#### *Rectangular Ditches Environmental Results*

Environmental samples were taken from each of the rectangular ditches (Appendix 12, Sample Nos. 14, 15 and 16). All produced small quantities of fired clay, [2308] and [2310] produced undatable pottery fragments and unidentifiable bone fragments, and [2310] produced five possible flint waste flakes. They were all poor in environmental finds and produced little charcoal, no sure evidence for charred cereal grains, one or two fragments of charred weed seed, a few snails and a vole bone. The terrestrial mollusc fauna was composed only of species of open country or intermediate habitat implying a calcareous grassland environment, although the sample was very small.

#### *Rectangular Ditch Interpretation*

Again one is faced with the problem of partial feature exposure and re-deposition of artefacts. All three features have been grouped under the heading 'rectangular ditches' because it has not been possible to determine whether they were square or oblong in plan. The absence of this vital piece of information has resulted in the proposal of two very different hypotheses. One theory suggests that these are square ditches representing the remains of possible Arras type Iron Age barrows. The other suggests a more secular interpretation as the remains of (later) building construction slots. These two hypotheses will be discussed first on typological grounds and then according to artefactual evidence.

As previously mentioned, the Yorkshire burial traditions, commonly referred to as the Arras culture, involved the grouping together of small barrows in large cemeteries and the practice of surrounding individual barrows within a square ditched enclosure. The individual barrows were usually small, up to 9m in diameter, and normally covered crouched inhumations, although very occasionally extended inhumations and even cremations have been found. As 'square barrows' our three examples would have measured 4.10m, 6.0m and 7.9m in diameter, well within the norm. Generally, the burials were without

elaborate grave-goods but some were provided with brooches and joints of pork (Cunliffe, 1991). This tradition also included occasional examples of more elaborate grave goods and cart burials, although these are very much the exception.

Although no parallels are known in Lincolnshire, possible examples do exist outside Yorkshire. In Cambridgeshire, three possible square barrows have been recognised as cropmarks at Hemingford Grey. These were small, approximately 10m in diameter (NAU, 1981). At Handley in Dorset, a square-ditched barrow has also been shown by excavation to be Iron Age (Grinsell, 1990).

As with the ring ditches, the lack of a visible mound or surviving grave pit does not rule out this hypothesis. The small size of the mounds and the loose nature of the sands and gravels upon which they are constructed would have made them liable to rapid erosion. Truncation through agriculture may also have removed internal features. It is also possible that any surviving central pits may lie outside the easement area. Approximately a third of [2310] and just under a half of [2332] were exposed within the easement. Although just over half of [2308]'s potential ditch was exposed, it is possible that medieval furrow [2384] removed any evidence of a central pit.

The second theory suggests that these ditches may have been the foundation trenches or beam-slots for timber-walled structures, possibly contemporary with the cemetery immediately to the north. Excavations of an Anglo-Saxon settlement at Chalton in Hampshire have revealed a complex series of buildings, nearly all of which are post-built. This is especially relevant as Chalton is also thought to have dated to the seventh and eighth centuries. There appears to have been two methods of construction there. The most popular involved setting posts in individual holes as the basis of a framework. However, a few of the houses were indicated by shallow trenches outlining the walls. Either the posts were set individually in the trenches, or perhaps a wooden sill-beam sat in the trench and the posts were set into this. The houses were all rectangular and varied from 3m by 5.5m to 4m by 10m. Assuming the three Site 18 examples were laid out with their long axes parallel to the easement, they would not (with lengths of 4.10m, 6m and 7.9m) be too dissimilar to the Chalton examples. On the other hand, most of the Chalton examples had two doors opposite each other in the middle of their long sides, something which is not apparent here. Nor is there any surviving evidence of internal partitioning which was another characteristic of many of the Chalton houses (Brown, 1978).

If the Site 18 features were houses, then the two postholes, [2328] and [2330], located approximately 0.40m south of ditch [2332], could have been associated with the proposed building, possibly providing additional support to the fabric of the roof (for full details see posthole section below). No evidence was found for other postholes associated with the rectangular ditches, though, once again, less substantial features may have been destroyed.

No definitive answers are provided by the artefacts. The latest datable evidence within the rectangular ditches points to the Iron Age, with a few earlier middle Bronze Age pottery sherds and prehistoric flints present. No datable Anglo-Saxon finds were recovered although a fragment of fine sandstone quern from the upper fill of [2310] could be either Iron Age or Anglo-Saxon in date (Appendix 11). Although it is possible that the Iron Age material was re-deposited, this is difficult to prove in the absence of later material.

The presence of the quernstone fragment and several pieces of animal bone (including sheep, cattle and horse) might suggest domestic type activity but given the small amounts involved this is not convincing. It is unlikely that the bone fragments would have survived from the Bronze Age (Rackham, pers. comm.) and so it seems most likely that they are contemporary with the Iron Age pottery. It is, therefore, possible that they represent offerings or feasting debris associated with the proposed square barrows or, alternatively, general debris arising from the settlement at Site 19 or from activity outside the easement.

### **The Postholes**

Twenty-three convincing postholes were recorded within the excavated area : [1915], [1917], [1919], [1923], [1925], [1927], [1931], [1933], [1935], [1937], [1939], [1941], [1943], [1945], [1947], [1949], [1951], [1955], [2306], [2328], [2330], [2357] and [2378] (Figure 43).

Fifteen of the postholes were circular in plan, the remainder being sub-circular. In profile, all had steep sides, many almost vertical, whilst just over half had flattish bases and the remainder rounded. Diameters varied between 0.17m and 0.38m and depths between 0.07m and 0.28m. The average diameter was 0.26m and the average depth 0.16m. All contained a single fill, the majority being either mid-brown or mid grey-brown sandy silt or silty sand. Nearly all contained occasional small sub-rounded and/or sub-angular stones, whilst eleven contained occasional charcoal flecks.

Varying numbers and types of artefacts were recovered from ten of the postholes. A small lump of unidentifiable, chaff-rich fired clay was recovered from [1939] whilst two sherds of possibly Iron Age pottery were found within [1945], one within [1955] and one within [1915]. Posthole [1915] also produced a single prehistoric flint waste flake whilst [2306] contained four waste flakes and one undecorated middle Bronze Age pottery sherd. Another sherd of undecorated middle Bronze Age pottery was recovered from posthole [1919].

A number of animal bones were also recovered, some of which may have been deliberately incorporated within the postholes as packing material. Posthole [1947] contained a small burnt fragment of cow-sized cranium (5g), whilst [1943] contained a partial cattle mandible fragment (60g). This bone showed evidence of gnaw marks, probably from a scavenging animal, which suggests that it may have been lying around for some time before being picked up and used as packing for a post. Posthole [1925] contained a single cattle talus (35g) and posthole [1941] contained a cattle scapula (110g) and a sherd of possibly Roman pottery. No other form of packing material was discovered from the site.

Postholes [2328] and [2330] are the only two postholes for which an association with a possible structure, in this case rectangular ditch [2332], has been suggested (see [2332]). Posthole [2328] was oval in plan, with a diameter of approximately 0.28m and a depth of 0.18m (Fig 45, (n)). It was steep-sided with a rounded base and contained a single grey-brown silty sand with occasional small rounded pebbles. Posthole [2330] was circular in plan, with a diameter of 0.28m and a depth of 0.12m (Figure 45, (o)). It had moderately steep sides with a rounded base and contained a single orange-grey/brown sandy silt with occasional small rounded pebbles. Neither fill contained either artefacts or charcoal.

### **[1941] and [1945] Environmental Results**

Soil samples were taken from postholes [1941] and [1945] for environmental analysis (Appendix 12, Sample Nos. 17 and 18). Both lacked archaeological finds and were poor in environmental remains. One or two charred weed seeds and an unidentified fragment of burnt bone were all that was recovered. Although occupation debris was low, the small size of the samples is such that this absence may be a factor of sample size.

### **Posthole Interpretation**

The postholes will be discussed alongside the pits below.

### **The Pits**

Six small pits were recorded : [1912], [1929], [1984], [2304], [2363] and [2341] (Figure 43).

### **Pit [1912]**

This was sub-circular in plan, measuring approximately 0.61m in diameter and 0.28m deep, and was situated on the western edge of the easement. It had moderately steep sides and a flattish base (Figure 45 (p)). Two fills were recorded. The lower fill, (1914), was a reddish brown sandy gravel up to 0.12m

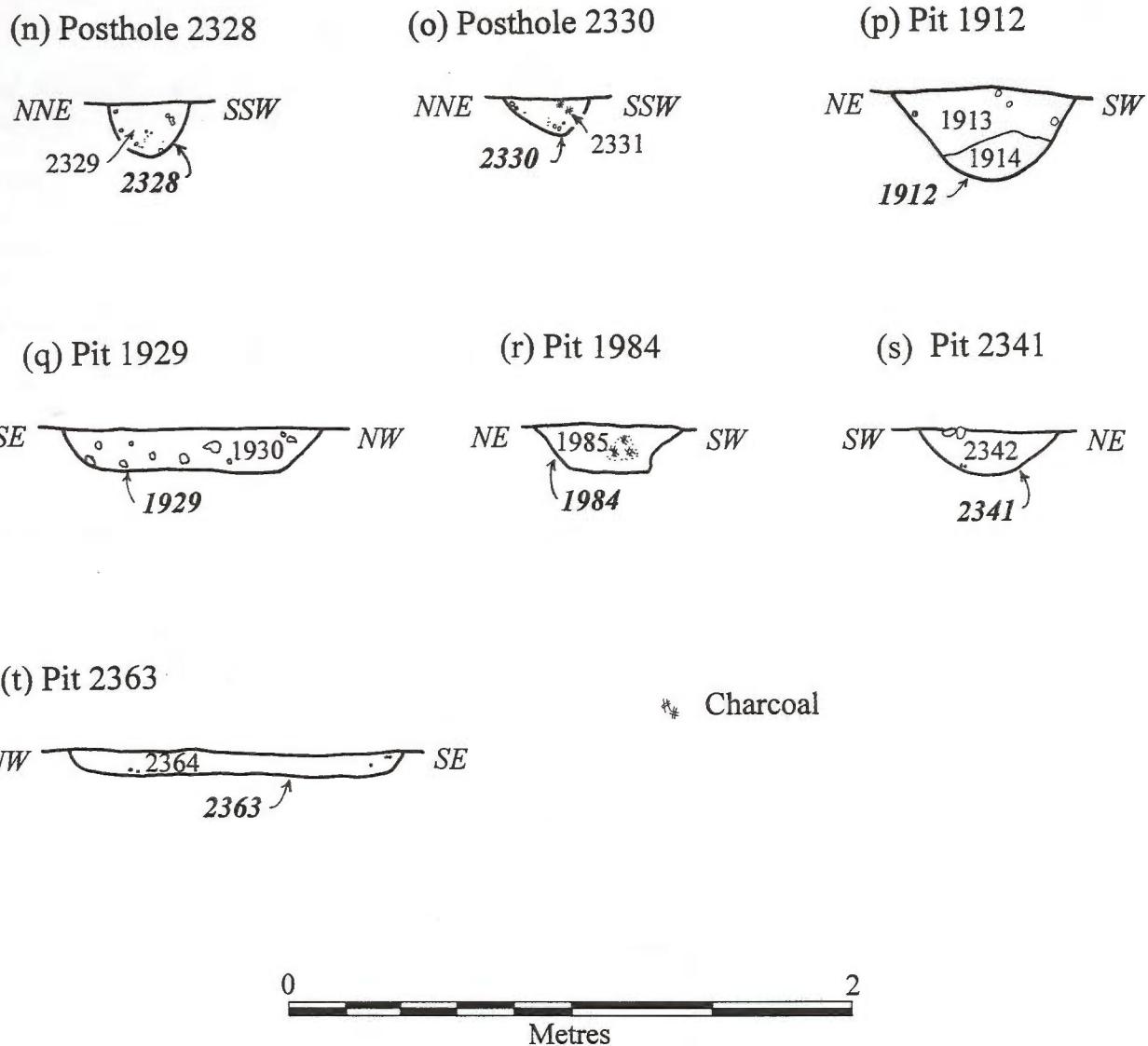


Figure 45: Site 18, Section Drawings (n)-(t)

deep whilst the upper fill, (1913), was a mid-brown silty sand with occasional charcoal flecks. No artefactual or environmental evidence was recovered.

#### *Pit [1929]*

This was also located on the western side of the easement, approximately 18m south of pit [1912]. It was circular in plan and measured 0.9m wide and 0.16m deep, with moderately steep sides and a flat base (Figure 45 (q)). It contained a single fill, (1930), an orange-brown sandy silt containing occasional rounded and sub-angular stones and charcoal flecks. Total excavation produced one sherd of middle Bronze Age pottery, a number of cow-sized skull fragments, two fragments of fired clay, two prehistoric flints, and a fragment of oyster shell. The fired clay weighed 196g and has been interpreted as being part of the base of a triangular loomweight (Appendix 6).

#### *Pit [1984]*

Pit [1984] was located immediately alongside ring ditch [1990]. It was sub-oval in shape, with fairly steep, slightly concave sides, and a flattish base, measuring approximately 0.50m wide and 0.20m deep (Figure 45 (r)). The single fill, (1985), was a red-brown silty clay containing a large amount of charcoal flecking but no finds.

#### *Pit [2304]*

Pit [2304] was situated approximately 6m north of rectangular ditch [2308], on the eastern side of the easement. It was oval in plan, measuring 0.67m long by 0.55m wide and only 0.03m deep (no section was recorded). It had gently sloping edges and a flat base. Its single fill, (2305), was a red-brown silty sand with a marked concentration of large rounded pebbles, over 0.10m in width, lying on the surface. A single unworked flint fragment, again over 0.10m wide, was also present. The fill produced one probable Mesolithic flint flake and two sherds of possibly Iron Age pottery.

#### *Pit [2341]*

This was positioned at the north end of the site, towards the western side of the easement. The cut was sub-circular with steep, concave sides, and a flattish base, measuring 0.45m long, 0.40m wide, and 0.16m deep (Figure 45 (s)). The fill, (2342), was a brown-grey clayey silt with occasional small, medium and large rounded and sub-rounded pebbles and occasional flecks of charcoal. A fragment of Iron Age pottery and a prehistoric flint core were recovered from the fill.

#### *Pit [2363]*

This pit cut the rectilinear ditch [2308], thus postdating it. It was oval in shape, with a length of 1.20m, a width of 0.40m, and depth of 0.10m (Figure 45 (t)). In profile it had steep concave sides and a wide flat base. The fill (2364), was a dark brown sandy silt containing no finds.

#### *Posthole and Pit Interpretation*

The postholes and pits do not form any clear patterns which might aid their interpretation. There does appear to be a trend for short, north-south posthole alignments, but these are neither extensive enough nor distinctive enough to confidently treat as related groups.

The wide variety of dates and types of artefacts within the postholes complicates interpretation. However, a number of assumptions have been made in an attempt to give a probable overall date to these features. Due to a complete lack of later Anglo-Saxon or medieval finds within any of these features, it is presumed that the Iron Age pottery is not re-deposited. It is also presumed that, as it is highly unlikely that animal bone could have survived from the Bronze Age, this too is likely to be Iron Age in date. This is supported by the recovery of animal bone from pit [1929] alongside fragments of a probable Iron Age triangular loomweight, as well as its close association with Iron Age pottery within both the ring ditches and the rectangular ditches. If this were correct it would make ten out of the thirteen artefact-containing pits and postholes Iron Age in date. Of the remaining three artefact-containing features, two contained only probable Middle Bronze Age material, postholes [1919] and [2306], whilst one contained an unidentifiable piece of fired clay, posthole [1939]. Although it is

not impossible that [1919] and [2306] are Bronze Age in date, it seems more likely that this material is also re-deposited. With the datable Iron Age material spread right across the site, it seems highly likely that the remaining undated features are of a similar date.

The question of function is problematic. Whilst there are insufficient postholes and pits to suggest structures or enclosures it is quite possible that some may have been destroyed by agriculture. Whilst no features relating to dwellings were found within the easement, the presence of such items as the loomweight fragments in pit [1929], and possibly even the quernstone fragment in rectangular ditch [2310], indicates domestic activity somewhere. It is possible that this refuse originates from the more obvious Iron Age settlement at Site 19, or from activity immediately to the east or west of Site 18.

Only pit [1984] has had a specific function proposed for it. Originally it was suggested that the feature may have been a burnt tree stump, however on further reflection this does not appear to be the case. Instead, it seems possible that the pit, which exhibited a high degree of *in situ* burning, may have been associated with the hammer scale detected in the fills of ring ditches [1990] and [1993]. The initial interpretation means that no environmental sample was taken which might have established a link. Nevertheless, it is possible that this feature represents the remains of a hearth or furnace. Why it would be situated on the edge of ring ditch [1990] is open to speculation and, if a spiritual link is accepted for the ring ditch, then perhaps the iron-working occurring here also had a ritual significance.

### ***The Inhumations***

The nine inhumations were all orientated ESE-WNW (head at the western end) and arranged in very approximate north-south rows. These lay at the north-eastern end of the site, overlying ring ditches [1990] and [1993] (Figure 43). Each inhumation will be described in turn, starting with the most northerly grave.

#### ***Grave [2325]***

Grave [2325] was the largest grave in the assemblage, being 1.10m wide, 0.17m deep and over 2.30m long (Figure 46). The eastern edge of the grave lay outside the easement but by removing a section of the baulk it was possible to confirm that the grave post-dated ring ditch [1993]. The fill, (2326), was a mid-brown sandy silt with a moderate amount of sub-angular and sub-rounded stone and occasional flecks of charcoal.

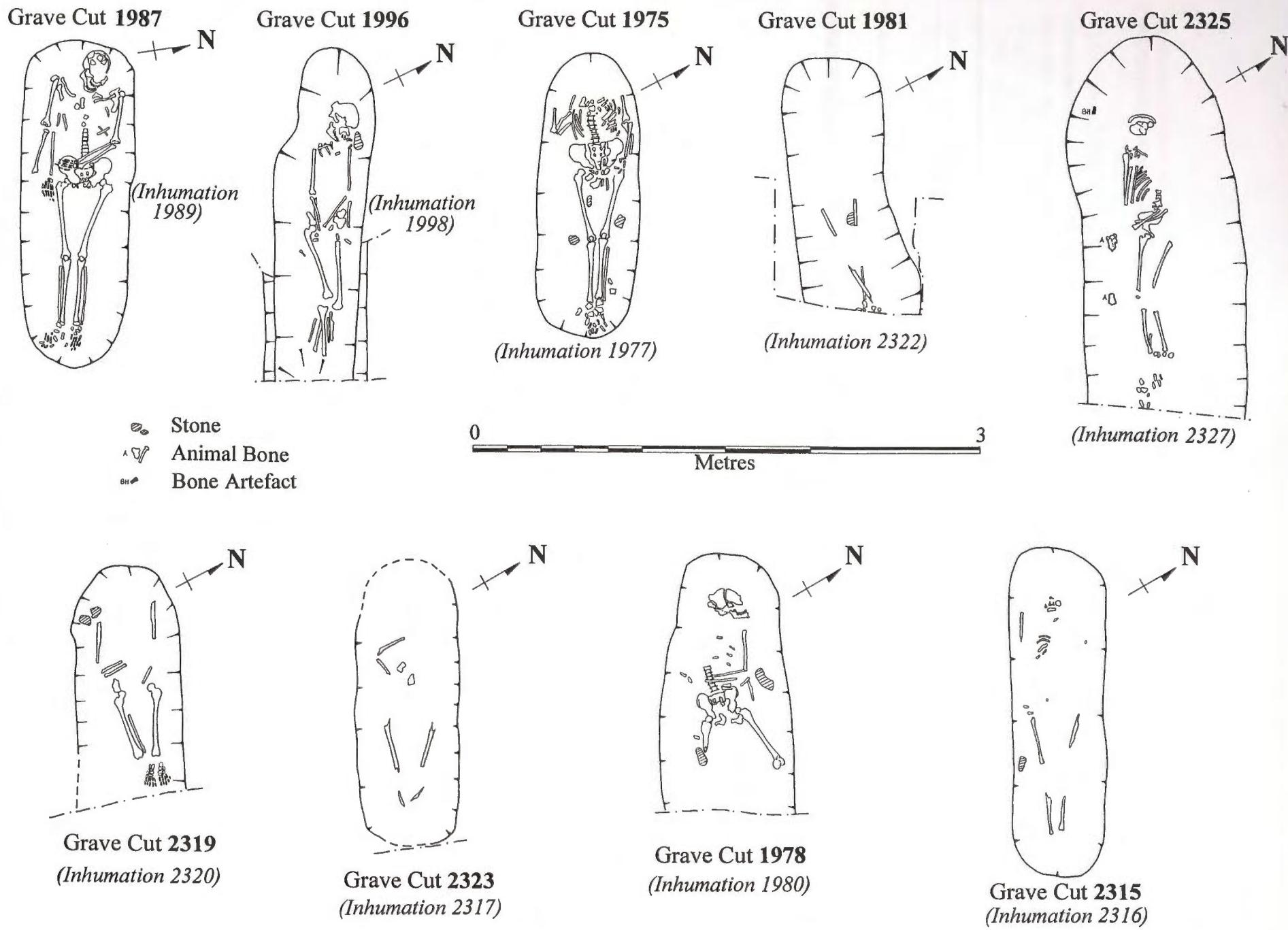
The grave fill produced fourteen flint waste flakes, two cores, five possibly late Iron Age pottery fragments, a tiny amount of unidentifiable fired clay and 120g of animal bone. The Iron Age pottery includes a sherd decorated with a square-toothed roulette (Appendix 3, Dr. 71). The animal bone includes two dog mandibles, cow and sheep-sized bone fragments and several pieces of horse vertebrae that appears to have been placed behind the body, running parallel with the back. It is possible that the two dog mandibles (probably from the same animal) and the horse vertebrae were contemporary with the burial. The other finds within the fill are probably residual, having been deposited during the back-filling of the grave.

Although the human bone (2327) is poorly-preserved, the remains are identifiable as a female, 25-35 years old and approximately 5'6" tall. It was impossible to tell from the state of the bones whether the woman had suffered from any trauma or disease, although the majority of her teeth are present and show a fairly high degree of decay (Appendix 9). The body was laid on its left hand side and had a decorated bone object placed behind the head. The object's decoration consists of two circumferential lines between which are two ringed-dots. The object was burnt before burial, which has left the piece distorted and incomplete, making interpretation virtually impossible (Appendix 10)

#### ***Grave [1981]***

Grave cut [1981] was dug immediately alongside grave [2325] and, therefore, probably also postdates ring ditch [1993] (although this was not proven by excavation). The grave cut was 0.60m wide, approximately 0.18m deep and over 1.60m long, again with the eastern edge lying just outside the

Figure 46: Site 18, Plans of Inhumations



easement (Figure 46). The fill, (1982), was a mid grey sandy silt with a moderate amount of small and medium-sized sub-rounded stones.

The bones (2322) are very poorly-preserved, with only fragments of the legs remaining. Little can therefore be said of the remains except that they belong to an adult that had been placed on its back with the right leg crossed over the left. Two iron knife blades were uncovered along with the burial. The largest knife, possibly a seax, would have been positioned across the torso. This 'seax' is 285mm long with a blade width of 27mm. It has a single cutting edge with a 4mm-wide groove running down the back edge of the blade (Appendix 10 Dr. 10.1, Plate 11). The other, smaller blade, has a curving back and a straight cutting edge with a blade width of 15mm and a surviving length of 165mm (Appendix 10, Dr. 10.2). No other finds were recovered.

#### *Grave [1975]*

Grave cut [1975] lay south-west of grave cut [1981] and contained skeleton (1977). The south-eastern edge of the grave cut through ring ditch [1990], thereby postdating it. The grave measured 1.65m long, 0.65m wide, and 0.15m deep (Figure 46). No finds, either residual or associated with the burial, were recovered. The fill, (1976), was a grey-brown sandy silt with occasional sub-angular stones.

The human remains are in relatively good condition and could be identified as belonging to a male, 27-35 years old and approximately 5'7" tall. There is some slight evidence of stress on the vertebrae, although this would not have caused his death (Appendix 9).

An environmental sample taken from (1976), Sample No.3, produced several snail shells indicative of open country (Appendix 12).

#### *Grave [1996]*

Grave cut [1996] lay slightly south-east of grave cut [1975]. The grave itself measured approximately 2.00m long by 0.50m wide and 0.15m deep (Figure 46). It cut the uppermost fill of ring ditch [1990], thus postdating it. The grave fill, (1997), was a mid-dark brown clayey silt with occasional small, medium- and large-sized rounded and sub-rounded pebbles. The fill contained a flint disc scraper tool, a flint core, fifteen waste flakes, thirteen sherds of Iron Age/Romano-British pottery and 120g of animal bone. The bone includes sheep, pig, cow, a possible frog bone and several burnt bone fragments. Also within the grave fill was a small bun-shaped bone object of unknown function. It is 12.3mm in diameter, 7.1mm in height and hollow-based with a possible central perforation (Appendix 10). All the finds from fill (1997) are probably residual with the exception of the bone object.

The human remains, (1998), are poorly preserved with all the bones showing at least some post-depositional damage, including the loss of the facial bones, feet and the spine. This limited evidence does suggest, however, that the remains are probably those of a female aged 25-35 years old. Almost all of the teeth were retrieved, and show advanced stages of decay, with three teeth being reduced to the stubs of roots and one tooth being completely lost. It has not been possible to determine the cause of death (Appendix 9).

#### *Grave [1987]*

Grave cut [1987] was located to the south-west of grave [1996], and contained the most complete human skeleton (Figure 46, Plate 10). The grave measured 1.90m long by 0.65m wide and 0.18m deep. It too appeared to cut the edge of ring ditch [1990]. The fill was a mid grey-brown sandy silt with occasional-moderate amounts of sub-angular stone. There were a number of finds within the grave fill, (1988), including five sherds of Romano-British pottery, four prehistoric flint flakes, oyster shell and 40g of animal bone including cow, sheep and pig bone fragments. All of the finds are thought to be residual.

This, the most complete skeleton (1989), was the tallest within the cemetery assemblage, standing at 5'11". The remains are of a male aged between 35 and 40 years, also making him the oldest individual

amongst the identifiable remains. The teeth of the subject were completely preserved, with only the lower third molars being lost during the man's lifetime. All of the teeth exhibited some form of wear, with three of the molars having completely lost their crowns, leaving only the roots. The skeleton also displayed evidence of infection, consisting of several lesions within the skull, probably representing a scalp infection, which appeared to have almost completely healed before death. The advanced state of healing suggests that this infection would not have led to the death of the individual, the cause of which remains unknown (Appendix 9).

A sample taken for environmental analysis provided several snail shells of open country habitats (Appendix 12, Sample No. 4).

#### *Grave [2315]*

Grave cut [2315] was located immediately to the south of grave [1987] and had been partially damaged by later medieval furrow [2384]. The grave cut measured 1.90m long by 0.70m wide and only 0.05m deep (Figure 46). The fill, (2324), was an orange-brown sandy silt with occasional rounded and sub-angular stones. There was a small number of re-deposited finds including a possible sheep tooth, a cow-sized bone fragment, and a featureless lump of fired clay weighing 25g.

Although only the leg and arm bones and some teeth survived within the grave, it has been possible to age the skeleton to between 25 and 35 years. The eleven teeth recovered show an extreme amount of decay for the age of the individual, with only two crowns present. This would appear to suggest that the individual was suffering from severe periodontal, or gum disease (Appendix 9).

#### *Grave [1978]*

Grave [1978] was located south-east of grave [2315], against the eastern baulk of the easement. The grave itself was over 1.50m long (the eastern edge was not within the easement), 0.65m wide and 0.10m deep (Figure 46). The fill, (1979), was a mid-brown clayey silt with some small and medium-sized rounded stones and occasional flecks of charcoal. The finds include three flint waste flakes, a core and 20g of animal bone consisting of sheep, pig and horse bone fragments, as well as a small dog-sized mammal bone.

Although the remains of this individual, (1980), are fragmentary, it is possible to say that they were of a male aged approximately 35 years old. This male was suffering from a condition called *osteochondritis dissecans*, resulting in the eradication of the blood supply in the affected area (Roberts and Manchester, 1995, 87). It also appears that the individual's spine bent slightly to the left, which may have been part of an inherited disorder. The teeth are in a fairly poor state of health and exhibit signs of gum disease. Although this adult male had a number of infections and pathological conditions, the cause of death is unknown (Appendix 9).

#### *Grave [2323]*

Grave cut [2323] was located to the south-west of grave [1978], and was partially truncated by later medieval furrow [2384]. The grave measured 1.70m long by 0.55m wide, and was only 0.10m deep (Figure 46). The fill, (2318), was a dark grey/brown sandy silt with frequent sub-angular and rounded stones. No finds were recovered.

The human remains, (2317), are poorly preserved, with only fragments of the legs and right arm remaining. All that can be discerned from the remains was that it was of an adult (Appendix 9).

#### *Grave [2319]*

Grave cut [2319], the most southerly burial discovered within the easement, was located immediately to the south of grave [2323]. The grave was approximately 1.70m long (the eastern end of the cut had been removed by later medieval furrow [2384]) by 0.55m wide and 0.10m deep (Figure 46). The fill of the grave, (2321), was a mid-brown sandy silt with occasional sub-angular stones. It contained less than 5g

of animal bone including a possible sheep's tooth and a cow-sized bone fragment. These finds are likely to either be residual or associated with furrow [2384].

The human remains, (2320), are badly preserved with only fragments of the leg and arm bones remaining. This means that the body could only be identified as an adult and that cause of death is unknown (Appendix 9).

#### *Inhumations Interpretation*

The analysis of a cemetery can sometimes give us an important insight into its population, providing evidence about the size of the community and its social structure. This has not been possible here for a number of reasons. Firstly, the excavation at the Kirkby la Thorpe cemetery provides us with only a sample of the inhumation assemblage, further burials probably existing to the east. The burials themselves are also of varying preservation, from almost complete preservation to the survival of only portions of the leg and arm bones. From the skeletal remains it has been possible to identify three adult males and two adult females, the other four burials only identifiable as adults. Secondly, the paucity of grave goods, a characteristic of cemeteries of this type, means that it has been difficult to assign any social status to any of the individuals present.

Nevertheless, the small amount of information gathered has been sufficient to both loosely date the inhumations and set them within a wider context of changing fashions and traditions. During the sixth century, cemeteries tended to be extensive, as demonstrated by the great Sleaford cemetery 3km to the west. Both cremation and inhumation were practised across the country, although cremation was dominant in the north and east of England. Where inhumation was practised, grave goods were often plentiful and varied. Later in the seventh century, however, a totally different approach appears to have been adopted. The pairs of brooches that were so characteristic of female inhumations in the sixth century no longer appeared, whilst in men's, there was a marked decrease in the quantities of weapons buried. In some seventh century cemeteries, weaponry seems to have been extremely rare, and where it did occur, it often took the form of a long one-edged knife, a seax, rather than the earlier tradition of a spear and shield boss. Furthermore, inhumation took over as the dominant form of disposal and cemeteries appeared to be more regularly laid out with inhumation graves orientated east-west, with the heads at the western end. Previously it had been common to find several distinctly different orientations in the same cemetery (Brown, 1978). This new type of cemetery dating to the seventh century, sometimes showing the influence of Christianity, is referred to as 'Final Phase'.

In many ways, the findings at Kirkby la Thorpe show many of the attributes of a 'Final Phase' cemetery. The nine inhumations were all orientated ESE-WNW (head at the western end) and arranged in very approximate north-south rows. Only one of the burials, inhumation (2322), contained weaponry. This consisted of two iron knife blades, one of which has been identified as a probable seax. Although the gender of the human remains was not identifiable, they are almost certainly those of a male. Another iron knife blade fragment (2301) was found during the initial surface cleaning of the northern arc of ring ditch [1990] (Appendix 10, Dr. 10.3). This had a surviving length of 81mm, a blade width of 10mm and a straight cutting edge with a curving back. It has been dated on typological grounds to the seventh century. Unfortunately, this blade was unstratified, pulled from its original context either during topsoil stripping or earlier agricultural activity. It has not, therefore, been possible to assign it to a specific grave, although it seems likely to have come from either grave cut [1987] or [1975], both of which contained probable male inhumations.

Both the identified female burials do appear to have been buried with grave goods. Inhumation (2327), grave cut [2325], may have been accompanied by the two dog mandibles (probably from the same animal) and the horse vertebrae as well as a decorated bone object placed behind the head. This object's decoration consists of two circumferential lines between which were two ringed-dots (Appendix 10). The object was burnt before burial which has left the piece distorted and incomplete, making interpretation virtually impossible. It may have been a knife or comb handle but neither identification is convincing. Bone knife handles are rare in the early Anglo-Saxon period, the most common material

used being horn. Comparable bone objects have been found with cremations at Spong Hill, Norfolk, interpreted as a 'possible knife handle', and at Cleatham, Lincolnshire where rust staining confirmed identification. The burnt condition of the Site 18 object is, however, unusual, suggesting that it was something out of the ordinary (Appendix 10). The presence of animal bones in [2325] is also of interest. Animal and bird bones are frequently found with Anglo-Saxon burials. The remains are usually those of domestic animals and birds, some deposits probably representing food offerings. The horse vertebrae and dog jaws found within this grave probably have a ritual origin, both animals figuring in Anglo-Saxon ritual and symbolism (Appendix 10).

Female inhumation (1998), grave cut [1996], was accompanied by a small bun-shaped bone object of unknown function. Early Anglo-Saxon gaming pieces are well known but do not resemble this object, normally being plano-convex and much flatter. An onion-shaped gaming piece was found at Goltho but this was dated to the late tenth century (Appendix 10). As already described, a number of other artefacts were recovered from the grave fills of both inhumations (2327) and (1998) but, bearing in mind their similarity to the abundant prehistoric material at this location, they are considered more likely to be re-deposited.

The location of the cemetery is important as the graves were placed over the earlier ring ditch monuments [1990] and [1993]. The re-use of burial monuments by the Anglo-Saxons from about 550 AD onwards was a widespread phenomenon and suggests that these probable barrows may have survived as very slight mounds during the seventh century. Although small circular ditches, 10m and 5m in diameter, have been found to surround graves within the Anglo-Saxon cemetery at Spong Hill, Norfolk, it is clear that these ring ditches had entirely silted-up prior to the establishment of the cemetery. At least three of the graves ([1975], [1987] and [1996]) were found to cut the uppermost surviving ditch fills. Even if earthworks were not visible, there may have been some spiritual tradition associated with the site which would have attracted the Anglo-Saxons.

Apart from their orientation, there is nothing to suggest that these were Christian burials. It was not until the eighth century that the church established full control over the burial of the dead (Brown, 1978). These burials were extended inhumations with no grave goods (Adkins, 1998). Churchyards came into use at this time, and the old pagan cemeteries were gradually abandoned.

#### *The Furrows*

Two furrows, [2384] and [2313], were recorded, orientated north-south and lying roughly 11m apart. Both terminated towards the northern end of the site, on the brow of the natural ridge, and extended beyond the limits of the excavation to the east and south (Figure 43).

Furrow [2384] was approximately 0.20m deep and 1.30m wide and cut a number of earlier features, causing damage to ring ditch [1990], 'square' ditch [2308], and inhumations [2319], [2323], [1978] and [2315]. Removal of the furrow material revealed no further features beneath it.

Furrow [2312] was approximately 2.10m wide and ran across the middle and western side of the site; no depth was noted during excavation. Due to time restrictions it was not possible to remove this furrow material and it is therefore possible that it may have overlain features, such as postholes, which were not discovered during the excavations.

#### *Furrow Interpretation*

During the medieval period the ridge was ploughed, culminating in the creation of a number of furrows running roughly north-south and set at intervals of approximately 11m. Although the lengths of the 'lands' were not precisely recorded at the time, they appeared to continue for about half the length of Plot 145, being approximately 150m long. It was not possible to determine if these furrows were originally a continuation of similar remains seen in the adjacent southern field as the build-up of materials around the present boundary ditch masked the central area. Overall, this field was the most northerly in a distinct concentration of medieval activity collectively called Site 20. A total of 116

medieval pottery sherds was recovered along this stretch of the pipeline - a distance of approximately 1.90 km. Out of the 38 sherds collected during construction and evaluation, 20 could be firmly placed in the 13th to 14th centuries, whilst the remainder spanned the period between the 12th and 16th centuries. These results accord with an interpretation of medieval farming, with associated manuring, around the medieval villages of Kirkby and Laythorpe. The date range of 13th to 14th century clearly coincides with an intensive phase of farming but the presence of some earlier and later sherds indicates extended usage. Further details can be found within the medieval section.

#### 9.4 Discussion

It is clear that this site has seen repeated episodes of both domestic and religious usage from the Mesolithic through to the present day. The Mesolithic/early Neolithic is represented by a scatter of positively identified worked flint consisting of twenty-nine flakes and two cores. All of this flint was recovered from either the topsoil, (1900), or from post-Neolithic features. With a small number of additional Mesolithic flints identified in the fields immediately north and south of Site 18, it is possible that this location was a focus of activity, although the nature of that activity remains unknown. The source of this flint has been suggested as either the terrace gravels of the Rivers Slea, Witham or Bain, or the sands and gravels around Sleaford and Heckington. The Sleaford sand and gravels are perhaps the more likely as the site is located on the very edge of this deposit.

The later Neolithic/Bronze Age is also represented by a scatter of flint, also recovered from either the topsoil or post-Bronze Age features. This consists of thirteen flakes, five scrapers and four cores, all positively identified as late Neolithic/Bronze Age in date. A single late Neolithic/early Bronze Age flint scraper was recovered during fieldwalking in 1997. In addition to these there are 77 flints more generally identified as prehistoric but which are also considered likely to belong to this period. This group includes seven 'prehistoric' cores. It is unclear why so many cores were present at the site as there was a virtual total absence of primary flakes. This implies discard away from areas of core procurement and flaking, and raises the question as to why they were brought to this particular (part of the) site (Appendix 1).

A total of 32 sherds of Bronze Age pottery were recovered, fourteen of which were unstratified. All appear to be locally produced wares consisting of decorated and undecorated body, base and rim sherds typical of the East Midlands tradition of the middle Bronze Age Deverel Rimbury type of pottery. A date in the middle to later second millennium BC is considered appropriate for this type of bucket-shaped vessel with simple rims and fingertip decoration. However, the variations at Site 18 may indicate that a longer period of time covering several generations might be appropriate for the pottery, and thus for the occupation of the site. There was no evidence of burials and the fragmentary nature of the pottery seems to suggest that this material is likely to represent the remains of settlement debris (Appendix 2). The fact that nine of the unstratified pottery sherds were collected over a distance of about 90m south of the main area of excavation, and that further stratified and unstratified late Neolithic/Bronze Age material was found in the field immediately to the south at Site 19, also raises the question of just how extensive or scattered this occupation may have been.

The above was followed by a period of intense activity during the Iron Age, some of which may have been contemporary with the late Iron Age settlement remains at Site 19. No absolute conclusions have been drawn as to the function or construction date of any of the features (excluding the inhumations), although the overall evidence seems to point to a later Iron Age date for the ditched structures. Despite the presence of significant amounts of 'domestic' refuse within the fill of [1990], and to a lesser extent within [1993], the dimensions of these ring ditches is such that nothing other than a ritual interpretation seems appropriate. Exactly what purpose the structures served is unclear. The presence of similarly-dated Iron Age material in the rectangular ditches, although extremely limited, has also led to the probable inclusion of these three features within this period. In form, the only familiar parallels are the square barrows of the Arras culture. The functions of the pits and postholes is unknown, and with insufficient evidence to suggest domestic structures, also raises the possibility of a ritual association.

With so little known of the pre-Roman religious practices of Iron Age Lincolnshire, there are many possibilities.

The small number of Romano-British finds suggests a low level of activity during this period. Whilst a small number of indeterminate Roman pottery sherds were found across the site, mostly from within the medieval furrows or during the initial surface clean, the only definitively Roman sherd is a single unstratified flake from a South Gaulish samian object. Metal detecting within the field as a whole recovered a small amount of relatively high status material, including three, fourth century AD copper alloy coins, a domed stud with traces of an iron shank, a possible stylus, a mount with simple linear decoration, and a terminal or fitting. Pottery of a third and fourth century date was found in association with a Romano-British field system and pits at Site 21 to the south. It is possible that the Romano-British material recovered from Site 18 originated from settlement activities there, in the base of the valley.

Undoubted evidence for seventh century pagan Anglo-Saxon activity is represented by nine inhumation burials, some accompanied by simple grave goods. These are interpreted as part of a 'Final Phase' cemetery. Although the possibility has been discussed that the three rectangular ditches immediately to the south may represent construction slots from this period, there is no dating evidence to support this suggestion.

The medieval pottery and furrow remains are an indication of this field's long association with arable farming. Unfortunately, continued ploughing will inevitably result in the eventual destruction of the majority of the features on this site, without archaeologists ever having the opportunity to fully understand the features which have been uncovered, or to assess the potential evidence beyond the pipeline easement.

## 9.5 Conclusion

The possible discovery of part of a circular and square barrow cemetery at Site 18 is of considerable importance, both regionally, and perhaps nationally. Further discussions on its potential significance can be found in Iron Age section (7.11).

Although little of Anglo-Saxon date was recovered from along the pipeline, the small amount encountered is highly significant. As a 'Final Phase' cemetery, Site 18 is one of only two known examples in this region, the other being the Roxby 2 cemetery (Leahy and William, forthcoming). It is made all the more significant by the presence, only 3km to the west, of the great Sleaford cemetery which appears to have passed out of use at the end of the sixth century. Further work is required to confirm or refute the possibility of accompanying settlement.

Considering the shallow nature of the Iron Age and Anglo-Saxon features encountered, some of the graves surviving to a depth of only 0.05m deep, and the extensive damage already caused by agriculture, it seems unlikely that these important remains will survive for future archaeological investigation. The rarity of burial, cemetery and settlement evidence of this period in Lincolnshire makes further investigation a priority.

## 10 MEDIEVAL

### 10.1 Archaeological Background

As with the majority of England during the 12th and 13th centuries, a period of expansion and relative prosperity was also experienced in medieval Lincolnshire. With a growth in population there was increased demand for land causing an increase in clearance and reclamation of the fens and coastal areas. Rural trade and industry was increasingly successful, and this in turn encouraged the growth of towns. However, by the end of the 13th century, this expansion saw a reversal, brought about by a combination of factors. Overcrowding, land shortage and climatic deterioration all contributed to the weakening of rural industry which in turn undermined the success of the townships. Foreign wars added to the pressures during the 14th century and the arrival of the Black Death by 1349 significantly reduced the population. Further recurrences of bubonic plague continued sporadically throughout the 15th century, becoming less virulent but continuing to restrict population growth.

The 15th century saw a decline in the arable sector of the agrarian economy as a whole. A smaller population meant a lower demand and farmers no longer needed to cultivate marginal lands. Many villages shrank and some became depopulated. A large-scale conversion to sheep farming led to the extensive enclosure of previously open field systems.

By the 16th century there was great concern at what was happening in the rural areas, but it came too late to prevent wide-scale destruction and dilapidation. By the first half of the 16th century, Lincolnshire had gone from being one of the richest counties in England to one of the least prosperous, these change of fortunes beginning around the mid-14th century (Platts, 1985).

In the historical and archaeological record, medieval Lincolnshire is largely represented by Deserted Medieval Villages (DMVs) and their surrounding field systems, over 235 being identified to date, with even this thought to be an understatement (Start, 1995, 52). Other medieval remains include moated sites, manors, castles, watermills, churches and various other standing monuments.

### 10.2 Pipeline Results

#### Introduction

Fieldwalking in 1993 produced no significant concentrations of medieval material along the route, although the general background density increased south of the Slea. Fieldwalking in 1997 detected three slight medieval pottery scatters: one to the west of Ewerby village, one in the area of Plot 149, and one in Plot 151 (Network Archaeology Ltd, NAL, December 1997).

The collection of further unstratified material, and the excavation and recording of additional medieval features during construction in 1998, added to the number of medieval 'sites' recorded. The following list summarises the eight sites discovered throughout all pipeline stages (Figure 2). Sites consisting of extensive areas of activity are located by the northern and southernmost points of their plot numbers.

- ***Site 1, Plot 3, Hatton, TF 17590 75796***

An area of well-preserved ridge and furrow earthworks, surveyed prior to construction.

Additional ridge and furrow evident on aerial photographs.

Presence of medieval pottery.

Proximity to medieval village of Hatton.

- ***Site 3, Plots 8 and 9, Greenfield Farm, Minting, TF 17146 75012 - TF 17169 74280***

Apparent ridge and furrow field system visible on aerial photographs.

Presence of medieval pottery.

Remains of furrows surviving after topsoil stripping.

Probable medieval field boundary/ditch.

**Sites 4 and 5, Plots 12 and 17, TF 17220 72964 and TF 17090 72280**

Two areas of well-preserved ridge and furrow earthworks.  
One area of poorly surviving ridge and furrow earthworks.  
Additional ridge and furrow evident on aerial photographs.  
Remnant furrows seen after topsoil stripping.  
Association with Shrunken Medieval Village of Gautby.

• **Site 7, Plot 71, TF 12042 60950**

Cropmark and physical remains of ?medieval road.  
Ridge and furrow evident on aerial photographs.  
Presence of medieval pottery and stonework.  
Proximity of Linwood Grange and Deserfed Medieval Village (DMV) of Cotes.

• **Site 8, Plots 76-81, TF 11338 60470 - TF 11040 59812**

Remains of furrows.  
Presence of medieval pottery.  
Proximity of medieval village of Martin, Linwood Grange, and DMV of Cotes.

• **Site 14, Plots 131-136, TF 12510 48542 - TF 11464 47242**

Presence of medieval pottery.  
Remains of furrows.  
Proximity of medieval village of Ewerby.

• **Site 20, Plots 145-151, TF 10718 45908 - TF 09545 44428**

Presence of medieval pottery.  
Remains of furrows.  
Associated ridge and furrow evident on aerial photographs.  
Proximity of medieval village of Kirkby la Thorpe.

### 10.3 Site 1 Ridge and Furrow Earthworks and Pottery

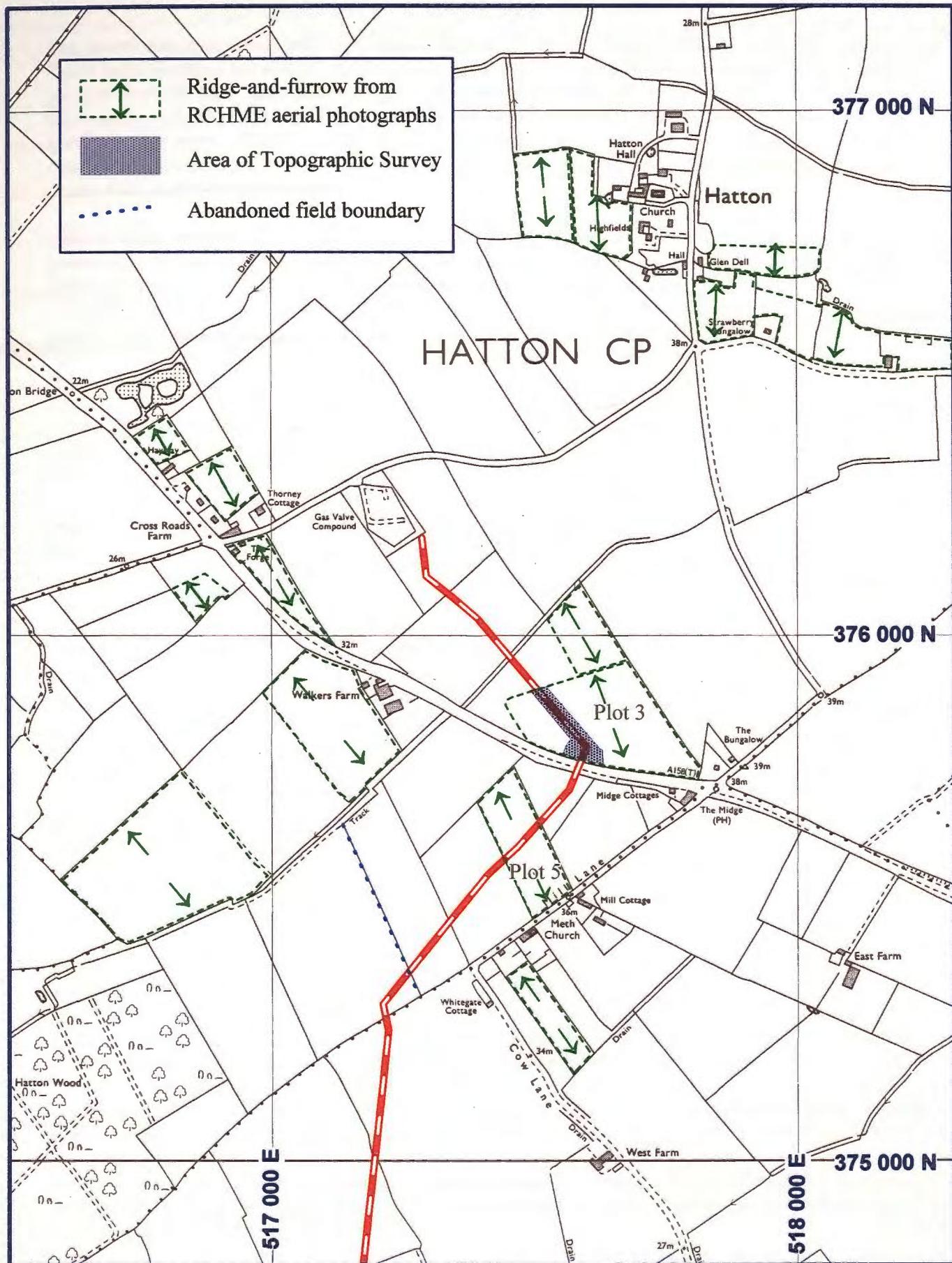
Plot 3, Hatton, TF 17590 75796

#### Summary

*A complex of ridge and furrow field systems presumably relating to the medieval settlement at Hatton were recorded. They were identified both from aerial photographs and surviving earthworks. The earthworks which were to be affected by the pipeline were subject to topographic survey. A small collection of medieval pottery dating to the twelfth and thirteenth centuries was collected.*

Construction Plot 3 (TF 1752 7586) and Plot 5 (TF 1739 7551) were highlighted in the Archaeological Desk-Based Assessment (NAL, January 1997) due to the existence of RCHME aerial photographs indicating the remains of medieval ridge and furrow (Figure 47). Field reconnaissance survey, undertaken as part of the fieldwalking survey in 1997 (NAL, December 1997), confirmed the presence of surviving earthworks in Plot 3. The visible remains within Plot 5 had been removed presumably through modern ploughing. A field boundary seen on the aerial photographs had since been removed but is shown on Figure 47.

The ridge and furrow affected by the pipeline route in Plot 3 consisted of well-preserved earthworks running north-north-west to south-south-east, extending to the east and west of the easement. They lay to the north of the present A150 trunk road. Due to their high level of preservation it was decided that a detailed topographic survey should be undertaken. The survey was conducted following the construction right of way clearance (the full survey has been deposited in the Lincoln archive).



Scale 1:10 000

Figure 47: Site 1, Location of ridge-and-furrow and topographic survey

The survey recorded eleven rows of ridge and furrow, or 'lands', which would be cut by the pipeline. These lands averaged 6m wide by 160m long, being very close to the Midlands average of 7m by 180m. At their downhill ends, the ridges had small heaps of grassed over soil or 'heads'. In Plot 3 no 'heads' were apparent at the uphill end of the lands, but one would not expect them anyway since the effects of gravity would have probably prevented such a build-up of soil. Another characteristic of medieval open-field systems, a slight left-hand twist, or reversed 'S' pattern (Hall, 1982), towards the end of some of the lands, was also evident.

Only a small quantity of medieval pottery was recovered from Plot 3 and the surrounding area, presumably because they were pasture fields and therefore unsuitable for fieldwalking. Three medieval pottery fragments were collected during pipeline construction. Two of these fragments are dated to the 13th-14th centuries, being sourced to Nottingham and Toynton. The third fragment is of an undated, Lincoln-type fabric (Appendix 4).

It is probable that the ridge and furrow earthworks in Plot 3 are contemporary with both the pottery fragments and the additional ridge and furrow fields in the immediate area (Figure 47). All are within working distance of the medieval settlement of Hatton, the latter appearing in both the Domesday Book of 1086 and the poll tax returns of 1379.

#### 10.4 Site 3 Ridge and Furrow Field System, Pottery and Field Boundary Ditch

Plots 8 and 9, Greenfield Farm, Minting, TF 17146 75012 - TF 17169 74280

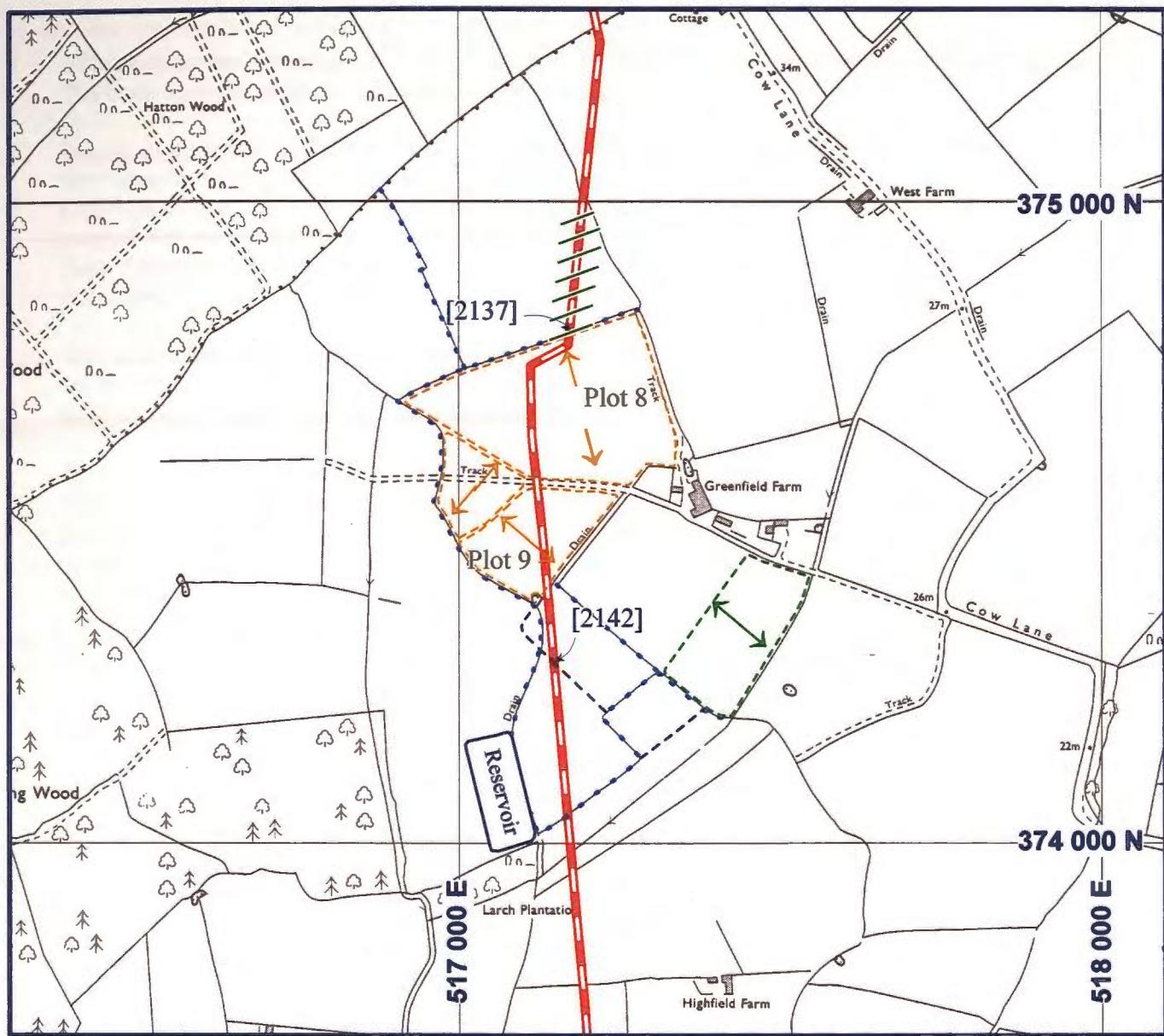
##### **Summary**

*Ridge and furrow field systems were initially identified from aerial photographs, parts of which have since been ploughed. They either belonged to Minting or to a now deserted smaller hamlet. Topsoil stripping produced additional evidence of remnant furrows. Only two unstratified pottery sherds were recovered from the area, an unidentified medieval sherd and a sixteenth century Bourne ware sherd. The construction watching brief produced a boundary ditch which may be medieval in origin.*

Construction Plot 8 (TF 1718 7488) and Plot 9 (TF 1715 7426) were both highlighted in the Archaeological Desk-Based Assessment (NAL, January 1997) due to the aerial photograph evidence provided by Lincoln City Hall. These photographs were taken in 1971, and show ridge and furrow in the fields directly to the north and south of the track leading west from Greenfield Farm (Figure 48). Similar features were apparent on the pipeline photo-geomorphological photographs (Dames & Moore International, 1992) (Figure 48). Several of the boundaries which defined these fields at the time of the photographs have since been removed, but are shown on Figure 48.

The ridge and furrow identified from the various photographic sources had different orientations, in particular to the north and south of the track which runs to the south of Greenfield Farm (Figure 48). The line of the track marks a change in gradient, the ground starting to slope down to the south-east. Assuming the field systems were contemporary, this change in orientation would appear to reflect the gradient and the need to facilitate drainage. From the photographs it appears that the furrows to the north of the track were between 150m and 220m long, orientated north-north-west to south-south-east and spaced approximately 9m apart. They do not appear to extend north of field boundary [2137]. These lands also displayed the reversed 'S' pattern characteristic of medieval ridge and furrow. The lands to the south of the track were, on average, around 170m long and again set approximately 9m apart. This southern group also appeared to show traces of two furlongs (*i.e.* a block of lands with parallel furrows), a main furlong being orientated north-west to south-east and a smaller fragment to the west having a north-east to south-west orientation.

The photo-geomorphological survey of 1992 also highlighted an additional, less distinct, area of possible ridge and furrow to the south-east of Greenfield Farm. This ridge and furrow lies on the same



Scale 1:10 000



Ridge-and-Furrow, from City Hall aerial photographs



Ridge-and-furrow, from Geomorphological Survey photographs



Area of furrows seen after topsoil stripping



Abandoned field boundary, shown on map but no longer present



Former field boundary identified from Geomorphological Survey photographs



[2142] Excavated field boundary ditch

Figure 48: Site 3, Ridge-and-Furrow

orientation as that immediately south of the track (north-west to south-east) and has a similar spacing. The lands appeared to be approximately 100m in length.

During construction, no furrow traces were found to match the aerial photographs, presumably because they have been ploughed out, though additional furrows were recorded to the north of field boundary [2137] in Plot 8. These furrows were orientated roughly east-north-east to west-south-west, running parallel with the field boundary and at right angles to the furrow orientation in the southern half of the field. Although one cannot estimate the length of the lands, it is possible to say that the furrows were set c. 9m apart.

Two unstratified medieval pottery fragments were retrieved from the area. Both of these came from the northern half of Plot 8. One is a sherd of mid-late 16th century Bourne ware and the other a sherd of undated medieval Lincoln-type ware (Appendix 4).

Apart from the furrows in Plot 8, the only other potential medieval feature encountered was a former field boundary ditch in Plot 9, feature [2142] (TF 17148 74264). This was first identified on aerial photographs and seen during topsoil stripping as a regular linear feature running north-west to south-east across the entire easement. Investigation during trenching showed it to have been re-cut at least twice, and to be 1.5m deep. The fills of each of these phases were fairly homogenous, lacking in organic matter. Three fragments of pottery were noted: two within the first re-cut and one within the second re-cut. All were medieval green-glazed sherds.

From the aerial photographs, the cropmark of this ditch shows that it once was part of a larger field system, forming the southernmost limit of the visible ridge and furrow (Figure 48). Although medieval field systems were, by definition, open plan, some ditches and/or fences would have been required for stock control and drainage. As the subsoil here is a heavy clay, drainage may well have been a problem. The combination of medieval pottery within the ditch and a field system containing ridge and furrow, both point towards a medieval rather than modern date.

In contrast, field boundary ditch [2137], although located at a junction between two differently aligned furlongs, appears to be relatively modern in date. Plastic sheeting was noted near the base of the ditch which appeared to have been recently back-filled. It is possible that an earlier ditch or boundary was sited in the same place, though any evidence of this has been removed by the modern ditch cut.

In summary, the investigations here located ridge and furrow field systems, as well as several extinct field divisions in the vicinity of Greenfield Farm. It cannot be certain that the field systems seen from the air and the features recorded on the ground are contemporary, but a medieval date for both does seem probable. The system probably either belonged to the village of Minting, less than a kilometre to the east, or was worked by a smaller hamlet or farm now deserted.

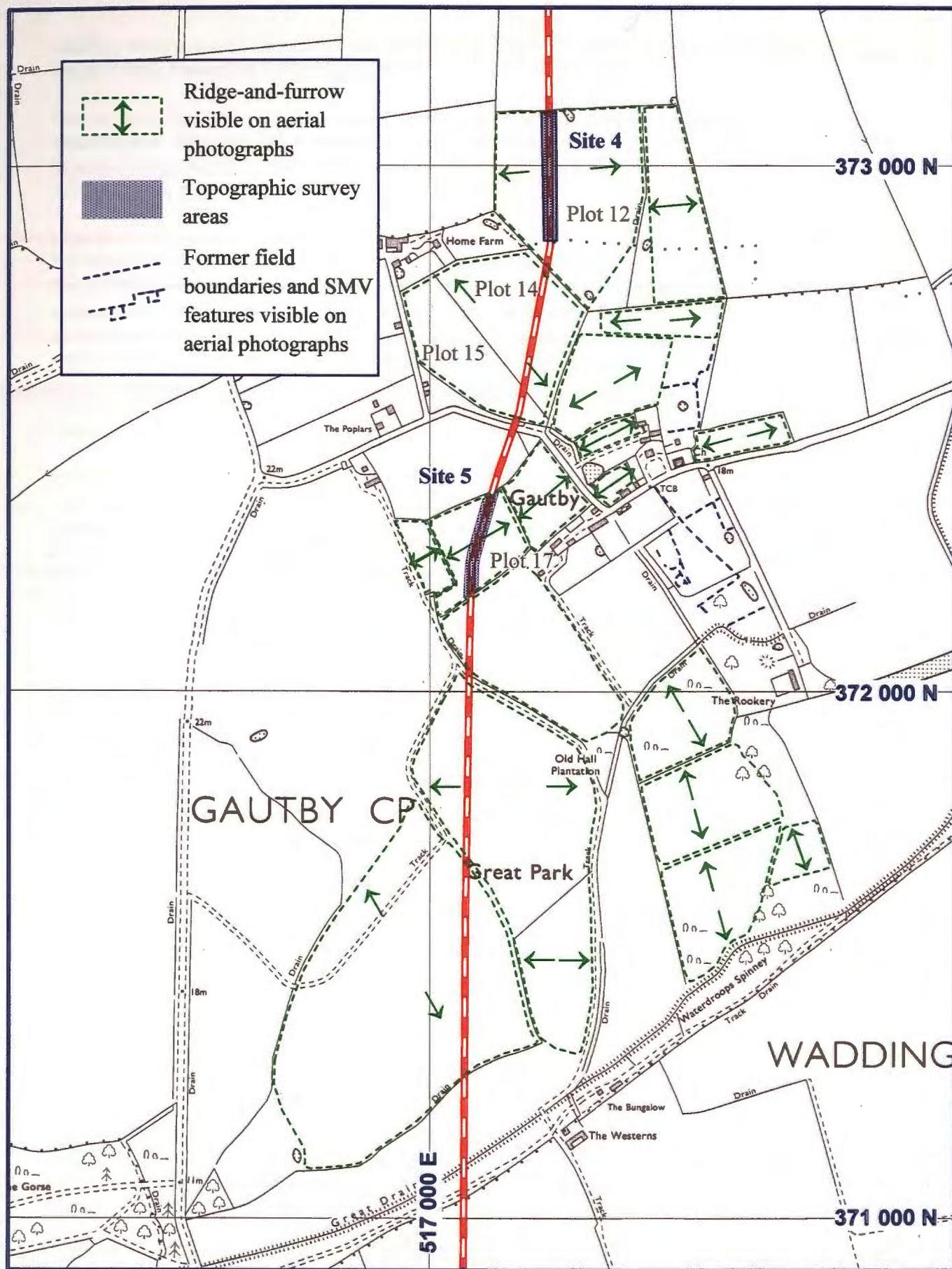
## 10.5 Sites 4 and 5 Ridge and Furrow Earthworks and Pottery

Plot 12, Home Farm, Gautby, TF 17220 72964 and Plot 17, Great Park, Gautby, TF 17090 72280

### **Summary**

*Ridge and furrow was evident from aerial photographs and highlighted in the Archaeological Desk-Based Assessment, associated with the Shrunken Medieval Village of Gautby. Topographic survey was carried out on two surviving field systems. A high proportion of the field systems seen on aerial photographs had been ploughed away, only two traces of remnant furrows being seen during topsoil stripping.*

The Archaeological Desk-Based Assessment (NAL, January 1997) highlighted the area around Gautby as possessing an extensive system of medieval fields surrounding the Shrunken Medieval Village of Gautby. The field systems were identified from RCHME aerial photographs, and the presence of



**Figure 49: Sites 4 and 5, Medieval Landscape, Location of Topographic Surveys**

standing earthworks confirmed within Construction Plots 12 and 17 during the field reconnaissance survey (NAL, December 1997) (Figure 49).

Due to their high level of preservation, it was decided that detailed topographic survey would be undertaken in these two ridge and furrow areas. This survey was conducted prior to the right of way clearance, recording all visible earthworks which were thought likely to fall within the easement (the full survey has been deposited in the Lincoln archive).

#### ***Plot 12***

The ridge and furrow earthworks in this field were orientated east-west, and at least eleven were cut by the pipeline route which ran at right angles to them. The ridges and furrows were not regularly spaced, varying between 4m and 12m apart. A triangular-shaped land, or 'gore', was identified within the survey area. Gores were simply blocks of land filling in odd spaces (Hall, 1982). Further lands were present at the southern end of the field but these were too faint and erratic to be accurately surveyed.

Artefact collection was not possible at the fieldwalking stage as this field was under pasture. During construction, one fragment of early post-medieval pottery was recovered.

#### ***Plot 17***

The lands in this field were orientated north-east to south-west, and at least thirteen were cut by the pipeline, which ran through them in a north-south direction. These lands were poorly preserved in the northern half of the field, where only erratic fragments of furrow could be seen. Within the southern half of the field, however, both the ridges and furrows were clearly visible. Here the lands were nearly all approximately 7m wide. The constraints imposed by limited access prevented the surveying of a full length of any land.

Artefact collection was not possible at the fieldwalking stage as the field lay under pasture. During construction, one fragment of Lincoln-type medieval pottery was recovered and one of early post-medieval date.

As well as Plots 12 and 17, the pipeline crossed five other fields around Gautby where aerial photographs had indicated the existence of ridge and furrow. Of these, only Plots 14 and 15 showed faint and intermittent traces of remnant furrows within the easement. One fragment of Lincoln-type medieval pottery and one sherd of early post-medieval pottery was recovered during construction from Plot 14 (Appendix 4).

It has not been possible to assign a specific date to any of these areas of ridge and furrow, other than to assume by their form that they are from the medieval period. We know that Gautby village was in existence from at least 1196, where it is mentioned in the *Feet of Fines* for the County of Lincoln.

### **10.6 Site 7 Roadway**

Plot 71, Linwood Moor, TF 12042 60950

#### ***Summary***

*A linear feature was seen as a cropmark immediately prior to topsoil stripping. On investigation it proved to be a metalled roadway, thought when first discovered to be either medieval or Roman. The only direct dating evidence found was a sherd of medieval pottery from half way up the fill of the main roadside ditch. By itself, this would not normally be sufficient to demonstrate a medieval origin. However, this date is to some extent reinforced by the presence of the site of a former grange at Linwood Farm, since the alignment of the road suggests it could have provided access to the grange. This evidence is by no means conclusive, and it is not impossible that the road is Roman in origin.*

Immediately prior to topsoil stripping, a cropmark was sighted on the hillside within Plot 71. It consisted of a strong linear feature, orientated approximately north-north-west to south-south-east, and which merged with an area of more irregular discolouration to the south-east of the easement. These cropmarks became more distinct as the cereal ripened and were most clearly visible during reinstatement (Plate 14). These, as well as further possible marks to the north-west of the pipeline, were also visible in the construction photo-geomorphological survey (Dames & Moore International, 1992). It is upon this survey that Figure 50 is based.

After the area covered by the linear cropmark was topsoil-stripped, it revealed a dark humic band approximately 9m wide. The soil in this band was fairly loose in structure and contained fragments of late 19th and 20th century pottery and glass. Having reached a depth of approximately 0.50m, the machine encountered a layer of gravel and limestone fragments. This layer appeared to form a metalled surface cutting back into the hillside. As this cropmark was clearly more than an ordinary field boundary it was decided to investigate further by opening two machine-dug trench at right angles to the feature (Figure 50).

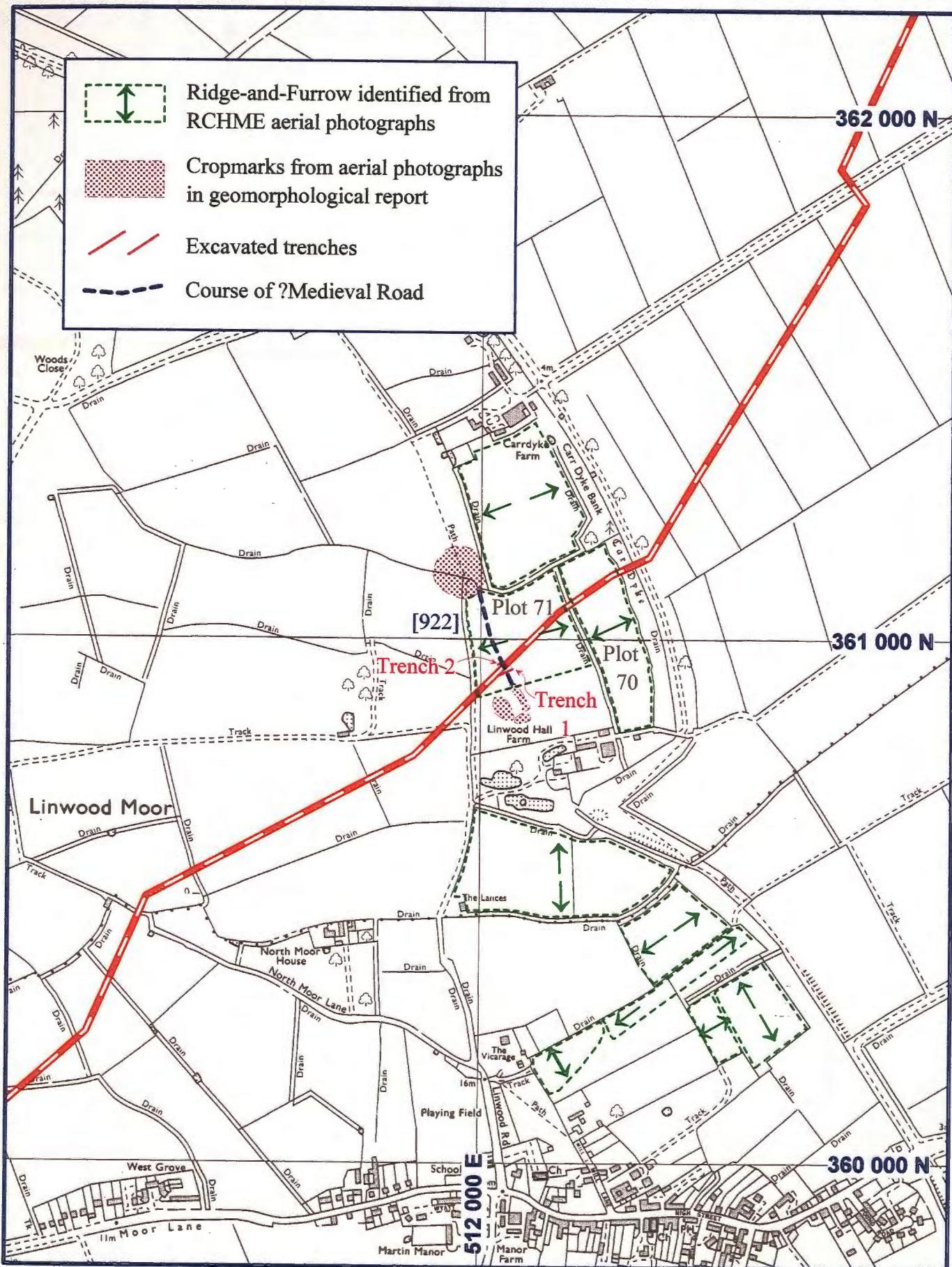
Trench 1, measuring approximately 2m wide and 8m long, was opened at the eastern edge of the easement. The trench varied in depth, reflecting the depth of the features encountered. The section confirmed the presence of a metalled road surface. Either side of this surface were ditches following a parallel course. The up-slope ditch measured approximately 1m deep and was roughly twice the size of the down-slope ditch. No dating evidence was recovered from any of these features, the only securely stratified finds being fragments of animal bone within the up-slope ditch which disintegrated upon removal. The metalled surface was made up of a jumbled layer of limestone fragments, measuring up to 0.15m in length, lying on a thin bed of rounded gravel. This covered a width of approximately 3m-4m and appeared to form a slight terrace, cut back into the slope. Due to the severe disturbance caused by the initial machining, it was not possible to determine whether the limestone fragments would ever have formed a 'paved' surface.

Owing to pressure of work elsewhere on the pipeline, it was not possible to record the trench in detail at this time. Instead it was agreed with Transco and Laing Engineering Ltd that, following the reinstatement of the topsoil, a further trench (Trench 2) would be opened over the road where the topsoil stack had protected the ground from disturbance. This would allow a more lengthy and exact examination of the stratigraphy and increase the likelihood of recovering datable evidence.

Following reinstatement, Trench 2, measuring approximately 2.50m wide by 15.6m long, was opened at the north-western edge of the easement, placed at right angles to the cropmark. A strip approximately 1m wide was machine-dug to a level just above the surface of the features, whilst an adjacent strip, measuring approximately 1.5m wide, was excavated using a combination of machine and hand-digging, to a level below the base of the features (Plate 15). This resulted in two partial sections being revealed, whose results were then combined to produce Figure 51.

As in Trench 1, a metalled surface accompanied by parallel ditches was evident, although there appeared to be more than one possible phase to the south-western ditch. This latter group of features was given an overall context number of [922].

The level of preservation did not match that of the first trench. Immediately beneath the topsoil, the layer of loose, dark humic soil, (926), again corresponded with the position of the cropmark, but had an average depth of only 0.40m. Beneath this, a clayey subsoil, (927) and (928), varying in depth between 0.05m and 0.55m, sealed almost all of the features. Only a 2.10m wide band of gravel metalling, (929), was visible between the two areas of subsoil (Figure 51). This gravel layer continued beneath the subsoil, in both directions, to the edges of the parallel ditches. Only occasional fragments of limestone were encountered on the surface of the gravel.



Scale 1:10 000

**Figure 50: Site 7, ?Medieval Road**

Trench 2 South-east facing section through medieval Roadway 922,  
featuring Ditches 935, 937, 939 and 931

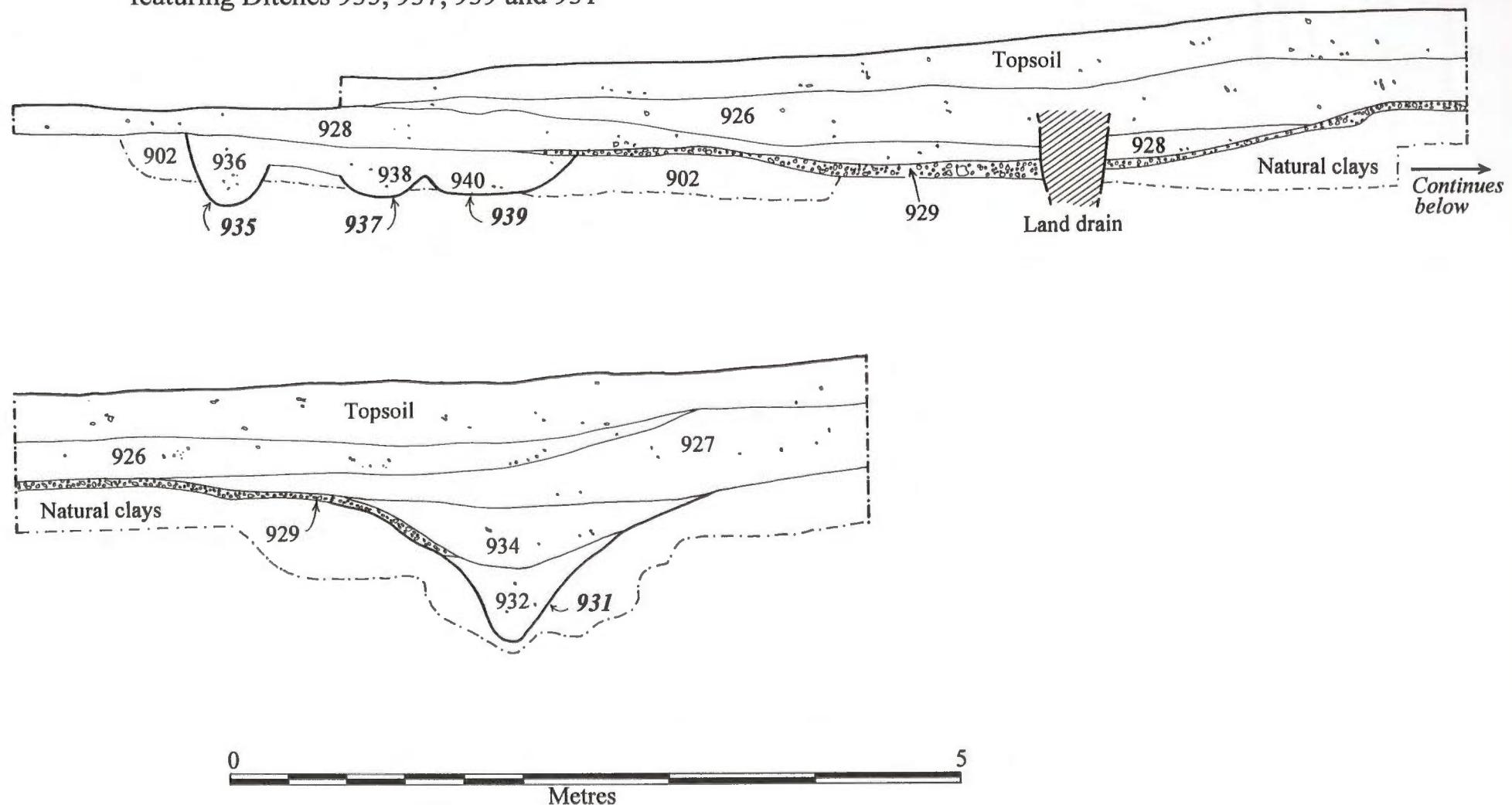


Figure 51: Site 7, Section Drawing of ?Medieval Road

Also in contrast to Trench 1, there did not appear to be the same discrete area of metalling between the ditches. Instead the gravel layer appeared to cover a width of approximately 8.50m, varying in depth between just 0.04m, where it was exposed through the subsoil, to 0.13m, where it was sealed below subsoil deposit (928). The area exposed above the surviving deposit of subsoil corresponded with a higher 'plateau', extending to the edge of northern-westernmost ditch [931]. To the south-west of this 'plateau', the gravel appeared to be sitting in a slight dip which extended to the edge of ditch cut [939].

The north-easternmost ditch, cut number [931], measured a maximum of 2.60m wide by 0.90m deep. In plan it appeared to be a fairly regular linear feature running parallel with the metalled surface. In profile it was steep-sided and symmetrical with a fairly narrow, flattened base. It was undoubtedly the same ditch as that seen to the north-east of the metalled surface in Trench 1. There appeared to be two principal phases of silting within this ditch. The primary fill, (932), reached a maximum depth of approximately 0.75m and was almost indistinguishable from the mid-orange-brown natural clay surrounding the feature. Differentiation was only made possible by the presence of snail shells and numerous fragments of bone, most probably from sheep. The majority of these bone fragments were too soft to recover, but larger fragments of a horse metacarpal and horse or cattle skull fragments were retrieved. A small fragment of pottery was recovered from the upper part of this fill, subsequently identified as a locally produced glazed ware dating to the 13th-14th centuries (Appendix 4).

The second phase of silting was probably much slower. The metalling adjacent to ditch [931] appears to have been slumping over the south-western edge of the ditch at the same time as the remainder of the ditch was gradually filling with an homogenous darkish brown-grey silty clay, context (934). These two contexts were very distinct from surrounding natural clay (902) and lower ditch fill (932).

The features to the south of the metalling were less clear. There appeared to be a number of possible shallow, inter-cutting ditches: features [935], [937] and [940], the relationships and chronology of which are unclear. All ran parallel to the metalled surface and all contained the same mid-orange-brown silty clay fill. Because of the homogenous nature of the fill and its similarity with the surrounding natural clay, it was not possible to be sure of any dimensions. Assuming that these were separate cuts, one could estimate that ditch [935] was approximately 0.60m wide by 0.48m deep, that ditch [937] was approximately 1.00m wide by 0.35m deep, and that ditch [939] was 1.20m wide by 0.18m deep. These depths were taken from below the supposed lower level of the subsoil. As the cuts were only really clear at their bases, and their relationship with overlying subsoil (928) also unclear, these dimensions should be treated with caution.

The phasing of these three ditches is problematic. There appeared to be a small amount of metalling extending for roughly 0.38m over the northernmost edge of cut [939] after it has silted up. Perhaps ditches [937] and [935] were dug to replace this innermost ditch as the road surface gradually spread outwards from its original centreline. On the other hand, the fills of these ditches seem to have more in common with the later subsoil deposits than with the fills seen in opposite ditch [931]. Perhaps these three ditches are later in date and the small amount of metalling material which appeared to overlie [939] had in fact been re-deposited at a later date. No finds were recovered from any of these ditches.

Taken as a whole, it is difficult to fully explain the stratigraphy of the road at this location. There is no doubt that a metalled road surface was present. Furthermore, whilst at this point the surviving metalling consisted almost entirely of gravel, it is probable that, as in Trench 1, it would originally have been topped with limestone fragments. There were no distinct boundaries to the metalling as there were in Trench 1, something possibly due to the gradual deterioration and spreading of the metalling material. It is also possible, as mentioned previously, that the course of the road shifted slightly over time and use, and that the metalling was deliberately spread further to keep the surface usable. One can be reasonably confident in ascribing a contemporary date for the north-eastern ditch [931] and the metalled surface, since the ditch appears to have been going out of use and silting up at the same time as the metalling was beginning to slump down its southern edge. What remains unclear is the chronology or relationship of the above to the possible ditch features to the south-west of the road.

Following the probable abandonment of the road, when the accompanying ditches had fully silted up and the gravel metalling had begun to disperse, the development of a subsoil began, which eventually covered the area and preserved the structure. As these features are located on a hillside, it is likely that the subsoil was principally hillwash. This was followed by the deliberate deposition of context (926) in the 20th century. Discussions with the elderly landowner revealed that the course of the road had previously been visible as a slight indentation across the hillside but that it had been deliberately filled and drained within the last 30 years. This levelling process may also have damaged the metalled surface. It is likely that subsoil contexts (928) and (927) were once a continuous layer sealing the road.

Having described the physical structure of the road, one is left with the more difficult task of determining date and function. Early cartographic evidence is sparse, with no enclosure or tithe maps covering the area of the site. No road is shown on the earliest Ordnance Survey maps. Nor is it shown on the enclosure map for the parish of Martin, which it would enter if it continued northward on the same line. It is unlikely for such a substantial road to have gone unrecorded if it had been in use during the time that these maps were made, that is, in the post-medieval era.

The only direct piece of dating evidence is the fragment of 13th-14th century pottery from the lower fill of ditch [931]. There was some root and animal disturbance in this fill so this pottery fragment may conceivably have been deposited at a later date, but assuming that it is not intrusive, it would provide a 13th-14th century date for when the ditch was silting up, and therefore a medieval date for the road as a whole.

A wide variety of sources show that there was intensive medieval activity in the area. These sources include aerial photographs from the National Monuments Record which show the existence of ridge and furrow along almost all the fen edge land from Martin and for a further kilometre north of the pipeline. The photographs record the presence of ridge and furrow within both Plots 71 and 70, although no supporting evidence was found during construction. There is insufficient detail to say whether or not they respect the location of the road.

In addition, a combined total of three fragments of unstratified medieval pottery were recovered from Plot 71 during the 1993 (Brookes *et al*, 1993) and 1997 (NAL, December 1997) fieldwalking surveys, and the 1998 watching brief. One of these is a sherd of glazed Lincoln Ware dating to the mid-14th to 15th centuries (Appendix 4). No other pottery of any date, excluding modern fragments within infill deposit (926), were recovered from this field.

Perhaps of more significance are the sites of Linwood Grange and the deserted medieval village of Cotes nearby. Present day Linwood Farm is believed to occupy the site of the medieval 'Linwood Grange', but the exact location of Cotes DMV is unknown. The manor of Cotes was mentioned in the Domesday book of 1086, and land was later donated in the early 12th century to Kirkstead Abbey by Walter de Aincurt. The monks built a grange which they called Linwood and this name superseded the earlier one (Foster, 1924). A grange was a monastic farm settlement located at some distance from its abbey, supervised by a monk and staffed by lay brothers (Lawrence, 1984). The grange was given over to intensive wool production, and various references are found to pounds, wool houses and sheep pens.

In the 12th century, many granges comprised little more than a barn and a modest dwelling, but in the 13th century, with the growth of monastic wealth, many of the granges grew both in size and complexity (Lawrence, 1984). It is certainly known that Linwood Grange continued to grow into the 13th century, as records were made establishing its right to exemption of tithes on newly reclaimed land (Owen, 1971). It is also known that the grange may have been surrounded by a moat. The earliest OS maps show possible moat fragments to the north of what was then Linwood Hall, as well as a number of fishponds to the south-west of the house. Some of the remains of the grange survived to be incorporated into what became known as Linwood Hall which was demolished in 1935 and replaced by Linwood Farm. The possible moat remains have since been in-filled, perhaps at the time of the Hall's demolition.

Four large blocks of architectural stone were found at the southern edge of Plot 70, one of which had simple moulding. This decorated block was retained (Registered Find No.5, Appendix 11) and may have once formed part of the architrave of a door or window. This, along with the three blocks of plain dressed stone, suggests a substantial building of some status somewhere in the vicinity. With Linwood Grange only 250m - 300m to the south, this would seem the most probable source.

The wealth and stature of Linwood Grange is important if one wishes to argue a contemporary date for the portion of road investigated. It is likely that a well-funded and successful grange could have justified the expense and effort involved in the construction of a metalled road. A parallel exists at the Cistercian grange of Manton where a written conveyance to Louth Park Abbey explains:

*'They are also granted.....the causeway they have made before the gate of their grange,....'*

(Owen, 1971)

Certainly, if one were to continue the line of the road south by 150m, beyond the point where the cropmark becomes unclear, one would reach the site of Linwood Grange, though there is no evidence to suggest a direct continuation of the road to the south of the grange. It is also worth mentioning that a present day bridle path, which originates in Martin as 'Linwood Road' and is noted on the earliest OS maps, continues to the north of Plot 71 on a course which would almost exactly match a continuance of the road approximately 75m beyond its clearly visible limits. It is thus possible that this present day bridle path may, at least to the north of Plot 71, mark the original continuation of the metalled road.

The above evidence supports a medieval origin for the metalled road remains, and it is this period which is favoured here. Nevertheless, a number of the road's features would also support a Roman construction date, and so a brief mention of these is made here. Most obviously, a metalled surface with roadside ditches on either side is typical of a Roman road. Furthermore, the dimensions of the metalled area are consistent with this interpretation. Roman roads seemed to vary in width from around 3m to over 10m, with smaller routes being commonly 5m to 8m (Margary, 1973, 21). The grading of the surface, with fairly large stone blocks lying over a gravel layer, hints at a degree of sophistication in construction. Unusual features, such as the marked asymmetry between the two roadside ditches, and the lack of any clear berms between the road surface and the ditches, could be a consequence of the fairly steep lateral slope at this point. The road also runs roughly parallel to Car Dyke, which is generally thought to date from the Roman period. There is, though, no known Roman road or settlement in the area, from which it might take its alignment.

The dating evidence for this road, although inconclusive, tends on balance to favour a medieval origin, because it fits into the historical settlement pattern of the area. Whilst a Roman date should not be entirely discounted, a road leading up to Linwood Grange in the period of prosperity during the 13th and early 14th centuries would seem a more likely interpretation.

## 10.7 Site 8 Pottery Scatter and Furrow Remains

Plots 76-81, Martin, TF 11338 60470 - TF 11040 59812

### Summary

*A scatter of medieval pottery and a series of remnant furrows were seen after the removal of the topsoil during the watching brief. The furrows are close to the settlements of Martin, Linwood Grange, and the Desolated Medieval Village of Cotes, so could relate to any of these foci of medieval settlement.*

Six fields along the pipeline route contained a very slight scatter of medieval pottery, which appeared to coincide with an area of poorly preserved furrows visible within the natural clay. These furrows were present within four of the six plots (Plot 77, TF 1126 6092; Plot 79, TF 1111 6011; Plot 80, TF 1105

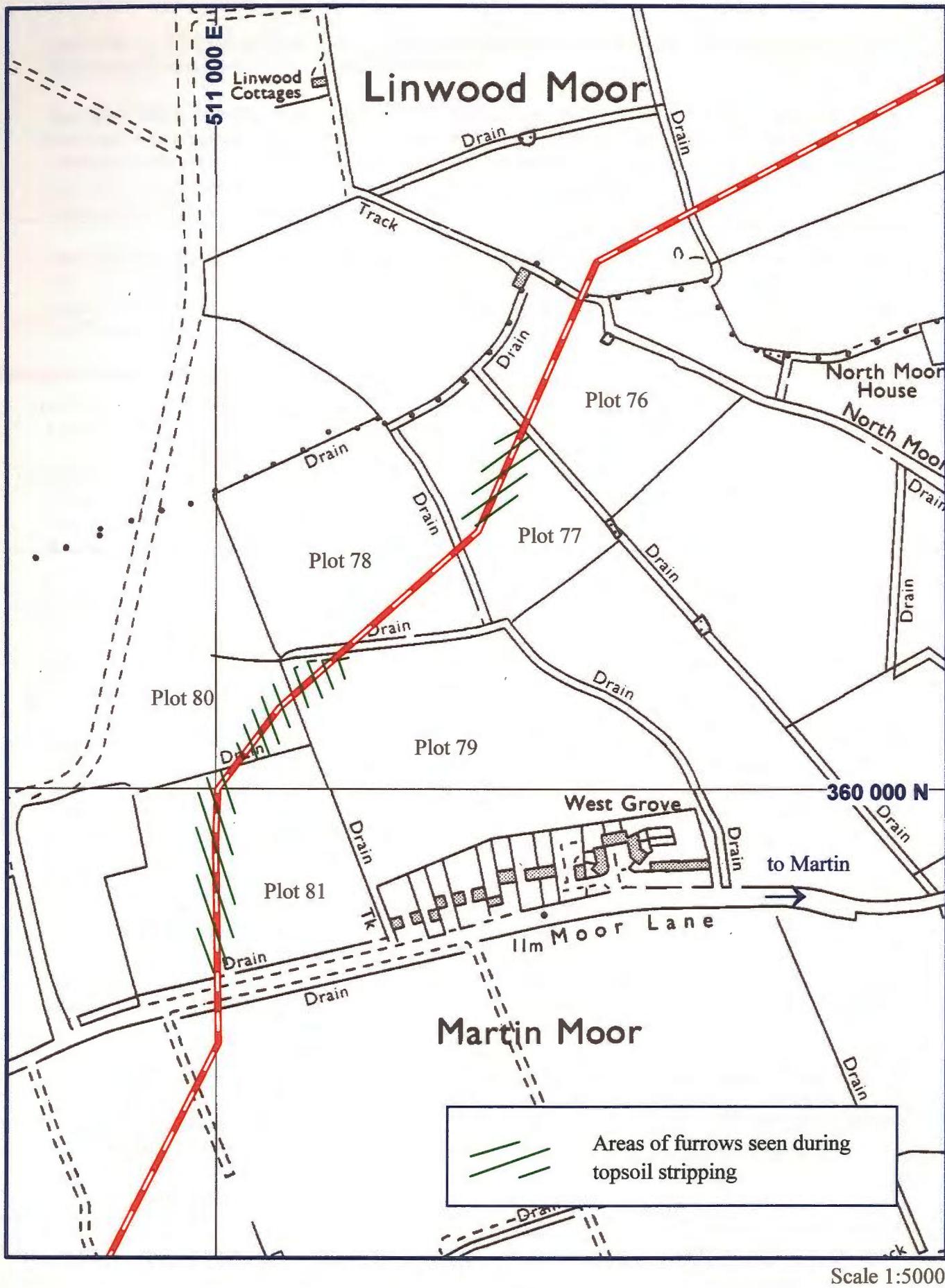


Figure 52: Site 8, Medieval Pottery Scatter and Remains of Furrows

6005; Plot 81, TF 1100 5992) (Figure 52). No ridges appear to have survived, although possible remains of a headland were seen at the northern end of Plot 79.

The fieldwalking surveys undertaken in 1993 (Brooks *et al*, 1993) and 1997 (NAL, December 1997), combined with artefacts collected during the 1998 watching brief, produced a total of nine fragments of unstratified medieval pot. Two of these fragments have been dated to the 13th-14th centuries, and are green-glazed jug fragments produced in Nottingham (Appendix 4). All of the sherds are regarded as the direct result of medieval manuring practices.

Although one cannot be certain that the furrows and pottery are contemporary, it seems quite likely. This area would have been within workable distance of medieval Martin and probably also the Deserted Medieval Village of Cotes, which is known to have been situated in the locality of Linwood Grange, itself situated about a kilometre to the north-east.

#### 10.8 Site 14 Pottery Scatter and Furrow Remains

Plots 131-136, Ewerby, TF 12510 48542 - TF 11464 47242

##### **Summary**

*A background collection of medieval pottery, presumably from manuring practices, was collected. Pipeline construction revealed two areas of remnant furrows seen after topsoil stripping. These furrows may be related to the medieval village of Ewerby.*

Fieldwalking in both 1993 (Brookes *et al*, 1993) and 1997 (NAL, December 1997) produced slight scatters of medieval pottery to the north and west of Ewerby. During the 1998 construction phase, further sherds of medieval pottery were recovered, and two areas of furrow remains recorded (Figure 53). The pottery is thought to represent manuring practices related to the medieval settlement of Ewerby.

The furrows were located within Construction Plot 132 (TF 1204 48040) and Plot 135 (TF 1163 4751). Those in Plot 132 were orientated north-south and set at intervals of between 8m and 15m. These furrows were poorly preserved in places and it is probable that the larger intervals are a result of 'lost' furrows rather than a true reflection of their distribution. Those in Plot 135 were orientated east-west and set at roughly 8m intervals. Due to the limited area of the easement it is not possible to estimate the full length of the lands.

Having combined the above information, a distinct concentration of activity is evident between TF 12510 48542, Plot 131, and TF 11464 47242, Plot 136. A total of 70 medieval pottery sherds were recovered along this stretch of the pipeline, over a distance of 1.77km. Out of 16 sherds collected during construction, thirteen have been dated to the 13th-14th centuries, and all are from either Lincolnshire or Nottinghamshire (Appendix 4). None of the sherds from either the 1993 or 1997 fieldwalking surveys can be dated any more accurately than to the medieval period.

The principal area of medieval activity, as represented by the above finds, appears to be north of Ewerby, petering out as the pipeline route continues to the south-west of the village. The 13th to 14th century dates might reflect a phase of expansion and prosperity for the village, with the scarcity of later evidence perhaps reflecting the contraction of activity from the mid-14th century onwards.

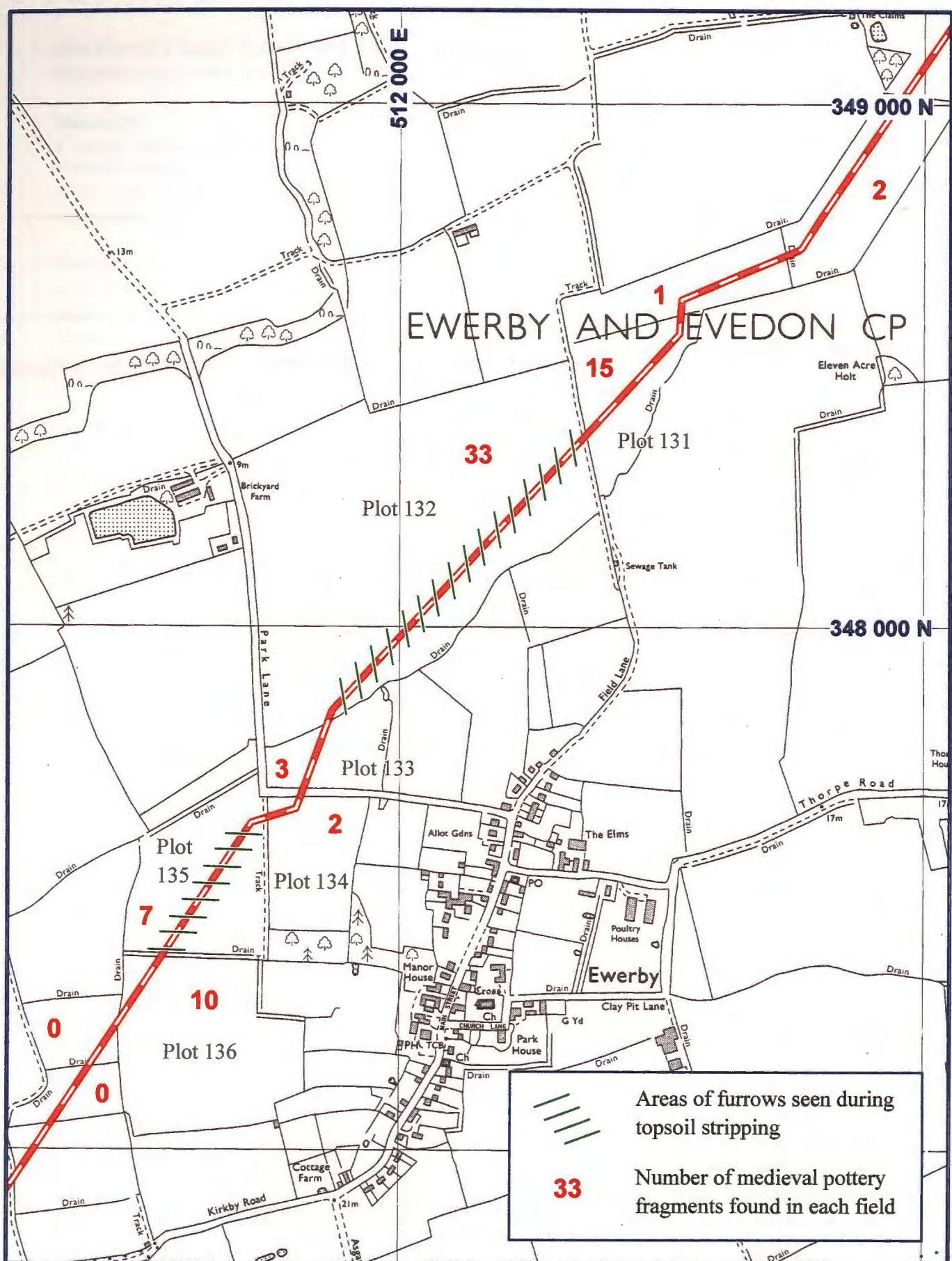


Figure 53: Site 14, Medieval Pottery Scatter and Remains of Furrows

## 10.9 Site 20 Pottery Scatter and Furrow Remains

Plots 145-151, Kirkby la Thorpe, TF 10718 45908 - TF 09545 44428

### Summary

A large collection of medieval pottery was collected from the vicinity of Kirkby la Thorpe, and the Deserted Medieval village of Thorpe or Laythorpe to the south. Remnant furrows were identified in five construction plots during topsoil stripping. Additional field systems were identified from an aerial photograph.

Fieldwalking in both 1993 (Brookes *et al*, 1993) and 1997 (NAL, December 1997) produced several slight scatters of medieval pottery to the east of Kirkby la Thorpe village and the deserted settlement of Laythorpe or Thorpe, which lay to the south of the present day village. These are again interpreted as representing manuring practices related to the medieval settlement of Kirkby la Thorpe. During the 1998 construction phase, further sherds of medieval pottery were recovered, and five fields containing furrow remains were noted (Figure 54). A total of 116 pottery sherds were recovered in all. An additional area of ridge and furrow cropmarks was also identified to the south of the pipeline in Plot 150. The latter were visible on an aerial photograph donated by the landowner following trenching.

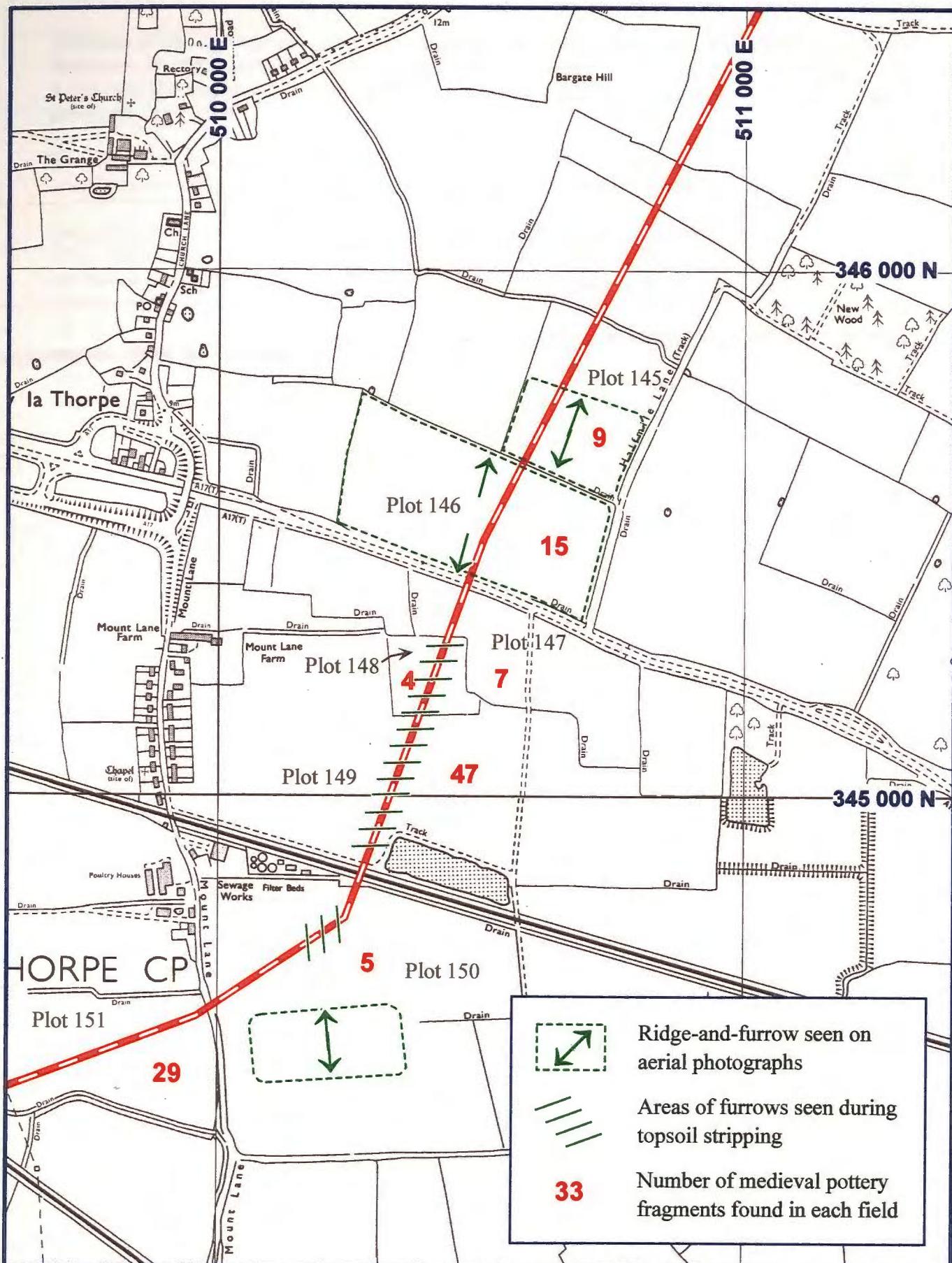
The furrow remains were located within Construction Plots 145, 146, 148, 149 and 150 (Figure 54). Those in Plots 145 and 146 were orientated north-north-east to south-south-west and set at intervals of approximately 11m. Although the lengths of the lands were not accurately recorded at the time, they appeared to continue for about half the length of Plot 145 and the whole length of 146, being approximately 150m and 200m respectively. It is not possible to say if they were originally continuous, as the build-up of materials around the present boundary ditch masked any such deposits. Those in Plots 148 and 149 were orientated east-west and set at roughly 9m intervals. The limited easement width and the angle at which the pipeline cut the furrows meant that it was not possible to estimate the full length of any of these lands. Finally, the furrows cut by the pipeline in Plot 150 were orientated north-south but their spacing was uncertain as much of the area was disturbed and waterlogged, though on average they appeared to have a spacing of about 10m.

Having combined the above information, a distinct concentration of activity is evident between TF 10718 45908, Plot 145 and TF 09545 44428, Plot 151, OS 0044. A total of 116 medieval pottery sherds were recovered along this stretch of the pipeline from a distance of approximately 1.9km. Out of the 38 sherds collected during construction and evaluation, 20 have been firmly placed in the 13th-14th centuries, whilst the remainder span the period between the 12th and 16th centuries. Only two of the pottery fragments, found in Plot 149, were produced outside Lincolnshire or Nottinghamshire (Appendix 4).

These results again reflect 13th-14th century arable farming with associated manuring, around the DMV of Thorpe or Laythorpe to the south. The pottery date range coincides with an intensive phase of farming, but the presence of some earlier and later sherds indicates extended usage.

## 10.10 Discussion

The majority of information gathered for this period has added to our knowledge of medieval farming patterns within this part of Lincolnshire. Twelve new areas of apparent furrow remains have been identified, eleven of which can be tentatively dated because of their association with significant pottery scatters of the 13th-14th centuries. They are all located in the proximity of known medieval villages, forming three distinct concentrations around Martin, Ewerby and Kirkby la Thorpe (Figure 2). All of the field systems are sited on boulder clay and river gravels (Figure 3). Notably, no sites were found on the marine and estuarine clays and peatland areas. This is most probably due to the fact that thirteenth century Lincolnshire witnessed a considerable rise in sea levels, which led to the flooding of many parts of the fens, making the peatlands wetter and generally less hospitable.



Scale 1:10 000

Figure 54: Site 20, Medieval Pottery Scatter, and Ridge and Furrow

The study of aerial photographs both from the British Gas Geomorphological Survey and an individual landowner, has also enabled the identification of two new extensive areas of ridge and furrow, near Plot 8 and Plot 150 respectively, which, although being outside the immediate area of the pipeline, were previously unrecorded.

The discovery of a metalled roadway at Linwood, if it is indeed of medieval date, has made a valuable contribution to our knowledge of Linwood Grange, a site of which very little is known.

Perhaps most significant of all is what the investigations have shown concerning the rate of destruction of the medieval landscape in this part of Lincolnshire. Of the thirteen directly affected areas of ridge and furrow highlighted in the Desk-Based Assessment (NAL, January 1997), eight no longer exist, two are mere traces of furrows within the natural clay, and only three have survived as standing earthworks. All three of the surviving areas are within long-standing pasture fields, which is the reason for their survival. With the increasing pressures of modern arable farming, it is likely that even more of Lincolnshire's medieval landscape will be lost over the next few decades. This makes it increasingly important that remains such as those encountered along the pipeline at Hatton and Gautby are recorded.

## 11 UNDATED

### 11.1 Pipeline Results

A total of thirteen undated, isolated ditches were recorded as part of the watching brief. Most are thought to be post-medieval or modern. There were probably more ditches of this kind along the route, but due to the large number of significant sites requiring intensive excavation and management elsewhere on the pipeline, it is likely that some were missed.

Table 3 below lists the principal characteristics of each of the ditches investigated, along with its most likely date. The table also states at which stage of construction the feature was recorded, *i.e.*, during topsoiling operations, or following pipeline trenching. Unless otherwise stated all ditches extended beyond the limits of the easement.

Since most of the ditches are thought to be fairly recent in date, many of them probably relate to the period of parliamentary enclosure within the Witham peat fenlands, which took place in the eighteenth and nineteenth centuries. The fens were also subject to major drainage operations in the 18th century, some 25,000 acres being drained and enclosed between 1777 and 1797 (Robinson, 1995, 72). Some of the ditches could also represent the smaller drains of this network..

Of the thirteen ditches recorded, only three merit further comment.

#### *Field Boundary Ditch [914]*

This ditch is aligned with adjacent field boundaries, so is thought to be relatively modern in date, despite the presence of a Romano-British *tegula* fragment within its lower fill. A similar fragment was retrieved during the 1997 fieldwalking survey (Network Archaeology Ltd, December 1997) approximately 40m away, but no further evidence of activity was detected. The *tegula* could easily be re-deposited.

#### *Field Boundary Ditches [1727] and [1733]*

These shallow ditches were cut through subsoil layer (1732), which had a scatter of medieval pottery recovered from its surface. This indicates the ditches are medieval or later. They are located within an area of medieval activity, associated with the nearby settlement of Ewerby, evinced by the pottery scatter and some furrows, also cut into the subsoil (see Medieval period : Site 14). The ditches are not aligned with the furrows. Rather, they fit into the modern field layout, so are thought more likely to be post-medieval or modern.

Feature	Plot	NGR	Location	Pipeline Stage	Orient-tation	Dimensions	Finds	Interpretation
[4403]	19	TF 17077 71886	Moor Farm, Bucknall	Pipe-trench	NE-SW	0.57m D 1.35m W	None	Deliberately backfilled field boundary/drainage ditch; probably post-med/modern
[7018]	42	TF 14162 65490	Hare Booth Farm, Metheringham Delph	Topsoil strip	ENE-WSW	0.67m D 1.35m W	None	Deliberately backfilled field boundary/drainage ditch showing evidence of re-cutting; probably modern
[7014]	43	TF 14110 65348	Duns Dike Bridge, Metheringham Delph	Topsoil strip	NNW-SSE	0.60m D 1.55m W	None	Deliberately backfilled field boundary/drainage ditch; probably modern
[7003]	44	TF 13940 65033	Duns Dike Bridge, Metheringham Delph	Topsoil strip	N-S	0.95m D 2.35m W	1 Early Modern pottery sherd	Deliberately backfilled field boundary/drainage ditch showing evidence of re-cutting; probably modern
[8006]	46	TF 13777 64713	Duns Dike Bridge, Metheringham Delph	Topsoil strip	NW-SE	0.60m D 2.40m W	None	Silted up drainage ditch running parallel to trackway; probably modern
[8003]	61	TF 12834 62238	Blankney Fen Farm, Blankney Fen	Topsoil strip	NE-SW	0.74m D 1.80m W	Cattle bone & modern iron fragments	Deliberately backfilled field boundary/drainage ditch; probably modern
[911]	74	TF 11771 60707	Linwood Moor	Topsoil strip	WSW-ENE	0.75m D 0.85m W	None	Silted up field boundary/drainage ditch; probably post-med/modern
[914]	74	TF 11792 60713	Linwood Moor	Topsoil strip	WSW-ENE	0.60m D 2.10m W	1 Roman <i> tegula</i> fragment	Silted up field boundary/drainage ditch; probably post-med/modern
[923]	75	TF 11434 60536	Linwood Moor	Pipe-trench	N-S	0.85m D 3.50-4.00m W	1 20th Century pottery sherd	Silted up semi-circular drainage ditch; probably association with nearby early-modern farm building remains
[1715]	128	TF 13125 49259	Cobbler's Lock, Anwick Fen	Pipe-trench	NW-SE	0.58m D 1.30m W	None	Silted up field boundary/drainage ditch (still in use to west); probably post-med/modern
[1719]	128	TF 12992 49068	Cobbler's Lock, Anwick Fen	Pipe-trench	ENE-WSW	0.47m D 1.00m W	None	Silted up field boundary/drainage ditch with evidence of re-cutting; probably post-med/modern
[1727]	132	TF 12322 48336	Ewerby	Pipe-trench	NE-SW	0.50m D 1.20m W	1 medieval pottery sherd	Silted up field boundary/drainage ditch; probably med to modern
[1733]	132	TF 11999 47982	Ewerby	Pipe-trench	NNW-SSE	0.56m D 1.25m W	None	Silted up field boundary/drainage ditch; probable med to modern

Table 3: Undated (?Recent) Ditches

## **12. OVERALL CONCLUSION**

The programme of archaeological investigations, commencing with the appraisal of the original proposed pipeline route in 1992 and culminating in the completion of the construction watching brief in 1998, resulted in the discovery of twenty-two previously unknown sites, all of local value, most of regional significance and Site 18 possibly of national importance.

The implementation of various mitigation strategies, from route modification at an early stage, to excavation during construction, has allowed each of these sites to be dealt with in the most appropriate and efficient manner, whilst allowing the design and laying of the pipeline to have continued with the minimum of disruption.

The success of the project demonstrates both the value of a staged approach when dealing with the archaeology of pipelines, and the importance of a proactive environmental policy in general.

The construction of a pipeline can clearly make an important contribution to the archaeological record, since it provides an opportunity to study a random swathe of archaeological evidence throughout a narrow but extensive strip of the countryside. This evidence would otherwise have remained undiscovered due to the lack of opportunity to investigate such areas. It also provides geological and topographical information to advance research areas such as changes in settlement patterns and land-use within a spatial and temporal context. The works along the Hatton to Silk Willoughby pipeline have proved that this area was well-settled and utilised throughout both historic and prehistoric times.

None of the above could have been achieved without the financial support of Transco and the continuous liaison between the Transco and Laing engineers involved with the pipeline project.

## **13. REPORT, FINDS AND ARCHIVE DEPOSITION**

The general site code for the Hatton to Silk Willoughby Gas Pipeline Project is HWP. The field-survey report from 1993 is labelled as HWP93. The field-survey artefacts/records from 1997 are labelled as HWP97, and the evaluation/excavation and watching brief artefacts/records as HWP98.

One copy of the desk-based assessment (NAL Report No. 103, January 1997) and the 1997 field-survey report (NAL Report No. 111, December 1997) has already been lodged with Lincolnshire County Council's Sites and Monuments Record. The geophysical survey report which accompanies the NAL field-survey report (GSB, Geophysical Report Survey 98/07) has also been submitted to this body.

The report by GeoQuest Associates on the geophysical survey conducted at the Scheduled Ancient Monument of Car Dyke (SAM.314), has been lodged with Lincolnshire's SMR and English Heritage. A separate report on the results of the watching brief at this location will also be lodged with English Heritage (NAL Report No. 133).

Two copies of this report (NAL Report No. 134) will be lodged with Lincolnshire's SMR. The paper archive will be deposited at the Lincolnshire Archives, and the artefacts at Lincoln Museum. The Accession Number will be 269.98.

## **14. ACKNOWLEDGEMENTS & CONTRIBUTORS**

### **14.1 Acknowledgements**

Network Archaeology Ltd (NAL) wishes to express thanks firstly to Transco who commissioned and funded NAL to carry out the Stage 2 Desk-Based Assessment and the Stage 7 Publication and Archive parts of the project. Thanks also to Laing Engineering Ltd, who commissioned and funded NAL, on behalf of Transco, to carry out the Stage 3 Field Survey, the Stage 4 Evaluations, and the Stage 6 Construction Watching Brief. For Transco, particular thanks are due to Des Gelly and Barry Robinson

for their input and support at all stages of the work, and to Peter Lockwood for his invaluable assistance with the on-site surveying. Thanks are also expressed to Jeff Evans, Public Relations Officer for Transco, who co-ordinated press releases and radio interviews. Nick Sheriff of Transco is thanked for his liaison with landowners. For Laing Engineering, thanks are expressed to Phil Allen and Steven Boothroyd for their continuous assistance throughout the field survey and construction watching brief.

Steve Catney (then the County Archaeologist for Lincolnshire) and Andrew Brown (English Heritage) also made valuable comments on the project. Thanks to Steve Adam the metal detectorist, who significantly added to the amount of information retrieved from the sites along the route. The staff of the Conservation Laboratory at Lincoln are thanked, especially Rob White for his assistance. Finally, NAL wish to thank the archaeologists who worked on the sites excavated along the pipeline route, and to David Cotterrell of Precise Surveys for recording the ridge and furrow earthworks.

## 14.2 Specialist Contributors

<b>Bronze Age Pottery</b>	183 Ashby Road, Burton upon Trent, Staffs. DE15 0LE
<b>Roman and Iron Age Pottery</b>	25 West Parade, Lincoln. LN1 1NW
<b>Anglo-Saxon Grave Goods</b>	North Lincolnshire Museum, Scunthorpe, DN15 7BD
<b>Anglo-Saxon and Medieval Pottery</b>	25 West Parade, Lincoln. LN1 1NW
<b>Human Bone</b>	96 Ross Close, Saffron Walden, Essex. CB11 4DT
<b>Animal Bone</b>	25 West Parade, Lincoln. LN1 1NW
<b>Ceramic Building Material</b>	25 West Parade, Lincoln. LN1 1NW
<b>Baked/Fired Clay Material</b>	25 West Parade, Lincoln. LN1 1NW
<b>Flint Artefacts</b>	12 Market Square, Winslow, Buckingham. MK18 3AG
<b>Registered &amp; Bulk Finds</b>	25 Main Street, South Rauceby, Lincs. NG34 8QG
<b>Environmental Analysis</b>	25 Main Street, South Rauceby, Lincs. NG34 8QG
<b>Artefact Illustration</b>	110 High Street, Heckington, Sleaford, Lincs. NG34 9QD
<b>Plan &amp; Section Illustration</b>	25 West Parade, Lincoln. LN1 1NW

### **14.3 NAL Personnel**

Claire Lingard (CL) initially managed the project which was then taken on by Linda Bonnor (LB) for the construction and report writing stages. LB was assisted throughout the watching brief by Mark Allen (MA) who, along with Andrew Hunn, each supervised the excavation of a number of sites. LB and MA wrote the report text whilst Dr Richard Moore produced the computerised illustrations. Nicola Smith produced the plan and section drawings. CL, Chris Taylor and Rosie Burton edited the report text and collated both volumes.

Personnel in the field were: Mark Allen (Assistant Project Officer), James Belcher, Linda Bonnor (Project Officer), Joanne Boote, Wendy Booth, Dave Bower, Aidan Burford, Iain Charles, Mike Garrett, Andrew Hunn (Excavation Supervisor), Dr Richard Moore, Elizabeth Muldowney, Darren Pullen, Alec Russell, Jon Sygrave and Barry Taylor.

## 15. REFERENCES

- Allen, M. & Applin, B., 1996. *The story of the Buckskin barrow*, Current Archaeology, No.146, vol XIII (2) 52-56, The Friary Press.
- Allen, T., Miles, D. & Palmer, S., 1984. *Iron Age Buildings in the Upper Thames Region*, in Cunliffe, B. & Miles, D. (eds.), 1984. Aspects of the Iron Age in Central Southern Britain. Oxford.
- Adkins, L. & R., 1998. *The Handbook of British Archaeology*. Constable & Company Ltd.
- Bawled, R., 1994. *Prehistoric Settlement*. Batsford.
- Bennett, S., and Bennett N. (eds.) (second reprint) 1995. *An Historical Atlas of Lincolnshire*. The University of Hull Press.
- Brookes, I.P., et al, 1994. *Hatton to Silk Willoughby Pipeline: Initial Archaeological Fieldwork*. British Gas Internal Report
- Brookes, I.P., 1994. *Hatton to Silk Willoughby Pipeline 1994: Pre-Construction Flint work*. British Gas Internal Report.
- Brown, A. G., 1997. *Alluvial Geoarchaeology*. Cambridge University Press.
- Brown, D., 1978. *Anglo-Saxon England*. The Bodley Head Archaeologies, BAS Printers Ltd.
- Code of Conduct*. Revised Edition October 1997. Institute of Field Archaeologists.
- Code of Approved Practice For the Regulation of Contractual Arrangements in Field Archaeology*. Revised Edition October 1998. Institute of Field Archaeologists.
- Chowne, P., & Healy, F., 1983. *Artefacts from a Prehistoric Cemetery and Settlement in Anwick Fen, Lincolnshire*. Lincolnshire History & Archaeology Vol. 18, 1983.
- Cunliffe, B., 1991. *Iron Age Communities in Britain*. Routledge.
- Dames and Moore International, 1992. *Photo-Geomorphological Survey, Hatton - Peterborough, For British Gas PLC, Volume 1, Hatton to Silk Willoughby*.
- Dark, K. & P., 1998. *The Landscape of Roman Britain*. Sutton Publishing.
- Dyer, J., 1990. *Ancient Britain*. Batsford Ltd., London.
- East Anglian Archaeology Report No.12, 1981. *The Barrows of East Anglia*. Norfolk Museum Service, Suffolk County Council, Norfolk County Council.
- Ekwall, E., 1974. *The Concise Oxford Dictionary of English Place-Names*. Fourth Edition. Oxford University Press.
- Foster, C., W., 1924. *Lincolnshire Record Society*, Vol. 19, liv.
- Geophysical Surveys of Bradford, July 1998. *Geophysical Survey Report 98/07, Hatton to Silk Willoughby Pipeline*. For Network Archaeology Ltd on behalf of Laing Engineering Ltd.

- GeoQuest Associates, 1997. *Geophysical Surveys at Car Dyke, Lincolnshire*. A programme of research carried out on behalf of Laing Engineering Ltd, Internal Report.
- Grinsell, L., 1990. *Barrows in England and Wales*. Shire Publications Ltd.
- Hall, D., 1982. *Medieval Fields*. Shire Publications Ltd.
- Hanley, R., 1987. *Villages in Roman Britain*. Shire Publications Ltd.
- Hingley, R., 1989. *Rural Settlement in Roman Britain*. Seamy, London.
- Lawrence, C., H., 1984. *Medieval Monasticism*. Longman Group Ltd.
- Leahy, K., 1993. *The Anglo-Saxon settlement of Lindsey*. in *Pre-Viking Lindsey (edited by A. Vince)* 29-44, Meltons Printers.
- Lincolnshire County Council, City and County Museum, Lincoln, *Conditions for the Acceptance of Archaeological Archives* 1994.
- Lincolnshire History and Archaeology, Volume 31, 1996. North Lincolnshire Council.
- Management of Archaeological Projects*, 1991. Second Edition, English Heritage.
- May, J., 1976. *Prehistoric Lincolnshire*. The History of Lincolnshire Committee.
- May, J., 1996. *Dragonby - Report on Excavations at an Iron Age and Romano-British Settlement in North Lincolnshire*. Oxbow Monograph 61.
- Method Statement and Specification for Hatton to Silk Willoughby Proposed Natural Gas Pipeline LEC 0217*, 1998. Network Archaeology for Laing Engineering Ltd. On behalf of Transco.
- Network Archaeology Ltd, Jan 1997. *Proposed Hatton to Silk Willoughby Gas Pipeline: Archaeological Desk-Based Assessment*. For British Gas Transco.
- Network Archaeology Ltd, Dec 1997. *Hatton to Silk Willoughby Gas Pipeline: Archaeological Fieldwalking and Field Reconnaissance Survey*. For Laing Engineering Ltd.
- Network Archaeology Ltd, Report No. 133., September 1999. *Hatton to Silk Willoughby 1005mm Gas Pipeline. Archaeological Evaluation and Watching Brief at Car Dyke (SAM 314)*. Prepared for English Heritage on behalf of Transco.
- Owen, D., M., 1971. *Church and Society in Medieval Lincolnshire*. The History Of Lincolnshire Committee.
- Pitts, M. W., 1978. 'Towards an Understanding of Flint Industries in Post-Glacial England', *Bull. Inst. Arch. Univ. London* 15, 37-57.
- Platts, G., 1985. *Land and People in medieval Lincolnshire*. The History Of Lincolnshire Committee.
- Reid, M. L., 1993. *Prehistoric House in Britain*. Shire Archaeology.
- Roberts, C. & Manchester, K., 1995. *The Archaeology of Disease*. New York Cornell University Press.

- Robinson, D, 1995. "Drainage and Reclamation" in Bennett, S., and Bennett N. (eds.) (second reprint). *An Historical Atlas of Lincolnshire*. The University of Hull Press.
- Sawyer, P., 1998. *Anglo-Saxon Lincolnshire*. The History of Lincolnshire Committee.
- Simmons, B., 1995. 'The Iron Age and Roman Coasts Around the Wash' in *An Historical Atlas of Lincolnshire Edited by Stewart Bennett and Nicholas Bennett, 1993*, The University of Hull Press.
- Standard and Guidance for Archaeological Watching Briefs*, 1994. Institute of Field Archaeologists.
- Start, D., 1995. "Deserted Medieval Villages" in Bennett, S., and Bennett N. (eds.) (second reprint). *An Historical Atlas of Lincolnshire*. The University of Hull Press.
- Transco Brief for *Archaeological Desk-Based Assessment*, June 1997. Prepared by Network Archaeology Ltd for Transco.
- Transco Brief for *Non-intrusive Field Survey*, June 1997. Prepared by Network Archaeology Ltd for Transco.
- Transco Brief for *Watching Brief (during development)*, June 1997. Prepared by Network Archaeology Ltd for Transco.
- Transco Brief for *Excavation*, June 1997. Prepared by Network Archaeology Ltd for Transco.
- Transco Brief for *Archive and Publication*, June 1997. Prepared by Network Archaeology Ltd for Transco.
- Tipper, J.B., 1994. *Mareham Road, Horncastle. An Archaeological Evaluation*. Lindsey Archaeological Services, Report No. 95.
- Wacher, J., 1986. *Roman Britain*. J.M. Dent & Sons Ltd, London, Melbourne.
- Welch, M., 1992. *Anglo-Saxon England*. English Heritage, B.T. Batsford Ltd.
- Whitwell, J., B., 1992. *Roman Lincolnshire*. The History Of Lincolnshire Committee.
- Williams, H., 1998. *Monuments and the past in early Anglo-Saxon England*. World Archaeology, *The Past in the Past*, vol. 30 (1) 90-108, Routledge.



Plate 1: Iron Age enclosure cropmark at Site 22



Plate 2: Romano-British well [2029], Site 2



Plate 3: Waterlogged conditions at Site 2



Plate 4: Late Iron Age ring gully, Site 6A



Plate 5: Romano-British stock enclosure, Site 9



Plate 6: Cropmarks of Romano-British and Medieval features in the vicinity of Site 21



Plate 7: Ring ditch [1990], Site 18



Plate 8: Section (a) through ring ditch [1990], Site 18



Plate 9: Ring ditch [1993], Site 18



Plate 10: Anglo-Saxon Skeleton 1989, Grave cut [1987], Site 18



Plate 11: Anglo-Saxon 'Seax' from grave [1981], Site 18  
(part of blade has been cleaned to show a groove)  
Scale: 15cm



Plate 12: View south from ring ditch [1993],  
Site 18



Plate 13: View north from rectangular  
ditch [2332], Site 18



Plate 14: Cropmark showing roadway, Site 7



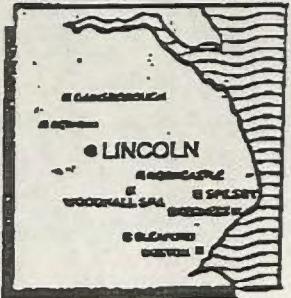
Plate 15: Trench through road, Site 7



Plate 16: Evaluation trench to the north of Car Dyke in Plot 68



Plate 17: Construction of thrust pit to the north of Car Dyke in Plot 68



# LINCOLNSHIRE ECHO GROUP NEWSPAPERS

~~SCLEAFORD~~  
**TRANSKO  
PIPELINE**

Brayford Wharf East  
Lincoln LNS 7AT  
Tel. (01522) 52525

Evening and Weekly Newspapers for City and County.

FACSIMILE

TO: JUDY O'NEIL / JIM / STEVE /  
 FROM: JASON NEILOR  
 FAX NO: 553149  
 DATE: 12-6-98  
 NO OF PAGES (including this one): Two

Dear Judy,

He phoned @ 1015?

As discussed, here is the press release  
we've just received.

Many thanks for your help.

Judy

- He wanted info for 11AM today
- I gave Jason phone number  
for NETWORK

Lincolnshire County Council  
Archaeology Section

12 JUN 98

I said Steve was unavailable until Tuesday but  
he could phone back later today if he needed.

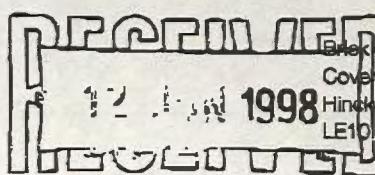
Woodhall and Tattershall  
Targets  
16 Wide Bargate,  
Boston PE21 6SR  
Tel. (01205) 356262

Sleaford Target  
4 Mill Court,  
Sleaford NG34 7TW  
Tel. (01529) 413419

Gainsborough Target  
24 Spital Terrace,  
Gainsborough DN21 2HE  
Tel. (01427) 810148

# Media Information

**Transco**



Bleek Kiln Street  
Coventry Road  
Hinckley  
LE10 0NA

## PIPELINE PROJECT UNEARTHS HUMAN REMAINS

Human bones including three skulls dating to pre-Roman times have been found by archaeologists working on a gas pipeline project in Lincolnshire.

Pipeline operator Transco is laying a 42 inch diameter high pressure gas transmission pipeline running north to south for 24 miles from Hatton, near Wragby to Silk Willoughby near Sleaford.

As part of the environmental commitment by Transco and its contractor Laing Engineering, the site is archaeological surveyed before the huge pipes are laid.

The bones were found east of Sleaford on what is believed to be the perimeter of an Iron Age cemetery of about 300/100 BC. Archaeologist Chris Taylor, described the finds as extremely important. Fragments (including parts of the three skulls) were found in a thirty metre area on the pipeline route.

"This type of cemetery in Lincolnshire is extremely rare," said Chris. "These people would have been farmers and we are carrying out a full excavation." Pottery giving an indication of the date and a long bladed knife are among some of the artefacts found.

DJS

Des Gelly, Transco's project manager, is pleased that the archaeologists have made such an important discovery. "Obviously our job is the get the pipeline laid to meet growing demand for gas, but we also have a commitment to the local environment and its history."

All the finds have been removed and it is expected that eventually they will go to Lincolnshire museums.

ENDS

Judy:

Cathy Here 553072  
881 ~~5296629~~ 100

Figurine model  
Ring  
0385 296629

For further information please contact Mike Chalmers/Jeff Evans (01455 615 949)  
or John O'Grady (0113 254 4985)

Transco operates in the UK  
and is a part of BG plc

BG plc  
Registered In England No. 2006000  
Registered Office  
100 Thames Valley Park Drive  
Reading, Berkshire RG8 1PT

revised/revised: (01455) 712622

