

**A505 BALDOCK BYPASS**  
**ASSESSMENT OF POTENTIAL AND UPDATED**  
**PROJECT DESIGN**

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## CONTENTS

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<b>1. INTRODUCTION .....</b>	<b>13</b>
1.1 Study Area Location.....	13
1.2 Archaeological Background.....	13
1.3 Nature of Archaeological Investigations.....	13
1.4 Purpose of this Report.....	14
<b>2. FIELDWORK AIMS AND OBJECTIVES.....</b>	<b>15</b>
2.1 Introduction .....	15
2.2 Period Specific Objectives.....	16
2.3 General Project and Cross period objectives.....	19
<b>3. PROVISIONAL SUMMARY OF RESULTS.....</b>	<b>21</b>
3.1 Introduction .....	21
3.2 Phase 2: Neolithic (Figure 2).....	21
3.3 Phase 3: Early Bronze Age (Figure 2).....	21
3.4 Phase 4: Late Bronze Age-early Iron Age (Figure 3) .....	22
3.5 Phase 5: Early to Middle Iron Age (Figure 4).....	22
3.6 Phase 6: Late Iron Age/early Roman (Figures 5 and 6) .....	23
3.7 Phase 7: Roman (Figure 7) .....	26
3.8 Phase 10: Medieval (Figure 8) .....	28
3.9 Phase 11: Post-medieval (Figure 9) .....	30
3.10 Phase 12: Modern .....	31
3.11 Phase 0: Undated (Figure 10) .....	32
<b>4. DATA SET QUANTIFICATION .....</b>	<b>34</b>
4.1 Introduction .....	34
4.2 Structural Data .....	34
4.3 Pottery .....	38
4.4 Ceramic Building Material.....	50
4.5 Flint.....	54
4.6 Registered and bulk non-ceramic artefacts.....	58
4.7 Human Bone J McKinley.....	69
4.8 Animal Bone J Rackham .....	74
4.9 Environmental Samples J Rackham.....	81
4.10 Soil micromorphology R Macphail .....	85
<b>5. ANALYTICAL POTENTIAL OF THE DATA.....</b>	<b>109</b>
5.1 Introduction .....	109
5.2 Contextual Data.....	109
5.3 Pottery .....	112
5.4 Ceramic Building Material.....	113
5.5 Flint.....	114
5.6 Registered and non-ceramic bulk artefacts.....	115
5.7 Human Bone J McKinley.....	117
5.8 Animal Bone J Rackham .....	118
5.9 Environmental Samples J Rackham.....	118
5.10 Soil Micromorphology R Macphail.....	119
<b>6. SUMMARY RESEARCH OBJECTIVES FOR ANALYSIS.....</b>	<b>121</b>
6.1 Introduction .....	121
6.2 Revised Research Objectives .....	121
<b>7. UPDATED PROJECT DESIGN.....</b>	<b>122</b>



7.1	Introduction .....	122
7.2	Publication .....	122
7.3	Timetable.....	123
7.4	Archiving.....	124
<b>8.</b>	<b>BIBLIOGRAPHY .....</b>	<b>127</b>
<b>9.</b>	<b>APPENDIX 1: METHOD STATEMENTS FOR ANALYSIS, PUBLICATION AND ARCHIVING (BY EACH DATA SET) .....</b>	<b>133</b>
9.1	Documentary Analysis .....	133
9.2	Analysis of the Structural Data .....	133
9.3	Analysis of Ceramic Artefacts .....	135
9.4	Analysis of registered and non-ceramic artefacts .....	137
9.5	Analysis of Human Bone.....	138
9.6	Analysis of Animal Bone .....	138
9.7	Analysis of the Environmental samples.....	139
9.8	Soil Micromorphology.....	140
9.9	Overall Publication, Archiving and Project Management.....	142
<b>10.</b>	<b>APPENDIX 2: THE PROJECT TEAM.....</b>	<b>144</b>
<b>11.</b>	<b>APPENDIX 3: SUMMARY OF ALL TASKS .....</b>	<b>145</b>



## LIST OF TABLES

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<b>Table 1: Provisional assessment phasing</b>	<b>15</b>
<b>Table 2: Geographical areas</b>	<b>16</b>
<b>Table 3: Summary of provisional phasing</b>	<b>21</b>
<b>Table 4: Quantity of records</b>	<b>35</b>
<b>Table 5: Landscape descriptions (ordered by phase) with count of assigned contexts</b>	<b>38</b>
<b>Table 6: Quantity of pottery by Area</b>	<b>39</b>
<b>Table 7: Pottery type series</b>	<b>41</b>
<b>Table 8: Assemblage composition by phase and sherd count (excludes unidentified material)</b>	<b>41</b>
<b>Table 9: Phase 2 Pottery by landscape and group</b>	<b>42</b>
<b>Table 10: Phase 3 Pottery by landscape and group</b>	<b>42</b>
<b>Table 11: Phase 4 Pottery by landscape and group</b>	<b>43</b>
<b>Table 12: Phase 5 Pottery by landscape and group</b>	<b>44</b>
<b>Table 13: Phase 6 Pottery by landscape and group</b>	<b>45</b>
<b>Table 14: Phase 7 Pottery by landscape and group</b>	<b>47</b>
<b>Table 15: Phase 10 Pottery by landscape and group</b>	<b>48</b>
<b>Table 16: Phase 11 Pottery by landscape and group</b>	<b>49</b>
<b>Table 17: Phase 12 Pottery by landscape and group</b>	<b>49</b>
<b>Table 18: Undated Pottery by landscape and group</b>	<b>50</b>
<b>Table 19: Quantity of ceramic building material by Area</b>	<b>50</b>
<b>Table 20: Assemblage composition by phase and fragment count</b>	<b>51</b>
<b>Table 21: Quantity of brick and tile by Phase, Landscape and Group</b>	<b>53</b>
<b>Table 22: Quantity of fired clay by Phase, Landscape and Group</b>	<b>54</b>
<b>Table 23: Struck and burnt flint by Assessment Phase, Landscape and Group</b>	<b>55</b>
<b>Table 24: Flint assemblage by Broad Term</b>	<b>56</b>
<b>Table 25: Quantification of registered and non-ceramic artefacts by material</b>	<b>58</b>
<b>Table 26: Quantification of registered and non-ceramic artefacts by object type</b>	<b>59</b>
<b>Table 27: Phase 5 registered and non-ceramic artefact assemblage</b>	<b>60</b>
<b>Table 28: Phase 6 registered and non-ceramic artefact assemblage</b>	<b>62</b>
<b>Table 29: Phase 7 registered and non-ceramic artefact assemblage</b>	<b>65</b>
<b>Table 30: Phase 10 registered and non-ceramic artefact assemblage</b>	<b>65</b>
<b>Table 31: Phase 11 registered and non-ceramic artefact assemblage</b>	<b>66</b>
<b>Table 32: Phase 12 registered and non-ceramic artefact assemblage</b>	<b>67</b>
<b>Table 33: Undated Landscapes registered and non-ceramic artefact assemblage</b>	<b>68</b>
<b>Table 34: Summary of results from scan of cremated human bone</b>	<b>72</b>
<b>Table 35: Summary of results from scan of unburnt human bone</b>	<b>73</b>
<b>Table 36: Number of animal bone fragments in each Phase allocated to each preservation condition, and the percentage of the total in each phase in condition 1/2, 3 and 4.</b>	<b>75</b>
<b>Table 37: Preservation by area. Number of animal bone fragments in each area for each preservation category (see table 36 for preservation codes)</b>	<b>75</b>
<b>Table 38: Frequency of animal bone fragments from each phase (excluding skeletons)</b>	<b>76</b>
<b>Table 39: Number of animal bone fragments by phase (and excavated shell)</b>	<b>77</b>
<b>Table 40: Animal bone fragments by phase and landscape assessment</b>	<b>80</b>
<b>Table 41: Frequency of soil samples from each area by phase</b>	<b>82</b>
<b>Table 42: Archaeological finds from samples</b>	<b>101</b>
<b>Table 43: Environmental finds from sample flots</b>	<b>108</b>
<b>Table 44: Non-ceramic artefacts in burials</b>	<b>117</b>
<b>Table 45: Fieldwork and new research objectives and analytical potential by data set</b>	<b>120</b>
<b>Table 46: Provisional outline of the publication</b>	<b>123</b>
<b>Table 47: Provisional timetable to complete the project</b>	<b>124</b>
<b>Table 48: Proposed Analysis Schedule</b>	<b>126</b>



## **LIST OF FIGURES**

- Figure 1**      **Location of Study Area**
- Figure 2**      **Phases 2 and 3**
- Figure 3**      **Phase 4**
- Figure 4**      **Phase 5**
- Figure 5**      **Phase 6, Area 1**
- Figure 6**      **Phase 6, Areas 2-5**
- Figure 7**      **Phase 7**
- Figure 8**      **Phase 10**
- Figure 9**      **Phase 11**
- Figure 10**     **Unphased**

**Note: figures are located at the back of the document.**



## **Preface**

*Every effort has been made in the preparation of this document to provide as complete an assessment as possible, within the terms of the brief and project design. All statements and opinions in this document are offered in good faith. Albion Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party, or for any loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in this document.*

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*For the assessment structural analysis was undertaken by Mark Phillips and Wes Keir. The pottery and ceramic building material were examined by Jackie Wells, coinage by Peter Guest, the non-ceramic artefact assemblage by Holly Duncan, human remains by Jacqueline McKinley, animal bone and environmental samples by James Rackham and soils by Dr Richard Mcphail.*

*The evaluation, Three Valleys Water pipeline watching brief and mitigation excavation were all directed by Reuben Thorpe (Project Manager) and Mark Phillips (Project Officer). The excavation team for the evaluation consisted Ian Beswick (Team Leader South), Julian Watters (Team Leader North), Caroline Clark, Matt Edgeworth, David Ingham, Adam Lee, Chris Mallows, James Pixley, Jeremy Stone and Christopher Thatcher. The Three Valleys water pipeline watching brief was undertaken by Julian Watters, Chris Mallows and Mark Phillips. The human remains were assessed by Chris Mallows. The mitigation excavations were supervised by Chris Mallows, Dan Miller, Martin Campbell and Wes Keir. The excavation team comprised Anthony Clifton-Jones, Zoe Clarke, Lawrence Coalter, Andrew Ginns, Richard Gregson, Cordelia Hall, David Ingham, Victoria James, Adam Lee, Iain McIntyre, Kathryn Maddison, Sarah Morton, Matthew Smith, Peter Sprenger, Jerry Stone, Chris Thatcher and Adrian Woolmer.*

*The subsequent Lannock Hill evaluation and the watching brief were carried out by Oxford Archaeology under the direction of Martin Wilson (Project Manager). The excavation team included Emily Glass (Supervisor – Lannock Hill evaluation), Guy Cockin (Supervisor - watching brief), Will Bedford, Matthew Copley, Dan Dodds, Diana Mahoney, Lucy Norman, Neville Redvers-Higgins, Jessica Tibber and Mike Wood.*

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## **Structure of the report**

*After an introduction (Section 1) detailing the site location, archaeological background and nature of the investigation, Section 2 presents the fieldwork aims and objectives of the project. Section 3 provides a provisional summary of the results. In the subsequent section the various types of evidence (data) are discussed individually (Section 4). The potential of the data to address the fieldwork aims and objectives are discussed in Section 5, prior to the presentation of the updated research objectives for analysis (Section 6). Section 7 presents the Updated Project Design, including timetable, publication format and archiving. Section 8 comprises the bibliography. Appendices 1 to 3 presents detailed method statements for analysis, publication and archiving, the Project Team and a summary of all analysis tasks.*

**Note: Key terms used in this document are described overleaf**





## **Key terms**

<i>Client</i>	Hertfordshire Highways
<i>Client's Consultant</i>	AOC Archaeology Ltd. Archaeological advisers to Hertfordshire Highways on the A505 Baldock Bypass project
<i>HCA</i>	<i>Hertfordshire County Archaeologist</i>
<i>SMR</i>	Hertfordshire's Historic Sites and Monuments Record
<i>Evaluation</i>	Archaeological evaluation conducted by Albion Archaeology, January – March 2003
<i>WYAS</i>	West Yorkshire Archaeology Service Subcontracted to conduct geophysical survey during <i>Evaluation</i>
<i>Oxford WB</i>	Oxford Archaeology's watching brief
<i>PD</i>	Project Design
<i>IFA</i>	Institute of Field Archaeologists
<i>MAP II</i>	Management of Archaeological Projects. English Heritage 1991



## **Non-Technical Summary**

*This report presents an assessment of archaeological investigations (evaluation, watching briefs and open area excavation) undertaken in advance of the construction of the A505 Baldock Bypass. The report quantifies the various elements of the site archive produced by the investigations and describes the work that has been undertaken on the archive. The objective is to assess the potential of the site records and material recovered from the archaeological features to address the research objectives of the project.*

*Due to the size of the study area, some 75 hectares extending along the 6km route, and for ease of reference, the project has been divided into five geographical areas (see Figure 1). The archaeological investigations revealed features that ranged in date from the later Neolithic to the Roman period, and from the medieval to the modern periods.*

*The earliest firm evidence for human activity consisted of an isolated pit (Area 2) containing a single fill with a sherd of late Neolithic Peterborough ware and red deer antler (30 pieces from one antler). Isolated pitting was also evident in the early Bronze Age, one pit containing a substantial assemblage of later Neolithic/early Bronze Age flint (166 pieces including debitage and broken tools) in association with remains of a possible collared urn (9 sherds weighing 49g) and a small assemblage of animal bone (antler, cattle sized long bone and pig tooth). The environmental material from the pit fill was limited, but comprised hazelnut, possible barley and snails, the latter indicative of open country.*

*To the north of this pitting activity (in Area 1), a complex of six bowl or bell barrows, surviving as circular ditches, and a possible seventh pond barrow were uncovered. Environmental evidence indicates open countryside in the vicinity of the barrows. Although heavily plough truncated, dating evidence, in the form of abraded sherds of collared urn, were found in the lower fill of one barrow (IV), and accompanying a central cremation within a second barrow (VI). A second, un-urned cremation, was found within the interior of a third barrow (II).*

*Evidence for activity dating to the late Bronze Age/early Iron Age comprised a possible square barrow, isolated pits, distinct pit clusters, and ditches. The barrow (again in Area 1) consisted of an oval central burial pit, 0.34m deep, containing a crouched inhumation surrounded by a ditch forming a roughly square enclosure measuring c.6m across. The primary ditch fills produced 69 sherds (weighing 191g) of flint-tempered pottery dating to the late Bronze/early Iron Age. The secondary and tertiary fills yielded smaller quantities of the same fabric type and were accompanied by a small assemblage of cattle sized bone. The environmental assemblage indicates the barrow was surrounded by open countryside.*

*The clusters of pits, including some possible fire pits, and postholes were focused in the area of the Weston Hills suggesting domestic occupation in this area. Again, flint tempered pottery was recovered from the fills of these pits, although little in the way of animal bone or environmental material was found.*

*One isolated pit (in Area 3) contained an aurochs skull in association with cattle, pig, deer and sheep bone and a small quantity of flint tempered late Bronze age/early Iron Age pottery. The recovery of aurochs in a late Bronze Age/early Iron Age context represents one of the most recent finds of aurochs in the archaeological record in England. Radio carbon dating is proposed to confirm this dating. The snail evidence from this pit indicates that woodland may have predominated in this area, as compared to the open country indicated to the north.*

*Domestic activity, evidenced by pits, postholes and an enclosure ditch, continued in the area of the Weston Hills in the early to middle Iron Age, while at the northern end of the bypass route*



*(Area 1) further pits and postholes were encountered. Cattle and sheep increase in comparison to the predominance of pig in the preceding period, with cattle predominating. The environmental evidence suggests that the extreme northern area may have had woodland, but in the area of the Weston Hills it was open country with limited evidence, in the form of charred plant remains, for the processing of wheat and barley.*

*Over 40% of the ceramic assemblage derived from features assigned to the early to middle Iron Age, and the range of fabric types is considerably broader than preceding periods. Both finewares and coarsewares are present, the former including a small number of burnished vessels of probably Chinnor-Wandlebury tradition. The absence of residual and intrusive material suggests the early to middle Iron Age deposits are largely undisturbed. The small assemblage of registered finds from this period provides supporting evidence for domestic occupation in the form of weaving equipment, small quantities of ferrous working by-products and items of dress.*

*Evidence for late Iron Age/early Roman activity was more extensive with some activity noted in each of the five areas. In addition to instances of isolated pits, and a possible naturally formed pond, activity in Area 1 was concentrated in and around the barrows. That the barrow ditches remained open at this stage is evident from the finds of late Iron Age and early Roman pottery in their fills. The presence of a group of cremations within the ditch fills of Barrows II, III and VI, and a possible satellite burial and cremation near Barrow I, indicate that the barrows retained some importance in the landscape. In total there were 18 cremations or cremation-related deposits in the fill of Barrow ditch II, 3 urned while the remainder were un-urned. Several of the cremation pits contained late Iron Age/early Roman pottery, whilst the urns dated to the early Roman period. Burials in the vicinity included two un-urned cremations, one found in Barrow ditch III while the second was identified just to the north of Barrow VI. A decapitated inhumation lay to the east of Barrow I and was truncated by a further un-urned cremation. Radio carbon dating of a selection of cremations (bio-apatite analysis) and the decapitated inhumation is proposed to confirm the provisional dating.*

*Activity in the central areas (areas 2 and 3) was characterised by two roads either side of the present A507, quarry pitting, and six sections of enclosure/boundary ditches. One of the roads survived as a series of layers, sealing an old ground surface. A sequence of soil micromorphology samples was taken through these deposits. Evidence for a single structure, a possible roundhouse, was revealed in Area 4. Activity in Area 5 was restricted to a boundary/enclosure ditch.*

*Environmental evidence indicates open country, certainly in Areas 1 -3, with sheep the predominant species recovered. Late Iron Age-early Roman deposits yielded 35% of the total ceramic assemblage, with over half of this material comprising wheel-thrown and handmade grog-tempered vessels in the 'Belgic' tradition. The early Roman assemblage (554 shreds weighing 6kg) is principally ubiquitous greyware types of probable local manufacture, with whitewares from the Verulamium region also well represented. Imported wares (including samian and amphorae) are also present but in smaller quantities. Seven Iron Age coins were recovered comprising a tinned bronze 'potin', four copper alloys units and two rare gold issues (a quarter-stater of Cunobeline and a stater of Tasciovanus). Non-ceramic artefacts from the construction of one of the roads, in particular three brooches, suggest that construction occurred sometime after the mid-1<sup>st</sup> century AD. Although the artefact assemblage indicates occupation activity, the range and quantity suggests that the focus of this activity was outside the investigated area.*

*Activity in the later Roman period can be divided into five classes of feature. The two roads, constructed in Phase 6, continued in use as evidenced by the 4<sup>th</sup> century coin assemblage recovered. Three linear features have tentatively been interpreted as a form of boundary*



marker, two of which are adjacent to roads, and the third could possibly be at right angles to the Icknield Way. Portions of boundary ditches were encountered in Areas 1 through 4. There was a limited degree of pitting activity, including two possible quarry pits. A single isolated inhumation, accompanied by four beads of probable 3<sup>rd</sup> century or later date, was also encountered.

Cattle was the predominant species in the Roman animal bone assemblage, suggesting a change in animal husbandry practices between the late Iron Age/early Roman and later Roman periods. The snail assemblage indicates open country. About 10% of the ceramic assemblage derived from Roman deposits and a degree of continuity from the preceding phase is evident, the most notable difference is the reduced quantity of late Belgic pottery. The assemblage is predominated by locally manufactured sand tempered wares and as in the preceding phase, imported continental vessels are poorly attested. Diagnostic vessels represent a low status utilitarian assemblage. Registered artefacts typologically dated to the second and third centuries are represented by three brooches, beads and seven coins. The majority of coins however date to the 4<sup>th</sup> century (40 examples). Again, the artefactual evidence suggests that the main focus of settlement activity lay outside the investigated area.

No evidence for Saxon period activity was encountered. The archaeological evidence for activity during the medieval period was restricted to Area 1 and comprised hollows over a palaeochannel, a large isolated pit, a barn and a rectangular enclosure and cemetery. The enclosure had been previously recognised in aerial photographic analysis, and was originally held to be part of a series of possibly prehistoric or Roman enclosures. The excavations revealed that the final infilling of this enclosure dated to the 16<sup>th</sup> century. Internal features excavated during the evaluation, including pits, a well and several graves (left in situ), have all been dated to the medieval period. This enclosure is currently being interpreted as being part of the complex of the Hospital of St Mary Magdalene, known to have been established circa AD1200 and moved to another location around AD1300.

The assessment of the various archaeological data sets generated by the fieldwork has resulted in amendment of the research objectives. These are presented and the final sections of the document outline the form of the publication and the resources needed to achieve the various objectives. It is intended that the analysis will ultimately lead to an East Anglian Archaeology monograph publication. The draft publication is provisionally scheduled for submission to East Anglian Archaeology for the external refereeing process in September 2006. The project team that carried out the assessment will continue to be involved in the analysis process. On publication of the final report, the archive of materials (subject to the landowners' permission) and accompanying records will be deposited with North Hertfordshire Museums Resource Centre (Letchworth Museum and Art Gallery), Accession Number BAL860/2004.



## 1. INTRODUCTION

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### 1.1 *Study Area Location*

The approved route of the A505 road corridor (Figure 1) lies to the south, southeast, east and northeast of Baldock. It extends from the A6141, where it joins the line of a Roman Road to the south of the town at TL242/312 and skirts to the east where it joins the line of the existing A505 at TL277/360.

The Bypass is located along a route that contains a variety of soils, to the south in the area of the Weston Hills, clay with flints predominates, while further to the north, a variety of silts predominate. These soils overlie a solid geology of Middle Chalk with occasional small areas of Upper Chalk separated by outcrops of Melbourn rock.

Topographically the route corridor cuts into the western slope of the Weston Hills to the south, which rises from 120m to 145m OD, before skirting round the western slope of Windmill Hill and Bird Hill between the 70m and 75m OD contours where it joins the existing A505.

### 1.2 *Archaeological Background*

Desk based assessment, geophysical survey, field walking and evaluation in the area of the proposed Baldock Bypass were initially carried out in 1994 and 1995 (Stevenson and Burleigh 1994; GeoQuest 1994a and 1994b; Ashworth and Burleigh 1994; Palmer 1994; Burleigh and Stevenson 1994; Hillelson 1995; Hutchings and Richmond 1994 and 1995).

In June 2002 Hertfordshire County Council commissioned AOC Archaeology Ltd to advise on the scope of archaeological reconnaissance and recording works, in advance of the construction of the A505 Baldock Bypass. AOC identified that road construction would impact on already known archaeological deposits and structures and recommended that the existing state of knowledge be augmented by the conduction of an intrusive archaeological evaluation. A trial trenching strategy was designed by AOC.

### 1.3 *Nature of Archaeological Investigations*

Albion Archaeology was commissioned by Hertfordshire County Council to implement the strategy formulated by AOC, the main aims of which were to characterise, identify and assess the archaeological resource through the excavation of a 2% targeted sample of the bypass route corridor area. This sample targeted known archaeological features and entities and also sought to evaluate areas where little evidence of past human occupation or activity appeared to exist. Intrusive evaluation works began on 20<sup>th</sup> January and were completed by 25<sup>th</sup> February 2003.

Subsequent to the evaluation, Albion Archaeology was commissioned by Hertfordshire County Council to undertake an archaeological watching brief during the re-routing of a water main in advance of the construction of the bypass. The most intensive phase of the watching brief took place between 4<sup>th</sup>



July and 15<sup>th</sup> August 2003 with additional, less intensive attendance during October 2003.

The evaluation demonstrated the existence of archaeological deposits and structures of local, regional and/or national importance within four zones. The Project Design for Archaeological Mitigation (August 2003) outlined a strategy of investigation of these four zones. Hertfordshire County Council commissioned Albion Archaeology to conduct the mitigation excavation of the four identified zones, work commencing in October 2003 and running until late April 2004.

The road construction consortium commissioned Oxford Archaeology to conduct a watching brief on the land that fell between Zones 1-4. The watching brief was carried out between April and June 2004. Albion Archaeology was commissioned to consolidate and integrate the results into the main excavation archive.

#### **1.4 Purpose of this Report**

This report presents an assessment of the results of all stages of the archaeological investigations. An updated project design is included listing all tasks that will be required to analyse, publish and archive the results.



## 2. FIELDWORK AIMS AND OBJECTIVES

### 2.1 Introduction

As a result of the evaluation findings, an excavation strategy was developed for four areas or zones of archaeological significance and specific research aims for each of the zones were outlined within the excavation specification document (AOC 2003, Appendices 1-4). Since the development of this strategy, additional archaeological investigations have taken place outside of these zones (Oxford Archaeology watching brief). In order to encompass this further work, and to present the findings in terms of chronological development of the landscape, the aims and objectives have been reordered and revised for the assessment. They are set out below (section 2.2) within the framework of the provisional assessment phasing (Table 1).

Assessment Phase	Assessment Phase date	Data present?
0	Undated	Yes
1	Mesolithic	No
2	Neolithic	Yes
3	Early Bronze Age	Yes
4	Late Bronze\Early Iron Age	Yes
5	Early\Middle Iron Age	Yes
6	Late Iron Age\Early Roman	Yes
7	Roman	Yes
8	Saxon	No
9	Saxo-Norman	No
10	Medieval	Yes
11	Post-medieval	Yes
12	Modern	Yes

**Table 1: Provisional assessment phasing**

As part of the assessment process, archaeological units of record (contexts) have been organised into an interpretative hierarchy. From the highest level downwards, this comprises chronological 'Phases', Assessment 'Landscapes' (e.g. the barrow complex), and Assessment 'Groups' (e.g. individual barrows). The Assessment Groups have been allocated a decimal number, which allows construction, use and disuse episodes to be allocated to respective Landscapes and Phases. For example, the construction of Barrow II has been assigned Assessment Group 102.00, its primary and secondary fills 102.01 and 102.02 respectively and so on. The 'Landscape' (AL) and 'Group' (AG) numbers provide the structure for the provisional summary of results set out in section 3.

Due to the size of the study area, and purely for ease of reference, the project has been divided into five geographical areas (see Figure 1 and Table 2). These areas run from north to south along the route of the bypass. Landscape numbers which fall within these geographical areas have been allocated blocks of numbers e.g. all Landscape numbers which fall in the 100s are located in the northernmost area, Area 1.



Area	Description	Landscape numbers
1	A505 to Wallington Road	100-199
2	South of Wallington Road to A507	200-299
3	South of A507 to the 'Weston Hills'	300-399
4	Weston Hills	400-499
5	Hatch Lane to Lannock Hill	500-599

**Table 2: Geographical areas**

Broad national research priorities have been formalised by English Heritage in *Exploring our Past* (1991), updated in their Research Agenda (draft 1997). National research themes dealing specifically with the Iron Age have been recently published (Haselgrove *et al* 2001), as have themes for the Iron Age-Roman transition (James and Millett 2001). Bryant (1995) and Bryant and Niblett (1997) have discussed a number of themes for the Chilterns as a whole. The archaeological resources of the East Anglian region have been assessed (Glazebrook 1997) and a regional research agenda and strategy produced (Brown and Glazebrook 2000). A number of these research themes have been incorporated into the objectives set out below.

## 2.2 Period Specific Objectives

### 2.2.1 Mesolithic to Neolithic (Phases 1 and 2)

The Weston Hills (Area 4) have in the past been the subject of a fieldwalking survey (Ashworth and Burleigh 1994), and intrusive evaluation on two occasions (Hutchins and Richmond 1994; Albion Archaeology 2003). Significant assemblages of Mesolithic/Neolithic and Neolithic/Bronze Age flint were collected during the fieldwalking, which was augmented by similar assemblages collected during evaluation (Hutchins and Richmond 1994).

**Aim 1:** a specific objective of the excavation strategy was to fully sample the ploughsoil zone so as to retrieve as comprehensive an assemblage of Mesolithic, Neolithic and Bronze Age surface artefacts as possible. The aim of this exercise was to identify spatial patterning within and between the assemblages collected from the plough zone so as to try to identify areas or concentrations where *in situ* features may lie. It was hoped that the results would contribute to the identification of any occupation sites and assist in defining their nature, morphology and chronology (Austin 2000, 7). These results might also contribute towards understanding the process of change from Hunter-gatherers into farmers (Brown and Murphy 2000, 9).

### 2.2.2 Late Neolithic to Bronze Age (Phases 2 and 3)

A desk-based assessment, conducted in 1994, highlighted the existence of a complex of ten round barrows south of the A505 (Stevenson and Burleigh 1994). Further study of the aerial photographic evidence (Palmer 1994; Burleigh and Stevenson 1994) resulted in eight 'definite' and two possible barrows being re-plotted from the re-assessment. Subsequent archaeological trenching, including contingency trenching in January and February 2003 was aimed at specifically locating, identifying and characterising these barrows (Albion Archaeology 2003). However the evaluation demonstrated that, 'only four (could be) identified with any degree of certainty in the trenches opened'





(Albion Archaeology 2003, 39). Subsequent excavation revealed a total of seven barrows (AL100). Archaeological evaluation also demonstrated the presence of secondary cremation and inhumation burials within the area of the funerary complex.

To the south of the barrow complex, in the area just south of the Wallington Road (Area 2) evaluation work in 2003 identified a single isolated pit of later Neolithic date, while two Bronze Age pits, also situated in Area 2, were located during the Oxford WB.

**Aim 2.1** One of the aims of the excavation was to assist in defining the nature, date, form and function of the:

- later Neolithic pit (AL200) and determine if other contemporary pits were present;
- and the Bronze Age pitting identified in AL201;

thereby contributing to the understanding of settlement sites within the region (Brown and Murphy 2000, 9-10).

**Aim 2.2** In addition, detailed exploration of the extent, form, relative construction sequence and construction technique of the monuments (barrows) within the funerary complex (AL100) could assist in determining any spatial, physical and temporal relationships with other archaeological and natural (e.g. palaeochannel) features within the landscape. Related aims comprised identifying, through targeted environmental sampling, the local environmental regime in relation to the inception and subsequent development of the funerary complex and the identification of the nature, date and form of burials associated with the funerary complex. It was hoped these investigations would contribute to understanding the landscape, the human impact on the natural landscape and identification of the patterns of burial practice and the changing course of social action (Brown and Murphy 2000, 10).

### **2.2.3 Late Bronze Age/early Iron Age (Phase 4) and early to middle Iron Age (Phase 5)**

Previous archaeological investigations indicated evidence of late Bronze Age and early Iron Age activity on the Weston Hills (Area 4) (Hutchings and Richmond 1994, 5) and in Area 1 (Albion Archaeology 2003, 17). The evidence comprised a combination of ditch and gullies and isolated pits.

**Aim 3.1** Bryant (2000, 14) has commented that “the extent and distribution of the known Iron Age settlements in the region is likely to represent only a small fraction of the true number of sites”. One of the aims of the excavations was to contribute to this knowledge by identifying the nature, date, form and relative sequence of any archaeological features encountered and to identify, through targeted environmental sampling, the environmental regime in relation to the sequence of archaeological periods represented. The evidence for late Bronze Age to middle Iron Age activity will be examined as part of the assessment to look at its potential to contribute to expanding the knowledge of settlement activity in this area.

To the south of the A505, a possible square barrow with central inhumation (AL101) was identified (Oxford WB) and provisionally dated to the late Bronze Age/early Iron Age. Evidence for early to middle Iron Age burial practices was limited to remains of a possible un-urned cremation associated with a group of pits and postholes in the area of the Weston Hills.



**Aim 3.2** The shift from a range of burial evidence dating to the 3<sup>rd</sup> and 2<sup>nd</sup> millennia to a far less archaeologically apparent form of burial practice in the early half of the 1<sup>st</sup> millennia BC is well known (Brown and Murphy 2000, 10). Further study of the burial practices encountered at Baldock may offer opportunities to explore the changing course of social action.

**Aim 3.3** The presence of a pit alignment, plotted in the desk-based assessment (Stephenson and Burleigh 1994) and fieldwalking survey (Ashworth and Burleigh 1994, fig 4) as extending across Area 2 is resolutely contradicted by Palmer, who states that “the alignment does not turn to the southeast as shown, but continues eastwards and appears to stop in the dry valley” (Palmer 1994, 9). An objective of the excavation was to define and date the extent and form of the ‘pit alignment’ variously interpreted as both stopping and continuing across Area 2.

**Aim 3.4** The eastern counties contain a range of Iron Age linear boundaries and dykes and these are considered an important resource for the study of the evolution of social, economic and political organisation in the region (Bryant 2000, 15). Two possible ‘dykes’ were identified from aerial photographs and evaluation work - one to the northeast of the barrow group (two short parallel ditches AL107) and parallel ditches to the south of the Wallington Road (Area 2, AL215). One of the aims was to confirm the identification of these two possible dykes through excavation.

#### 2.2.4 Late Iron Age to Roman (Phase 6) and Roman (Phase 7)

Burleigh has argued that Baldock was a late Iron Age oppidum with the eastern extent delineated by trackways, cemeteries, and a pit alignment, while beyond the settlement lay a concentration of boundary dykes running either parallel to, or across, the Icknield Way (1995). Archaeological works, including desk-based assessment (Stephenson and Burleigh 1994), artefact collection survey (Ashworth and Burleigh 1994; Hillelson 1995), aerial photographic plotting and interpretation (Palmer 1994), geophysical survey (Geoquest 1994a and 1994b; Archaeological Services WYAS 2003) and intrusive evaluation (Hutchings and Richmond 1994; 1995; Albion Archaeology 2003) conducted within the route corridor, indicated the presence of a late Iron Age/early Roman trackway, linear boundaries and possible enclosures and some evidence of late Iron Age and Roman occupation. A cremation cemetery, and a decapitated inhumation, were found either in, or adjacent to, the barrow ditches (Albion Archaeology 2003, 17) and an isolated inhumation, of possibly 3<sup>rd</sup> century date, was located to the south-east of the barrow complex (Albion Archaeology 2004, 11).

**Aim 4.1** The aim of the assessment will be to define the nature, date, form and function of each of the identified features within these sub-divisions and investigate the relationships between them and how they may relate to the postulated oppidum and subsequent development of the small town of Baldock. This would address regional and national research objectives, in particular processes of economic and social change/development during the late Iron Age and Iron Age/Roman transition (EH 1997, 44).

**Aim 4.2** Burials of Roman date are remarkably uncommon in the eastern region, and current work suggests that there were differing practices between urban areas and the



countryside, where formal cemeteries are the exception rather than the norm (Going and Plouviez 2000, 19). A study of the human remains from the route of the bypass will add further data and assist in establishing whether there is a differing pattern.

### 2.2.5 Medieval (Phase 10) and post-medieval (Phase 11)

The enclosure situated to the south of the A505 (AL114) had been previously recognised in aerial photographic analysis and the desk-based assessment. This enclosure was originally held to be part of a series of possibly prehistoric or Roman enclosures (Thompson 2002, 2-4 and Figures 1-3). Evidence, however, was recovered which dates the final infilling of this enclosure to the 16<sup>th</sup> century. Internal features excavated during the evaluation, including pits, a well and several graves (left *in situ*), have all been dated to the medieval period. This enclosure is currently being interpreted as part of the complex of the Hospital of St Mary Magdalene, known to have been established circa AD1200 and moved to another location around AD1300 (Albion Archaeology 2003, 9-10 and 42-43).

**Aim 5.1** Full excavations aimed to define and investigate this enclosure ditch and to establish the nature, date, form and sequence of any features to the west of this enclosure ditch. However, the subsequent decision to create a bund over this area meant that further archaeological exploration of the enclosure was not undertaken. The limited excavated evidence from the evaluation, including burial layout, combined with documentary research will form part of the publication.

**Aim 5.2** Two possible medieval/post-medieval trackways (AL118 and AL119) were revealed during the evaluation to the south of the Bronze Age funerary complex (Albion Archaeology 2003). At the time of writing the excavation specification, the more westerly of these trackways appeared to be a pre-cursor to a right of way which still existed. The more easterly feature was thought to represent pre-existing divisions between medieval fields, removed after the transfer of ownership of land to the Earls of Salisbury in 1617. Documentary study was proposed to assist in confirming the identification and contributing to the local understanding of the medieval and post-medieval landscape.

**Aim 5.3** The watching brief carried out by Oxford Archaeology identified a barn (AL115) comprising four bays with central post at each gable end and associated drip gully dated on morphological grounds to the medieval period. A probable L-shaped fence line (L123) was situated between the A505 and the Wallington Road. This has provisionally been placed in the post-medieval period.

### 2.3 General Project and Cross period objectives

“Many landscape features particularly relict field systems, are undated and are only classified on morphological grounds. As part of any coherent view of landscape archaeology, priority needs to be given to recognising the patterns of ancient fields and estate boundaries. Further basic work in identifying dating and analysing field systems is needed (EH1997, 53).” Baldock is well-known as a regionally important late Iron Age settlement which developed into a Romano-British small town. Although numerous excavations have taken place within the immediate area of the town (Stead and Rigby 1986; Burleigh 1982; Burleigh in prep.), its relationship with the surrounding rural settlement pattern is poorly understood at present (Bryant and Niblett 1997, 280). In addition a



sizeable proportion of the sites are known from aerial photography and cropmark evidence and most of these are undated (Bryant and Niblett 1997, 276). The recent archaeological investigations have the potential to add to the current knowledge of the landscape surrounding the town, in particular confirming or refuting the date and nature of cropmark and aerial photographic evidence.

**Aim 6.1** The overall objective of the archaeological works is to fully define any archaeological deposits/structures present so as to elucidate their nature, date, form and function, their spatial and temporal relationships and the nature of changing land use patterns over time.

The excavations uncovered a range of burial practices provisionally dated from the Bronze Age to Roman periods, differing both in their treatment of the body, and the treatment of the burial within the landscape. Both urned and un-urned cremations were encountered, several associated with the barrow complex (AL100.02) while others (currently undated) were deposited in isolated pits (AL140). Inhumations, although limited in number, also displayed differing treatments – crouched, decapitated and extended. Their situation within the landscape was also varied, a crouched inhumation within a square barrow (AL101), a decapitated burial associated with the barrow complex (AL100.06), with a cremation immediately overlying it, and a probable later Roman isolated burial (AL111).

**Aim 6.2** The potential to assist in confirming the provisional dating of the burials, and for the undated remains to suggest a date, by the means of similar treatment and/or absolute dating has been explored in the assessment. Positioning and treatment of the burials within in the landscape and across periods may assist in determining and understanding the landscape and perhaps provide a means by which the change from mobile settlement to a pattern of farms and fields was negotiated (Bradley 1993; Bradley 1998; Brown and Murphy 2000, 10).



### 3. PROVISIONAL SUMMARY OF RESULTS

#### 3.1 Introduction

A total of 3967 contexts (recording units) were identified during the investigations. A rapid scan of these records has resulted in a provisional grouping and phasing of the contexts (see Section 4.2.1). The phases have been assigned to broad chronological periods from the Neolithic to the modern period, within which the following discussion is organised.

Phase	Chronological Period	Activity Type
(1)	Mesolithic	No structural evidence
2	Neolithic	
3	Early Bronze Age	
4	Late Bronze Age – Early Iron Age	
5	Early – Middle Iron Age	
6	Late Iron Age – early Roman	
7	Roman	
(8)	Saxon	No structural evidence
(9)	Saxo-Norman	No structural evidence
10	Medieval	
11	Post-medieval	
12	Modern	
0	Undated	

**Table 3: Summary of provisional phasing**

#### 3.2 Phase 2: Neolithic (Figure 2)

The earliest, firm evidence for human activity consisted of a single, isolated pit, **AL200**, situated in Area 2, c.50m to the south of Wallington Rd. The pit contained a late Neolithic pot sherd and a substantial amount of antler.

#### 3.3 Phase 3: Early Bronze Age (Figure 2)

Evidence from this phase comprised a barrow cemetery and two small pits.

##### 3.3.1 Landscape AL100

AL100 comprised a group of seven barrows located roughly in the centre of Area 1. Six of the barrows survived as circular ditches, presumably representing the remains of bowl/bell barrows. A circular hollow partially exposed at the edge of excavation is interpreted as the remains of a pond barrow (Barrow VII). The barrows were clustered together. Two large barrows (II and III) of c.30m outside diameter occupied the centre with the smaller barrows (c.18m – 20m) arranged around the outside. The perimeter ditches of four barrows were partly superimposed upon one another, with the ditches joined together. The recorded relationships of these ditches suggest that the smaller barrows were constructed prior to the insertion of the larger barrows. However, such evidence should be treated with caution, as the more substantial ditches of the larger monuments are likely to have remained open for a longer period. As a result, it is possible that if the ditches were open simultaneously, the larger ditches would appear to cut the fills of the smaller.

In the case of the larger barrow ditches, a sequence of filling was recorded that includes evidence of rapid primary silting, followed by secondary fills. In the case of Barrow II it is clear that infilling slowed and the profile stabilised with the barrow ditch remaining open. During the late Iron Age or early Roman period, a cremation cemetery was created within the ditch of Barrow II. The shallow ditches of the smaller barrows contained only the remains of a



single episode of primary silting. It is likely that any upper fills of these features have been lost to plough truncation.

### 3.3.2 Landscape AL201

Two pits, about 9m apart, were situated in the southern portion of Area 2. Both were roughly circular, measuring 1m diameter by 0.58m deep and 0.7m diameter by 0.2m deep. They have been associated due to their relative proximity to one another and the lack of other features in the vicinity. The smaller pit had a single fill that contained no artefacts. The larger pit had four fills; the primary fill, two succeeding fills containing substantial amounts of flint, including a fragment of a polished flint axe, and charcoal, along with some pottery, and a final fill, containing smaller amounts of flint and charcoal. The flint includes characteristic late Neolithic types whilst the pottery appears to date from the early Bronze Age.

## 3.4 Phase 4: Late Bronze Age-early Iron Age (Figure 3)

Evidence for activity dating to the late Bronze Age/early Iron Age consisted of a barrow, isolated pits, distinct pit clusters, and ditches all dispersed along the length of the road corridor.

### 3.4.1 Landscape AL101

A 'square' barrow was identified in the southern half of Area 1. It consisted of an oval central burial pit, 0.34m deep, containing a crouched inhumation surrounded by a ditch forming a roughly square enclosure measuring c.6m across. Several sherds of late Bronze Age/early Iron Age pottery were discovered in the primary and secondary fills of the ditch.

### 3.4.2 Landscapes AL202 and AL300

Two isolated pits were encountered in Area 2 (AL202) and Area 3 (AL300). AL202 comprised a large pit (3m diameter by 3m deep) with vertical sides, in-filled by successive episodes of backfilling. Pottery, dating to the late Bronze Age/early Iron Age, and animal bone were recovered from the fills. The pit was subsequently sealed by the build-up of late Iron Age/Roman road L207.

AL300 contained an aurochs horn core attached to the skull and a single pot sherd dating to the late Bronze Age/early Iron Age. The scarcity of other finds in the pit and the fact that the pit was just big enough to accommodate the horn core, may suggest a ritual deposit.

### 3.4.3 Landscapes AL400 and AL401

Two distinct groups of features, **AL400** and **AL401**, were situated on the Weston Hills (Area 4). **AL400** consisted of several pits and postholes of varying sizes and two short lengths of ditch, one of which appears to have been truncated by a WWII bomb crater. The ditch was aligned NW-SE. Two of the pits revealed *in situ* burnt layers and may be interpreted as hearths/'fire pits'. Only two of the features contained datable finds. **AL401** consisted of a group of 12 pits situated c.100m to the south of **AL400**. The pits were oval in shape up to a maximum length of 3.7m with typically concave but rather irregular profiles. Many of the fills contained moderate amounts of charcoal flecking.

### 3.4.4 Landscape AL500

A possible curvilinear ditch and terminus, **AL500**, were identified at the southern end of the road corridor near the junction with the A1M. Both were c.0.9m wide and contained late Bronze Age/early Iron Age pot sherds.

## 3.5 Phase 5: Early to Middle Iron Age (Figure 4)

Early to middle Iron Age evidence consists of a large activity group **AL402** comprising pits, postholes and an enclosure ditch on the Weston Hills (Area 4), an activity group **AL102** consisting of pits and postholes near the northern extreme of the road corridor, a circular structure **AL103** situated between the



A505 and Wallington Rd, two isolated pits (**AL203**; **AL204**) and a ditch **AL301** occurring in the central areas of the road corridor.

### 3.5.1 Landscape AL402

AL402, situated on the Weston Hills, comprises clusters of pits and postholes and the remains of a possible enclosure ditch. Only one cluster of pits (AG410) formed a linear pattern and included a possible fire pit and a cremation within a small posthole/pit. The remaining clusters formed no distinctive pattern. Five pits (AG408) with deeper profiles and a succession of fills including chalk 'capping' layers, may be interpreted as storage pits re-used as rubbish pits. Though substantially obscured by the western edge of the site, two lengths of ditch (AG416) were identified in the vicinity, forming a possible enclosure or structure with an entrance to the east. The ditch appeared rather irregular in plan and profile, being a maximum of 1m wide by 0.3m deep and only contained one early to middle Iron Age pot sherd.

### 3.5.2 Landscape AL102

This activity group represents a possible group of 15 pits and postholes situated at the extreme north of Area 1. AG544 was a group of seven inter-cutting pits filled by undifferentiated silty sand containing 2 sherds of early to middle Iron Age pottery and animal bone. Large pit AG541 was c.1m in diameter and 1m deep with near vertical sides breaking onto a concave base. It contained several fills, one of which was comprised of a grey ashy silt containing animal bone and early to middle Iron Age pottery. The remaining features within this activity group contained no datable finds but have been placed within this activity group due to their proximity and a lack of features dating to other periods in the vicinity. Four postholes (AG542) formed a possible ENE-WSW alignment, whilst there were three dispersed pits (AG543) in the vicinity.

### 3.5.3 Landscape AL103

Circular structure **AL103** was situated in the southern half of Area 1. It consisted of six postholes forming a circle measuring c.4m in diameter. Four of the postholes were between 0.25m and 0.4m in diameter whilst two were more oval in shape measuring between 0.4m and 0.55m in length and c.0.35m wide. The postholes were situated c.1.5m distant, apart from on the northeast side where there was a gap of over 2m possibly indicating the position of an entrance. One of the postholes produced a few sherds of early to middle Iron Age pottery.

### 3.5.4 Landscape AL301

A NW-SE aligned ditch **AL301**, located in the northern part of Area 3, measured up to 2.3m wide and 0.75m deep. Its profile consisted of gently sloping sides becoming steeper mid-way down breaking onto a narrow base. It contained a large amount of early to middle Iron Age pottery in its primary and secondary fills as well as some post-medieval tile fragments which are thought to be intrusive. It was only revealed for a distance of 11m due to the boundaries of the excavation and no further features of the period were revealed in the vicinity.

## 3.6 Phase 6: Late Iron Age/early Roman (Figures 5 and 6)

Evidence for late Iron Age/early Roman activity was more extensive with some activity noted in each of the five areas. In addition to instances of isolated pits (AL104 and AL106), and a possible naturally formed pond (AL105), activity in Area 1 was concentrated in and around the barrows. That the barrow ditches remained open at this stage is evident from the finds of late Iron Age and early Roman pottery in their fills (AL100.01 and final fills AL100.03). The presence of a group of cremations within the ditch fills of Barrows II, III and VI (AL100.02), and a possible satellite burial and cremation near Barrow I (AL100.06), indicate that the barrows retained some importance in the landscape. Activity in the central areas (Areas 2 and 3) was characterised by two roads either side of the present A507 (AL207 and AL302), quarry pitting



(AL208 and AL209), and six sections of enclosure/boundary ditches (AL205; AL206; AL210; AL211; AL212 and AL303). Evidence for a single structure, a possible roundhouse, was revealed in Area 4 (AL403). Activity in Area 5 was restricted to a boundary/enclosure ditch (AL501).

### 3.6.1 Landscapes AL100.02 and AL100.06 (Figure 5)

A cemetery (**AL100.02**) was identified within the area of the earlier Bronze Age barrow cemetery. Included in this group were sixteen un-urned cremations and three urned cremations.

Eighteen cremation or cremation related deposits (AG102.04) were identified within the ditch fill of Barrow II (AG102). These comprised 3 urned cremations and 15 un-urned cremations or cremation-related deposits placed within shallow pits cut into the fill of the barrow ditch. The pits measured between 0.2m and 1.75m across. The cremations appeared to be cut into the secondary fill of the ditch and were sealed by the tertiary fill. The amount of surviving cremated material is relatively low suggesting it may be more representative of a secondary disposal event. Several of the cremation pits contained late Iron Age/early Roman pottery, whilst the urns appeared to date to the early Roman period. A few later Roman sherds were also recovered and are considered to be intrusive.

An un-urned cremation (AG103.03) was identified within Barrow III ditch (AG103). It was contained within a small pit which appeared to truncate the base of the barrow ditch and was sealed by its primary fill. Though there were no datable artefacts, it was situated near several of the cremations identified within the ditch of Barrow II (AG102) and is, therefore, likely to be associated.

A cremation (AG106.03) was identified just to the north of Barrow VI (AG106). It was contained within a shallow pit and was un-urned. The fills contained some early Roman pottery sherds.

Six possible postholes were identified, four truncating the secondary fills of Barrow ditch II (AG102) and two truncating the base of Barrow ditch III (AG103). One of the postholes within AG102 contained a high proportion of charcoal. The stratigraphic relationships with the barrows suggest they may date to the late Iron Age/early Roman period, though the lack of dating evidence makes this uncertain.

**AL100.06** comprised an inhumation burial (AG101.02) situated to the east of Barrow I (AG101), which was truncated by a pit containing an un-urned cremation. The inhumation was placed into an oval shaped pit with the legs flexed and the skull placed under the left arm. Although no datable artefacts were recovered, this landscape has been assigned to this phase by association with the other burial activity.

### 3.6.2 Landscape AL207 (Figure 6)

**AL207** comprises the construction and initial use of a NW-SE oriented road, situated in the south of Area 2. The main components are a banked up road mound or agger and its metallised surface, AG244, and the construction and primary fills of ditches along the northern and southern side of the road, AG245 (north) and AG246 (south).

The construction of the built up agger, AG244, found in this section of road, appeared to be in response to local conditions. The point where the road is built corresponds to where the road crosses a natural dip caused by the presence of a former palaeochannel. The road was built up for a length of at least 40m, raising it above the surrounding ground level. The built up section consists of a series of soils mounded up on top of the existing topsoil, forming a layer of buried soil, AG244.01. The first deposit of the road mound was a thin layer of re-deposited chalky natural. Above this was deep layer of soil, with one or more layers of chalk gravel to create the final road surface, approximately 4.5m wide. A number of possible ruts were identified in the excavated segments, two parallel ruts were visible in plan, impressed into the final chalk surface. These were visible for a distance of at least 17m and were separated by a width of 1.3m. Artefacts recovered from the build up of the agger comprise animal bone, fired clay,





burnt stone and a considerable quantity of pottery that dates from the late Iron Age or early Roman period, with a few sherds of 2<sup>nd</sup> century date. Non-ceramic artefacts include three brooches, dated to the first half or the mid 1<sup>st</sup> century AD.

The northern roadside ditch, AG245, was traced for a distance of at least 150m. It was around 6m wide, with a wide shallow profile and poorly defined outer edges. The primary fills, AG245.01, produced few artefacts. Only one side of the southern roadside ditch, AG246, was visible, due to the limit of excavation. A small segment of ditch, AG259, orientated NW-SE, was found in one excavated segment through the southern roadside ditch, AG246. It was cut by the roadside ditch, and was possibly a precursor to the later feature.

### 3.6.3 Landscape AL302 (Figure 6)

A second road, **AL302**, was situated c.130m to the south of road AL207. The road was orientated NW – SE and was flanked by one boundary ditch, AG307, on the southwest side and four inter-cutting ditches, AG308 and AG309, on the northeast side. There were also three gullies situated on the road and six postholes, AG310, bisecting the road. The road width measured between 5.5m and 6.6m. Some wheel ruts, AG311, were also identified, mainly visible at the northwest and southeast ends of the road.

The road can be divided into two broad phases of construction. The earliest phase consisted of a ditch, AG308, on the northeast side of the road. No corresponding ditch survived on the southwest side of the road, although it is possible that such a feature was completely truncated by the later ditch AG307. Ditch AG308 was v-shaped with a flat base. A possible posthole was identified at the northwest end of ditch AG308 that appeared to have been cut into the lower ditch fill. There was little dating evidence for this phase apart from two sherds of probably residual early to middle Iron Age pot and an iron nail.

By the second phase of the road, ditch AG308 had gone out of use and ditches AG307 and AG309 had been constructed. Ditch AG307 defined the southwest edge of the road and was generally 'v' shaped with a flat base and up to 1.1m deep and 3m wide, whilst AG309 was similar in profile but much smaller and defined the northeast edge. By this phase a probable gateway, AG310, was in use. This comprised of six postholes that ran at right angles across the road together with three narrow gullies and two further postholes. One of the gullies was situated to the inside of ditch AG307 whilst two were situated to the inside of ditch AG309. The gateway structure is situated where ditches AG307 and AG309 appear to have been deliberately bowed outwards to accommodate the structure.

The secondary fills of the southwest ditch AG307, contained late Iron Age/early Roman pottery whilst the initial cut of ditch AG309 contained a single sherd of Roman pot and a probable residual fragment of early to middle Iron Age pot. Though the discrete features that make up the possible gateway contained no finds, their position and arrangement suggests they were contemporaneous with the road.

### 3.6.4 Landscape AL303 (Figure 6)

**AL303** comprised a large boundary ditch, aligned SW – NE, situated just to the south of road AL302. It had a V-shaped profile of up to 3.5m wide and up to 1.5m deep. A substantial ledge in the southern edge of the ditch ran for 14m between excavated segments; the ledge may have been for maintaining the ditch. 'Tip lines', visible running down into the ditch from the southern up-slope side, suggest a bank may have been situated south of the ditch. Animal bone and a substantial amount of late Iron Age/early Roman pottery were recovered from the upper and lower fills of the ditch. The upper fills contained two late Iron Age coins and pottery of predominantly late Iron Age/early Roman transitional date, with only a very few later Roman sherds.

### 3.6.5 Landscape AL403 (Figure 6)

AL403 comprised a penannular ditch situated in an isolated position on the Weston Hills (Area 4). The ditch was between 0.7m and 1.4m wide and c.10.5m in diameter, with an entrance in the southeast side. This may be interpreted as the drip gully of a 'roundhouse' structure. No



discrete features could be definitely associated with AL403, although there were several undated postholes and pits (AG420) in the vicinity, some of which truncated the ditch. Although it contained two sherds of undiagnostic Roman pottery, the drip gully has been assigned to the late Iron Age/early Roman period on the basis of its form.

### 3.7 Phase 7: Roman (Figure 7)

Activity in this phase can be divided into five classes of feature. Roads AL207 and AL302, constructed in Phase 6, continued in use. Three linear features AL107, AL213 and AL304 have tentatively been interpreted as a form of boundary marker, two of which (AL213 and AL304) are adjacent to roads, and the third (AL107) could possibly be at right angles to the Icknield Way. Portions of boundary ditches were encountered in Area 1 (AL108), Area 2 (continued use of AL205), Area 3 (AL305) and Area 4 (AL404 and AL405). There was a limited degree of pitting activity, two possible quarry pits (AL110 and 214) and isolated pits AL109 and AL306. The latter pit is noteworthy for its rectangular shape, vertical sides and flat base. A single isolated inhumation was also encountered (AL111).

#### 3.7.1 Landscapes AL207.01 and AL302.01

**AL207.01** comprises the secondary and tertiary fills of the ditches flanking road AL207, and soil layers lying directly above the made road surface. The final fills of the roadside ditches may be associated with the disuse of the road; however, they may have been allowed to silt up during the lifetime of the road. These fills produced a mixed assemblage of artefacts, including pottery of late Iron Age date, but the presence of pottery dating to the 3<sup>rd</sup> to 4<sup>th</sup> centuries, and 4<sup>th</sup> century coinage, suggests a date in the later 4<sup>th</sup> or early 5<sup>th</sup> century for the final in-filling. Some intrusive medieval activity was also noted, confined to the southern roadside ditch. The disuse of the road is evidenced by soil layers lying directly above the made road surfaces, indicating that the road was not being actively maintained or resurfaced. Finds from these layers were limited and displayed a mix of late Iron Age and Roman date, the latest pottery noted dating to the 2<sup>nd</sup> century AD.

**AL302.01** represents the continued use and disuse of the road constructed in Phase 6 in Area 3. The northeast roadside ditch showed evidence of successive re-cuts, indicative of regular maintenance. The southwest ditch had a variable profile, possibly suggestive of re-cutting, but no definite evidence for this was found. The tertiary fills of the southwest ditch AG307 contained late Iron Age /early Roman pottery and Roman finds including several 4<sup>th</sup> century coins. The re-cuts of the northeast ditch yielded Roman pottery of 2<sup>nd</sup> to 3<sup>rd</sup> century date, taken together this suggests that the road ditches had silted up by the 4<sup>th</sup> century.

#### 3.7.2 Landscapes AL107, AL213 and AL304 – Boundary markers?

**AL107** comprises two short, parallel ‘ditches’, situated 9m apart, and oriented NW-SE. They are located about 80m northeast of the Bronze Age barrow group AL100, in Area 1. During the evaluation stage of work, these features had been interpreted as part of a possible boundary dyke of Iron Age date. Both were similar in form, being between 11m and 12m in length and up to 4m in width. In profile, the features were flat bottomed with near vertical sides, flaring out at the top due to erosion of the upper part of the sides. Both contained several fills including an episode of re-cutting. Pottery recovered from these features indicates that the fill accumulated during the early Roman period, probably 1<sup>st</sup> or 2<sup>nd</sup> century.

**AL213** consists of three short linear features, **AG249, 250 and 251**. The features are orientated NE-SW, vary in length between 4m and 8m, and are up to 1m wide. The features are orientated perpendicularly to road AL207, two are parallel, about 11m distant. The third linear, lying 16m to the south of the parallel linears, is cut into the metalling of the road surface. In profile, the features are shallow with concave bases 0.21m deep. The fills contained a small amount of Roman pottery and animal bone. The arrangement of these features is similar to the much deeper features of AL107. Both consist of short linear features, arranged in parallel and lying



perpendicular to the line of a trackway. It is possible therefore that they are a form of boundary marker, situated across a track.

**AL304** was situated on the north-eastern side of the road **AL302**. It consisted of two segments of ditch or gully, each a little less than 3.5m long and 0.7m wide with a gap of 2m between them. The resulting segmented linear feature was arranged perpendicularly to the road. The fills contained a small amount of oyster shell, animal bone and pottery, which dates the filling of the feature to the late 1<sup>st</sup> century to early 2<sup>nd</sup> century AD. These gullies may have a similar function to the short linear features of **AL213**, situated by the road to the north of the **A507**.

### 3.7.3 Landscape **AL108**

**AL108** comprises two ditches **AG113**, **AG115** set about 61.5m apart and orientated NNW-SSE. Each ditch was associated with a smaller subsidiary gully **AG112** and **AG114**, possibly precursors to the larger versions. The more southerly of the two ditches **AG115** was observed over a distance of 265m and measured up to 1.5m in width. A roughly circular hollow, **AG124**, associated with this feature was interpreted as an erosion hollow, possibly marking an entrance point in the boundary. Ditch **AG113** was situated in the Bronze Age barrow cemetery **AL100**. It extended from the western limit of excavation, encroaching on the northern half of Barrow III, a distance of 23m. A small quantity of Roman pottery was recovered from the ditch fills. The length of **AG115** suggests that these ditches were part of a larger landscape boundary.

### 3.7.4 Landscape **AL305**

NW-SE oriented boundary ditch **AL305** measured 1.5m wide and extended for at least 90m, continuing beyond the limit of excavation at either end. Towards the southern end of the ditch, traces of a possible earlier cut of the ditch were noted. A later re-cut was observed for a distance of 60m on the northern portion of the ditch. The fills of the ditch contained animal bone, oyster shell, two nails and Roman pottery, including some material of 3<sup>rd</sup> to 4<sup>th</sup> century date. There were also a few fragments of intrusive tile and pottery of the medieval/post-medieval period.

### 3.7.5 Landscape **AL404**

**AL404**, consists of two pairs of parallel ditches, which correspond to features identified by cropmark evidence as rectilinear enclosures. One pair of ditches, orientated NE-SW, was visible for a length of 30m and continued beyond the limit of excavation to the northeast. The second pair of parallel ditches, orientated NW-SE, intersect the eastern-most ditch of the NE-SW orientated pair. The two NE-SW aligned ditches and the southern most NW-SE ditch truncated the Phase 6 penannular drip gully (**AL403**). Although the fills contained some pottery of late Bronze Age to early Iron Age date, the majority of pottery dated to the Roman period.

### 3.7.6 Landscape **AL405**

Boundary ditch **AL405** was situated towards the southern end of the main concentration of archaeological features identified on the Weston Hills (Area 4). This may correspond to cropmark evidence for a double square enclosure close to this point. The ditch, which was orientated NW-SE and 27m long and up to 1.3m wide, cut through a number of pits dated to the early-middle Iron Age. As well as Roman material, the fills of the ditch contained a substantial amount of pottery dating from the late Bronze Age to the early/middle Iron Age, presumably derived from these earlier pits.

### 3.7.7 Landscape **AL111**

**AL111**, an isolated inhumation burial, was situated 70m ESE of the square Barrow **AL101** (Phase 5). The burial consisted of a poorly preserved juvenile skeleton, in a contracted posture with the head to the south. The roughly pentagonal shaped grave cut measured 1.05m by 0.9m and 0.08m deep. The grave fill yielded remains of four glass beads, dateable to the 3<sup>rd</sup> century or later, and a fragment of copper alloy sheet, possibly a toiletry implement.



### 3.8 Phase 10: Medieval (Figure 8)

The archaeological evidence for this phase was restricted to Area 1 and comprised hollows over a palaeochannel (AL112), an inverted bell-shaped pit (AL113), a barn (AL115) and a rectangular enclosure and cemetery (AL114).

Prior to the commencement of the archaeological evaluation, the Hertfordshire County Archaeological Records Officer forwarded a letter by Mr. Brendan King of the Baldock Historical Society, who, in conjunction with others, had tentatively identified the locus of the Hospital of St Mary Magdalene. That a hospital, for the treatment of lepers, was founded by Hugh de Clothall around 1200 and moved to a location nearer to Baldock in 1307 was known (Thompson 2002, 6 citing Andrews 1908-9). Neither the original site, nor the new one on which it was rebuilt in 1307, had been pinpointed. Thompson posited the location for the re-established leper hospital to be ‘on the south side of Royston Road, just beyond Whitehorse St.’ (Thompson 2002, 7)

Based on his own research and new translations of primary and later sources, Mr. King and the Baldock Historical Society have suggested that the original Hospital may have been near Spital Hill on the road to Wallington. From the available primary sources Mr. King managed to define a series of attributes pertaining to the location and disposition of the Leper Hospital. These are:

- That the establishment lay approximately a mile distant from any township, though was nearer to Baldock than anywhere else (Bishops Register II Dalderby pl 239 (Lincoln Records).
- That it was situated near the king’s highway (possibly Icknield Way)
- That it lay on and was bisected by a highway (Writ of the Inquisition Ad Quod Damnum C143/4/7) and that it had a frontage onto the highway of some 588ft (179m) (Thompson I. (2002) *Baldock Extensive Urban Survey Project Assessment Report* – Calendar of Patent rolls 1275).
- That the hospital was surrounded by an enclosure or *muros* and contained a cemetery (Calendar of Patent Rolls 1275).
- That the hospital had applied for and successfully obtained the right to move some 200 yards of a highway, which it bisected, and that the new road skirted round the hospital but was still within its lands (Writ of the Inquisition Ad Quod Damnum C143/4/7).
- That the hospital was founded circa 1200 and was re-located in 1307 (Thompson, I (2002) *Baldock Extensive Urban Survey Project Assessment Report*).
- That the hospital and its lands came into the hands of the Earls of Salisbury in the 17<sup>th</sup> century (Accounts 1688 kept at Hatfield House).

The evaluation located an enclosure and part of a burial area (AL114) which has been provisionally interpreted as the boundary wall and cemetery of the original Leper Hospital of St Mary Magdalene.

#### 3.8.1 Landscape AL114

**AL114** includes all of the assessment groups associated with the construction, use and disuse of the leper hospital. A boundary ditch marked the limits of the hospital precinct, a rectangular space that measured 140m long, and 90m from the A505 to the southern limit of the boundary.



The ditch was between 2m and 2.4m wide and up to 0.90m deep with a V-shaped profile and a narrow flat base. The primary fill contained a small amount of animal bone and tile. The secondary fills contained animal bone, tile, oyster shell and early medieval (AD1150-1250) pottery with a sherd of post-medieval pottery that is likely to be intrusive. The final fills, contained animal bone, tile and pottery, which was predominantly early and high medieval (AD1250-1400) in date. Two other boundary ditches ran parallel to the main boundary, one on the south side, and one on the west side. The fills of these two ditches contained no artefacts. Cropmark and geophysical evidence indicates that the west and south side were marked by parallel ditches, as well as a possible entrance in the south side.

A number of discrete features were found within the hospital boundary, these included a possible well **AG600**, a pit **AG603**, postholes **AG602** and graves forming a cemetery **AG605**. The possible well was seen partially exposed in a trial trench and was 1.7m wide and at least 0.85m deep, but was not bottomed. The fills contained animal bone, tile and a moderate amount of pottery of early and high medieval wares. The pit was circular in plan, 2.3m in diameter with a flat base 0.89m deep. It contained a small amount of animal bone and pottery of early and high medieval date. The graves were observed in the western part of the hospital enclosure within a trial trench excavated close to the A505. They appeared to be arranged in north-south rows, set close together. At least 15 graves were identified within the limits of the trial trench. Two burials were uncovered but not disinterred, these were extended, adult inhumations without grave goods, orientated W-E with the head at the west.

A holloway, **AG607**, included with this landscape, was situated adjacent to the hospital boundary along its western side. This was nearly 3m wide and 0.07m deep with a series of wheel ruts in the base.

### 3.8.2 Landscape AL112

**AL112** was a complex of irregular hollows located on the north-eastern facing slope of palaeochannel, AL124. Overall, the hollows covered an area measuring 26m by 14m. The largest one that was excavated was 5m wide and 0.29m deep, with an undulating base. The fills contained a moderate amount of roof tile and variety of types of medieval pottery.

### 3.8.3 Landscape AL113

Pit **AL113** was situated approximately 60m to the west of the Bronze Age barrow cemetery, AL100. It was sub-circular in plan, measuring 4.10m by 3.55m and 1.95m deep. In profile, it is an inverted bell-shape, with a shallow slope around top of pit, steep upper sides and vertical lower sides with an uneven, flattish base. The four fills contained few artefacts. A small amount of animal bone and early medieval pottery, AD1150-1250, was recovered from the primary fill. The final disuse fill contained a fragment of burnt sandstone, and pottery that included prehistoric, Roman and medieval types. The latest pottery dated from the high medieval period AD1250 to 1400. It appears likely, from the pattern of erosion demonstrated by the profile, that the feature had remained open for some time after its construction.

### 3.8.4 Landscape AL115

AL115 is a large post-built structure that has been provisionally interpreted as a medieval barn. The postholes form a rectangular structure of four bays, 21m long and from 6.8m to 7.8m wide, its long axis orientated NE-SW. The postholes were generally around 0.8m in diameter and 0.4m deep. At either end of the structure were two postholes in the middle of the end walls. These were of a similar diameter but were deeper, up to 0.6m in depth. The posthole fills contained only a single 1g crumb of ceramic building material.

Around the outside of the building, gully **AG534.02** provided drainage. It was dug in four separate lengths, leaving large gaps in two places. The 13m long gap on the northern side of the building may indicate that the main entrance was in the northern side. There is no artefactual dating evidence for the structure, however, it is believed that on typological grounds, it is most likely to be a barn of medieval date. The absence of occupation debris within the surrounding gully or postholes and absence of any other associated features indicate that this was not a domestic structure.



Two pits were found cutting through the silted drainage gully. These were sub circular with concave profiles, measuring 2.4m diameter by 0.86m deep and 1.5m diameter by 0.65m deep. The fills contained a few pieces of flint and small fragment of modern glass.

### 3.9 Phase 11: Post-medieval (Figure 9)

Evidence for post-medieval activity was recorded in Areas 1 to 4. In addition to evidence for the final in-filling of earlier features (waterhole 105.01), and the formation of overlying layers (e.g. layer overlaying Barrow I and II, AL117; headland AL217), the post-medieval landscape in the main is characterised by remains of trackways (AL118; AL119) and holloways (AL116 and AL122) confined to Area 1, field/boundary ditches and gullies (AL120: AL215; AL307; AL310; AL406 and gullies AL309), and quarry pitting (AL308; AL407; AL408). Further boundary markers may also be represented by a probable fence line and ditch (AL123), situated between 170m and 220m to the west and southwest of the medieval barn AL115. There was also one incidence of an isolated and badly truncated sheep burial (AL121).

#### 3.9.1 Landscapes AL116 and AL122

**AL116**, a holloway with wheel ruts, was identified in Area 1, adjacent to the A505 and aligned NE-SW. It was c.4m wide and up to 0.3m deep and filled with a layer of sandy silt that contained two pieces of post-medieval roof tile. Its location suggests it is a probable precursor to the A505.

**AL122**, an E-W aligned holloway with remnants of three wheel ruts, was discovered on the east extent of Area 1, approximately 250m northeast of Wallington Road. It was 3.30m wide, and had a wide, shallow profile and a wide, flat base.

#### 3.9.2 Landscapes AL118 and AL119

Trackway **AL118** was aligned E-W, comprising three wheel ruts which extended from the western limit of excavation for about 130m length. These were visible on the cropmark survey. The ruts measured up to 0.73m wide and were between 0.20m and 0.30m wide and 0.10m deep.

Trackway **AL119** was aligned ENE-WSW and comprised two wheel ruts which could be traced for a distance of up to 63m. The wheel ruts were u-shaped in profile with a flat base, up to 10cm in width and 2cm deep.

#### 3.9.3 Landscapes AL308 and AL407

**AL308** consists of a complex of closely inter-cutting pits located in the northern half of Area 3. The pits were situated at and partially obscured by the limit of excavation. The area covered by the pits measured 7m by 1.7m. The fills contained a small amount of animal bone, fired clay, a 3g fragment of Roman pottery and a 15<sup>th</sup>-16<sup>th</sup> century shoeing nail. This may have been a small quarry pit, the various different cuts representing episodic activity.

**AL407** comprised six sub-rounded pits, between 4.7m and 11m diameter, located in Area 4. These have been interpreted as quarry pits. They were spread across the site with no apparent pattern and as seen on the surface typically consisted of light to moderate grey-brown clay silt. Their dating is far from certain but was derived from the presence of a clay pipe and two pieces of tile from one of the machine dug pit segments.

One of the pits was hand dug to a depth of 1.2m, two were machined and another was completely machined (by 'stepping' the sides) down to a depth of c.6m onto the solid chalk bedrock. The excavated pits appeared to have near vertical sides, some having a thick layer of re-deposited natural below the uppermost fill, whilst all that were fully machine dug had re-deposited chalk tip lines close to the base. One of the machine dug sections appeared to



indicate that the pit may have been open for a long period of time due to there being slumping of natural clay from the pit walls overlying tip lines.

It is possible that these pits were man-made quarry pits, although the possibility remains that they were some kind of natural geological occurrence such as a solution hollow/sink hole.

### 3.9.4 Landscape AL215

**AL215** consists of a series of ditches located in the northern part of Area 2, just south of Wallington Road. The two main ditches **AG203** and **AG205** were orientated NNW-SSE. At their southern end, they were almost parallel, separated by a gap of up to 9m, before converging towards their northern end. At the south, both ditches changed course, heading towards the southeast, where they continued beyond the limit of excavation. Ditch **AG203** was visible for 99m with excavated segments measuring up to 1.6m wide and 0.4m deep. Ditch **AG205** was visible for 130m, excavated segments measured up to 1.94m wide and 0.26m deep. A short length of an earlier cut, **AG204**, was observed where **AG203** changed direction. Adjacent to **AG203**, traces of a shallow gully, **AG209**, 0.04m wide and 0.15m deep were observed in one segment within a trial trench. This may be remnants of a shallow, truncated precursor to **AG203**.

The convergence of the two main ditches suggests that they represent a sequence of replacement rather than parallel features on either side of a boundary. Artefacts recovered include late Iron Age/early Roman, Roman and post-medieval pottery, animal bone, oyster and post-medieval ceramic building material.

### 3.9.5 Landscape AL310

**AL310** comprised an enclosure situated in the southern half of Area 3. **AG515.0** consists of the initial cut, **AG515.01** the fills of this cut and **AG515.02** the recut and fills. Overall the ditches formed the northern and western sides of an enclosure, orientated SW-NE and NW-SE with a right angled turn on the NW with the ditch measuring up to 2.3m wide and 0.56m deep. Evidence for the initial cut survived for a short length in the western arm of the enclosure, presumably completely truncated elsewhere. Artefacts include pottery (late Iron Age to post-medieval), animal bone, brick and tile and clay pipe.

### 3.9.6 Landscape AL406

**AL406** consists of a ditch located in the northernmost part of the Weston Hills (Area 4). It was orientated NW-SE, at least 62m long, with the excavated segment being 0.82m wide, 0.36m deep with a concave profile. It contained a small amount of post-medieval roof tile and pottery. The orientation of the ditch is close to that of surviving boundary features lying to the SE and NW.

## 3.10 Phase 12: Modern

This phase mainly comprises topsoil and subsoil deposits that contained modern artefacts in addition to a small number of cut features that represent modern intrusions such as service trenches and bomb craters. Short descriptions of the modern landscape groups not detailed below can be found in Table 5.

### 3.10.1 Landscape AL421: Bomb craters

Prior to the start of excavation three bomb craters were visible as large circular depressions within the road corridor on the Weston Hills, with further craters existing to either side. In addition, a small pit **AG402** was found to contain detonated incendiary devices, believed to be material collected after air raids and detonated on the Weston Hills. All of these date from the 2<sup>nd</sup> World War. In marked contrast to the features interpreted as quarry pits or solution hollows, the craters had a mass of highly fragmented chalk rubble and shattered flint nodules immediately below the topsoil and at the crater edges.



### 3.11 Phase 0: Undated (Figure 10)

This phase comprises all of the landscapes that could not be assigned to a dated phase. The majority of these consist of landscapes with features that contained no dateable artefacts and could not be associated with dateable features/landscapes. The landscapes comprise a mixture of natural and man-made feature types. The natural types include palaeochannels, tree-throw holes, natural strata, erosional features and colluvial deposits. The man-made features include cremations, animal burials, pits and ditches. Unphased landscapes that are not specifically mentioned below are referenced with brief descriptions in Table 5.

#### 3.11.1 Unphased Cremations AL100.04 and AL140 and Inhumation AL100.05

In Area 1, there were three cremation burials (**AL100.04**, **AL140**) and one inhumation (**AL100.05**) that could not be assigned to a phase based on the presence of dateable artefacts or association with other dated features.

**AL100.04** was associated with Barrow II (AG102.0). It consisted of a un-urned cremation within a cut, 0.95m by 0.55m, found within the internal area of Barrow II. Its location, towards the southern edge of the internal area of the monument, means that it is likely to represent a secondary burial, inserted after the creation of the barrow. It is not possible to say whether it dates from the Bronze Age or represents some later phase of activity associated with the barrow cemetery.

**AL140**, two un-urned cremations located in the southwest of Area 1. They are separated by a distance of approximately 65m from one another, and have been grouped together by virtue of the fact that there are no other burials in the vicinity. The westernmost was cut into the fill of a tree-throw hole, and this has been included in the group, but the association in reality is likely to be coincidental.

**AL100.05** is an isolated, infant/juvenile inhumation that was located approximately 3.5m to the east of Barrow V (AG105.0).

#### 3.11.2 Unphased Animal Burials AL137, AL230, AL241 and AL235

**AL137** consisted of a regular rectangular cut measuring 1.8m x 0.7m in plan, located towards the northernmost part of Area 1, adjacent to the A505. It contained skeletal elements from a horse, rather than fully articulated remains.

**AL230** and **AL241** were two animal burials found in the south of Area 2. **AL230** was a dog burial within a cut 0.5m in diameter. **AL241** consisted of an assemblage of small animal bones within a small cut c.0.30m in diameter, possibly not a deliberate animal burial. **AL235** consisted of bird bones (chicken) in a small pit. These were not assigned to the animal grave feature type but were similar to deposit AL241.

#### 3.11.3 AL128 Discrete Features in Vicinity of Barrow Cemetery

This landscape is made up of various undated discrete features in the vicinity of the barrow cemetery in Area 1. The landscape includes a cluster of features lying to the west of Barrow VI, which comprises paired pits, postholes and five elongated pits between 5m and 1.12m long, four of which occur in a line, parallel to one another.

#### 3.11.4 Ditches in Weston Hills Area AL411, AL415, AL416, AL417, AL418 and AL419

A series of undated ditches were located on the Weston Hills, **AL411**, **AL415**, **AL416**, **AL417**, **AL418** and **AL419**. Landscape **AL411**, orientated NE-SW, ran parallel to the Roman enclosure ditches, AL404, and may be related. The others, orientated NE-SW and E-W have no indication of possible relationships, two (**AL416** and **AL417**) were observed only in trial trenches but not in the subsequent watching brief so may have been ephemeral or non-existent.





### 3.11.5 Discrete features/Activity Areas on Weston Hills AL410, AL414 and AL413

A number of undated Landscapes consisting of groups of pits and stake holes (**AL410**, **AL414** and **AL413**) were located on the Weston Hills (Area 4). Landscape **AL410** consisted of several pits, spread out over a distance of approximately 30m. One of the pits contained a charcoal rich fill and evidence for *in situ* burning. These features may represent activity similar to the late Bronze Age and Iron Age activity areas also present in Area 4. **AL414** consisted of pits and postholes found near the late Iron Age/Roman penannular drip gully, AL403, and the succeeding Roman enclosure ditches AL404. One pit, to the northwest of the penannular ditch, contained *in situ* burning and has been interpreted as a hearth or 'fire-pit'.



## 4. DATA SET QUANTIFICATION

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### 4.1 Introduction

For the following discussion the data sets recovered during the investigations have been divided into three main classes: contextual, artefactual and ecofactual.

*Contextual* data relate to the identification of individual events such as the digging of a ditch, its primary infilling etc. These have been recorded as context records during trial and open area excavation. All contexts have a detailed record sheet; many have a plan and section drawing along with photographs.

*Artefactual* data comprises human-made objects recovered during trial and open area excavation. These have been divided for ease of discussion into pottery, ceramic building material, flint and other artefacts (including registered artefacts and bulk finds, such as industrial residues).

*Ecofactual* data comprise natural materials found within excavated deposits. These are able to yield information on the nature of past human activity and its environmental setting. They include human and animal remains, and information obtained from environmental samples (for example charred plant remains).

In the following sections contextual data is discussed first as this has provided the framework for the preceding summary of results and the subsequent data set discussions. The methodological approach taken with each data set is discussed, followed by sections dealing with quantification, provenance (spatially and chronologically) and also condition. All these factors are important in deciding the potential of the material for analysis.

### 4.2 Structural Data

#### 4.2.1 Methodological approach to assessing contextual data

Each context from all four investigations was entered on to a unified project database (MS Access) which allows the formation of linked queries with other data sets (e.g. ceramics, non-ceramics *etc.*). All the site drawings have been digitised using AutoDesk Land Desktop 2005. The digitised plan includes the limit of excavations and outlines of all features, rather than details such as hachures. The feature drawings are digitised as “intelligent” entities, so that once “tagging” has been completed, every individual feature or element of a feature (for example excavated ditch segment) could be manipulated and displayed separately from the background all features plan. The digitised plan has been converted to a GIS format to permit the interrogation and presentation of any digitally stored data.



The contextual data was rapidly assessed in order to establish whether it would provide a coherent spatial and chronological framework. A total of 3694 contexts were assigned to “temporary” assessment groups, e.g. boundary ditch, building, pit group. The decision over whether to assign contexts to groups or not was made on the basis of the following criteria:

- Do the contexts form a coherent spatial unit e.g. ditch length, pit group etc.?
- Do the contexts represent key positions within the stratigraphic sequence?
- Do the contexts contain suitable dating material?

The resulting assessment groups were assigned to assessment landscapes to form groups representing landscape use, e.g. individual barrows were grouped together to form a barrow cemetery (see Table 5). Landscapes were assigned to a number of episodes (phases) of human activity corresponding to broad, chronological divisions, e.g. early to middle Iron Age or Roman, based on their artefactual assemblage (see Table 3 and 5).

Much of the discussion in Section 3 and the following artefactual and ecofactual data set discussions are based on the phase, landscape and group assignments.

#### 4.2.2 Quantification and date range

Table 4 presents a breakdown of the total quantity and type of structural records. These comprise the written description/interpretation of a deposit/feature (context sheets), a map-like drawing showing the location and inter-relationship between features (a plan), a profile drawing through a feature and its fills (section) and photographs.

Record type	Evaluation	Albion WB	Excavation	Oxford WB	Total
Contexts	697	145	2304	821	3967
Drawing Sheets	68	19	305	208	600
Sections	245	35	502	201	983
Photo Films	17	3	44	33	97

**Table 4: Quantity of records**

Table 5 tabulates the assessment landscapes by phase, noting the number of contexts belonging to each landscape.

Phase	Landscape	Description	No. contexts
2.00	200.00	pit and pit fill	2
3.00	100.00	Barrow cemetery	82
3.00	201.00	Two pits (fill of one containing possible collared urn)	7
4.00	101.00	Square barrow	64
4.00	202.00	Large pit, sealed by build up of Roman road	16
4.00	300.00	Pit containing aurochs skull	4
4.00	400.00	Activity group (pits, postholes and linears)	44
4.00	401.00	Pit group	33
4.00	500.00	Activity group (curvilinear ditch and ditch terminus)	6
5.00	102.00	Activity area at north end of road corridor	22
5.00	103.00	Circular arrangement of postholes	18
5.00	203.00	Large pit	5
5.00	204.00	Isolated Pit	4
5.00	301.00	Ditch (NW-SE) southern part area 3	5
5.00	402.00	Activity group (pit/postholes - includes cremation AG410.02)	257
6.00	100.01	Fills of barrow ditch	45
6.00	100.02	Cremation cemetery	68



6.00	100.03	Final fills of Barrow II ditch	23
6.00	100.06	decapitation burial and cremation	14
6.00	104.00	Pit located within earlier circle of postholes (AL103)	3
6.00	105.00	Pond	3
6.00	106.00	Large pit	8
6.00	205.00	Ditch oriented WNW-ESE	17
6.00	206.00	Enclosure/boundary ditch	44
6.00	207.00	Roman road (North of A507)	114
6.00	208.00	Pit beneath southern ditch of Roman road (L207)	2
6.00	209.00	Pit group	32
6.00	210.00	Ditch (possible terminal oriented E-W)	3
6.00	211.00	Ditch aligned NW-SE and turning SW-NE	23
6.00	212.00	Ditch aligned E-W	9
6.00	302.00	Roman road in area 3	150
6.00	303.00	Boundary ditch area 3	66
6.00	403.00	Roundhouse	24
6.00	501.00	Ditch SW-SE	5
7.00	107.00	Dykes, parallel arrangement of ditches	66
7.00	108.00	Boundary ditches	37
7.00	109.00	Pit	5
7.00	110.00	Possible quarry pit	2
7.00	111.00	Inhumation	3
7.00	205.01	Disuse of Ditch L526	5
7.00	207.01	Continued use, and final disuse of Road	85
7.00	213.00	Short linear features to north of A507	9
7.00	214.00	Pit group	14
7.00	302.01	Continued use and disuse of Road (L302)	81
7.00	304.00	Short linear feature north of Roman road (L302)	12
7.00	305.00	Ditch NW-SE	62
7.00	306.00	Isolated rectangular pit	5
7.00	404.00	Enclosure ditches (NE-SW)	61
7.00	405.00	Ditch (NW-SE)	30
10.00	112.00	Group of irregular features on south facing slope of palaeochannel	14
10.00	113.00	Large pit	30
10.00	114.00	Leper hospital	121
10.00	115.00	Probable barn, large post built structure	108
11.00	116.00	Holloway - probably precursor to current A505.	19
11.00	117.00	Layer identified within upper part of ditches between Barrows II & III	1
11.00	118.00	Trackway, wheel ruts, close to modern line of footpath	21
11.00	119.00	Trackway, wheel ruts, close to modern line of footpath	6
11.00	120.00	Ditch adjacent to A505 road, possible road boundary	16
11.00	121.00	Animal burial	3
11.00	122.00	Holloway and wheel ruts	8
11.00	123.00	Boundaries (ditch and L-shaped post alignment) and isolated postholes and final fill of pond feature	102
11.00	215.00	N-S oriented ditches (corresponding to cropmarks?)	46
11.00	217.00	Headland (includes metal detected area)	5
11.00	307.00	Ditch NE-SW	6
11.00	308.00	Inter-cutting pits	30
11.00	309.00	Gullies (NE-SW aligned)	24
11.00	310.00	Ditch (SW-NE before turning NW-SE)	34
11.00	406.00	Ditch (NW-SE)	3
11.00	407.00	Quarry pits	130
11.00	408.00	Isolated pit	3
12.00	147.00	Topsoil Area 1	4
12.00	148.00	Modern features area 1	6
12.00	149.00	Bomb crater	2
12.00	150.00	Stake hole	3
12.00	151.00	Topsoil (area 1 near 'Leper Hospital)	1
12.00	152.00	Ditch NW-SE	4
12.00	243.00	Topsoil north part area 2	7
12.00	244.00	sub soil north part area 2	14
12.00	245.00	Topsoil middle area 2	3
12.00	246.00	subsoil middle area 2	6
12.00	247.00	topsoil south part area 2	3
12.00	248.00	subsoil south part area 2	15



12.00	249.00	construction make-up modern road?	2
12.00	250.00	modern features/intrusion in south part area 2	1
12.00	251.00	topsoil along water pipeline watching brief (all areas)	1
12.00	320.00	topsoil area 3	1
12.00	420.00	topsoil area 4	231
12.00	421.00	bomb craters	13
12.00	507.00	topsoil Oxford watching brief	11
12.00	508.00	subsoil Oxford watching brief	10
12.00	509.00	isolated pit	4
12.00	510.00	modern features and intrusion Oxford watching brief	5
.00	100.04	cremation burial (associated with Barrow II)	4
.00	100.05	Cremation possible satellite of Barrow V	3
.00	124.00	Palaeochannel, dry erosion valley	20
.00	125.00	Layer filling upper part of palaeochannel (AL 124)	5
.00	126.00	Series of large stones situated along SW side of palaeochannel AG100.	12
.00	127.00	Tree holes	83
.00	128.00	Undated features in the vicinity of the barrow cemetery	75
.00	129.00	Natural strata	1
.00	130.00	Tree holes	4
.00	131.00	Subsoil	1
.00	132.00	Natural strata	3
.00	133.00	Three pits, southwest of square barrow (AL 101)	6
.00	134.00	Undated discrete features in Area 1	54
.00	135.00	Palaeochannels	9
.00	136.00	Pit, truncating corner of boundary ditch of leper hospital, (AL 114)	2
.00	137.00	Undated animal burial, near north end of road corridor	3
.00	138.00	Undated isolated pit, near north end of road corridor	3
.00	139.00	Undated discrete features to the east of the leper hospital (AL 114)	18
.00	140.00	Two cremations	6
.00	141.00	North-south gully in area of leper hospital (AL 114)	2
.00	142.00	Ditch to south of leper hospital	2
.00	143.00	Palaeochannels, various palaeochannels identified in pipeline watching brief	9
.00	144.00	Ditches, orientated NW-SE, located at north end of road corridor	10
.00	145.00	Gully, orientated NE-SW, located at north end of road corridor	6
.00	146.00	Construction and fill of furrows	17
.00	218.00	Natural strata (northern part area 2)	25
.00	219.00	Palaeochannel	13
.00	220.00	tree throws	1
.00	221.00	Natural Strata (middle part of area 2)	4
.00	222.00	tree throws	2
.00	223.00	natural geological strata (southern part area 2)	19
.00	224.00	Palaeochannel (N-S) southern part of area 2	14
.00	225.00	group of undated, discrete features	6
.00	226.00	Large pit	21
.00	227.00	isolated pit and posthole	4
.00	228.00	Pit (cut by Roman northern roadside ditch)	3
.00	229.00	Construction and fills of furrows/plough scars	2
.00	230.00	Dog burial	3
.00	231.00	Metal detected finds in southern part of area 2 (unstratified)	1
.00	232.00	gravel fan	5
.00	233.00	gravel fan	10
.00	234.00	Colluvium layer (above gravel fans) & sealing palaeochannel L224	20
.00	235.00	isolated pit containing bird bones (chicken?)	2
.00	236.00	Undated linear features cutting Roman roadside ditches (L207)	26
.00	237.00	Tree throw holes	74
.00	238.00	Three postholes (including post pipe cut and packing)	11
.00	239.00	Isolated pit (north east area 2)	2
.00	240.00	Pit	3
.00	241.00	Animal burial (south east part of area 2)	2
.00	242.00	Wheel ruts and drainage ditches (possibly associated with modern road?)	15
.00	311.00	subsoil area 3	1
.00	312.00	natural features area 3	1
.00	313.00	Palaeochannel area 3	8



.00	314.00	Cluster of shallow pits/postholes	10
.00	315.00	Shallow linear (parallel to Roman Road L302)	2
.00	316.00	Tree throws	5
.00	317.00	Natural features	15
.00	318.00	short ditch parallel to ditch (L310)	5
.00	319.00	Pit group	26
.00	409.00	Natural strata and geological formations	35
.00	410.00	Activity group (pit/postholes)	31
.00	411.00	Ditch NW-SW	24
.00	412.00	Tree throws	4
.00	413.00	Stakehole Group	5
.00	414.00	Discrete undated features near roundhouse (L403)	50
.00	415.00	Ditch (NW-SE)	7
.00	416.00	Ditch E-W	10
.00	417.00	Ditch E-W	2
.00	418.00	Ditch NW-SE	3
.00	419.00	Ditch E-W	11
.00	502.00	Prehistoric buried soil?	1
.00	503.00	Colluvium	4
.00	504.00	Colluvium	1
.00	505.00	Ditch N-S	2
.00	506.00	Natural stratum	12

**Table 5: Landscape descriptions (ordered by phase) with count of assigned contexts**

#### 4.2.3 Range, variety, survival and condition of features/deposits

The site consists mainly of cut features such as ditches, pits, postholes and graves, although a proportion of layer type deposits were encountered in Area 2. The latter all survive in low-lying parts of the site in the form of deposits lying within dry valleys (palaeochannels) or as build-up deposits within the construction of the Roman road (L207). Outside of these low-lying areas, on the slopes and flatter ground, the site was subjected to a considerable degree of plough truncation and soil erosion.

Overall, the study area can be characterised as having a comparatively low density of archaeological features, in the main comprising partially truncated negative features. In terms of the periods represented, the majority of contexts were assigned a date in the late Iron Age and Roman periods, based upon recovered finds assemblages.

### 4.3 Pottery

#### 4.3.1 Methodology

For each context, pottery was recorded by fabric type and quantified by minimum sherd count and weight. This information was entered onto the Context Assemblage Table in the project database. Unless otherwise stated all quantitative statements are based on sherd count. Pottery was also spotdated by individual fabric type and the date of the latest sherd used in the provision of an overall context spotdate. The latter has been used to assist in the establishment of the provisional phasing structure (see Table 3).

#### 4.3.2 Quantification

A total of 5872 sherds weighing 46.8kg were collected, the majority deriving from features within Area 4 (Table 6).



Area No.	Sherd No.	% Total
1	1961	33.4
2	677	11.5
3	575	9.8
4	2599	44.3
5	60	1.0

**Table 6: Quantity of pottery by Area**

#### 4.3.3 Range and variety: the pottery type series

Fabrics are listed below (Table 7) in chronological order, using common names and type codes in accordance with the Bedfordshire Ceramic Type Series, held by Albion Archaeology. Where appropriate, late Iron Age and Roman fabric groups have been correlated with those cited in the Baldock excavation report (Stead and Rigby 1986). Bracketed figures represent total percentage (by sherd number) for each chronological period.

Fabric Type	Common name	Sherd No.	Weight (g)
<b>Early prehistoric</b> (0.8%)			
Type X05	Peterborough ware	1	2
Type X07	Beaker	4	21
Type X10	Collared Urn	35	202
Type X01	Non-specific early prehistoric	6	42
<b>Late Bronze age/early Iron Age</b> (16.6%)			
Type F01A	Coarse flint	233	2068
Type F01B	Fine flint	133	963
Type F01C	Flint and quartz	611	5523
<b>Early-middle Iron Age</b> (28.1%)			
Type F03	Grog and sand	45	356
Type F14	Fine mixed inclusions	1	7
Type F16	Coarse shelly	497	1912
Type F16A	Vesicular shelly	13	146
Type F17	Grog	1	2
Type F19	Sand and organic	169	1722
Type F20	Limestone (calcareous) inclusions	9	122
Type F27	Shell and grog	9	51
Type F28	Fine sand	392	3509
Type F29	Coarse sand	326	3685
Type F30	Sand and calcareous inclusions	9	71
Type F35	Fine micaceous	2	9
Type F37	Calcareous mixed	181	1254
<b>Late Iron Age</b> (20.4%)			
Type F05 (Fabric 3)	Grog and shell	18	78
Type F06A (Fabrics 1 and 2)	Fine grog	19	68
Type F06B (Fabrics 1 and 2)	Medium grog	591	4395
Type F06C (Fabrics 1 and 2)	Coarse grog	265	3441
Type F07 (Fabric 4)	Shell	157	1150
Type F09	Sand and grog	120	876
Type F34	Sand	32	227
Type F (6.5%)	Non-specific Iron Age	383	1881
<b>Roman</b> (17.7%)			
Type F24 (Fabric 4)	Buff shelly	5	42
Type R01	Samian ware (source unknown)	67	201
Type R01C	Samian ware (Eastern Gaulish)	1	3
Type R03	Whiteware (source unknown)	8	74



Type R03A (Fabric 9)	Verulamium whiteware	41	78
Type R03B	Gritty whiteware	55	488
Type R03C	Smooth whiteware	8	81
Type R04	Fineware import	2	25
Type R05A	Orange sandy	91	500
Type R05B	Fine orange	1	3
Type R05C	Orange micaceous	1	1
Type R06B (Fabric 13)	Coarse greyware	53	391
Type R06C (Fabric 7)	Fine greyware	142	2684
Type R06D	Micaceous greyware	36	224
Type R06E	Calcareous greyware	1	8
Type R06F	Grey ware grog and sand	1	5
Type R06G	Silty greyware	2	67
Type R06H	White-slipped greyware	5	65
Type R07B (Fabric 14)	Sandy blackware	78	547
Type R07C (Fabric 14)	Gritty blackware	16	73
Type R08	Black micaceous	49	186
Type R10A	Buff gritty	2	46
Type R10B	Fine buff gritty	1	7
Type R11	Oxford oxidised wares	5	15
Type R11D (Fabric CC 8-10)	Oxford colour coat	2	10
Type R12B (Fabric CC 3)	Nene Valley colour coat	26	128
Type R13 (Fabric 4)	Shell	44	584
Type R14	Sand	92	1132
Type R18	Pink gritty	6	12
Type R19	Amphorae	39	986
Type R21	Mortaria (source unknown)	7	340
Type R22A	Hadham oxidised ware	29	88
Type R23	Roughcast colour coat	4	12
Type R33 (Fabric 9)	Mortaria (Verulamium region)	1	8
Type R36	Orange gritty	1	3
Type R38	Colour Coat (source unknown)	22	62
Type R39	Terra Rubra	1	1
Type R	Non-specific Roman	100	531
<b>Medieval (2.3%)</b>			
Type B01A	St Neots-type (orange)	1	9
Type B07	Shell	7	19
Type C01	Sand	7	79
Type C02	Red quartz	5	99
Type C03	Fine sandy	1	10
Type C05	Sandy (red margins)	1	13
Type C17	Heddingham type	5	16
Type C53	Sand (pasty)	11	45
Type C59A	Coarse sandy	13	1446
Type C60	Hertfordshire-type greyware	17	90
Type C61	Calcareous inclusions	7	43
Type C71	Buff-grey cored	7	42
Type C	Non-specific medieval wares	53	322
Type E03	Late medieval smooth oxidised	4	23
<b>Post-medieval (0.7%)</b>			
Type P01	Fine glazed red earthenware	19	543
Type P03	Black-glazed earthenware	3	25
Type P10	Red earthenware	1	19
Type P12	Cistercian ware	5	16
Type P30	Staffordshire slipware	1	5
Type P36A	Brown salt-glazed stoneware	1	10
Type P39	Mocha Ware	1	43
Type P45	Transfer-printed ware	2	2
Type P48	English stoneware	2	50
Type P	Miscellaneous post-medieval ware	4	60





<b>MOD</b> (0.1%)	Modern	8	14
<b>UNID</b> (6.6%)	Unidentified	386	356

**Table 7: Pottery type series**

#### 4.3.4 Provenance, Phasing and Date Range

The assemblage displays a wide date range spanning the late Neolithic to the post-medieval periods. Exceptions are the Saxon and Saxo-Norman periods, for which no ceramic evidence occurs.

Composition of the assemblage suggests that the pottery was subject to variable processes of post-depositional disturbance or contamination. Overall, the degree of fragmentation is high (average sherd weight 8g), and few vessels are represented by more than one sherd. Two hundred and ninety-six features (77% of contexts producing pottery) contained less than 100g, and only eight features (2%) yielded in excess of 1kg. One hundred and four features (27%) yielded only single sherds.

The greatest pottery concentrations derive from features within Phases 5 and 6, producing 44% and 34% of the total assemblage respectively. Table 8 shows assemblage composition by phase and sherd count, with shaded areas representing contemporary fabric types. Approximately 12% of the total assemblage is residual within features of later date, while intrusive elements account for less than 1%. Excluding post-medieval and modern phases, where residual material is expected to occur, the incidence of residuality is most evident in Roman Phase 7, where nearly 27% of the assemblage is of pre-Roman date.

Pottery date	Assessment Phase										Total	
	2	3	4	5	6	7	10	11	12	0		
Early Prehistoric	1	35	2					4	4			46
Late Bronze Age/early Iron Age			2	158	664	36	21	1	4	85	6	977
Early-middle Iron Age			5	2	1419	182	22			16	8	1654
Iron Age					327	46	7		1	1	1	383
Late Iron Age			2			1012	94	3	18	31	46	1206
Roman						554	383	11	26	32	32	1038
Medieval						17	9	81	8	6	14	135
Post-medieval						4		6	9	12	2	33
Modern				1		2	1		1	5	4	14
<b>Total</b>	<b>1</b>	<b>44</b>	<b>163</b>	<b>2410</b>	<b>1853</b>	<b>537</b>	<b>106</b>	<b>71</b>	<b>188</b>	<b>113</b>		<b>5486</b>
<b>% Residuality by phase</b>	-	-	1.2	-	0.1	26.8	17.9	85.9	97.3	-	-	
<b>% Intrusive material by phase</b>	-	20.0	1.8	-	1.2	1.8	5.6	1.4	-	-	-	

**Table 8: Assemblage composition by phase and sherd count (excludes unidentified material)**

##### 4.3.4.1 Assessment Phase 2

Ceramic evidence derived from pit AL200, AG208, and comprises a single abraded rim sherd with a finger nail impressed interior. Coarsely tempered



with quartz, flint and calcareous inclusions, the sherd has been provisionally identified as late Neolithic Peterborough ware.

AL	AG	Group Description	Sherd No : Wgt (g)
200.00	208.01	Fill of pit	1:2
<b>Total</b>			<b>1:2</b>

**Table 9: Phase 2 Pottery by landscape and group**

#### 4.3.4.2 Assessment Phase 3

The Phase 3 assemblage is highly fragmentary, with an average sherd weight of less than 1g. Over twenty-seven percent of the pottery derived from the sieved residues of environmental samples. Thirty abraded sherds in a grog tempered fabric identified as collared urn, derived from the lower fill of the Barrow IV ditch (AG104.01) and the central cremation within Barrow VI (AG106.02). For the purpose of this assessment, it has been assumed that numerous unidentifiable crumbs recovered from the same contexts as the collared urn derive from the same vessel. The secondary and tertiary fills of pit AL201, AG521 contained nine highly abraded sherds (49g) in a leached shell tempered fabric, which may also derive from a collared urn. The poor condition of the fragments precludes positive identification.

The primary and secondary fills of Barrow II ditch AL100, AG102 contained nine sherds (62g), which may be considered intrusive. They include flint tempered wares characteristic of the late Bronze Age and a single late Iron Age grog tempered sherd. The latter may be associated with late Iron Age / early Roman cremation cemetery AL100.02.

AL	AG	Group Description	Sherd No : Wgt (g)
100.00	102.01	Primary fill of Barrow II ditch	5:46
100.00	102.02	Secondary fill of Barrow II ditch	4:16
100.00	104.01	Lower fill of Barrow IV	3:3
100.00	106.02	Central cremation within Barrow VI	316:211
201.00	521.01	Pit	9:49
<b>Total</b>			<b>337:325</b>

**Table 10: Phase 3 Pottery by landscape and group**

#### 4.3.4.3 Assessment Phase 4

The Phase 4 assemblage is characterised by the presence of flint tempered vessels (fabrics F01A, F01B, and F01C), which constitute 95% of the material. Sherds are generally abraded and thick-walled, in some cases up to 20mm, although no diagnostic forms occur. Sherds have an average weight of 5g and few vessels are represented by more than a single sherd. Two undiagnostic fragments of quartz and organic tempered pottery (type F19) are also present. The majority of the assemblage derived from the primary fills of barrow ditch AL101, AG535.01, and the fills of pit group AL401, AG411.01.

Residual and intrusive material each constitute approximately 2% of the assemblage, the former comprising rim and body sherds from a miscellaneous



early prehistoric vessel (pit AL202, AG252.01), and the latter a sherd of modern pottery (pit AL300, AG304.01).

AL	AG	Group Description	Sherd No : Wgt (g)
101.00	535.01	Primary fills of barrow ditch	69:221
101.00	535.02	Secondary fills of barrow ditch	3:7
101.00	535.03	Final disuse fills of barrow ditch	6:60
202.00	252.01	Fill of pit	7:172
300.00	304.01	Fill of pit with aurochs skull	5:7
400.00	412.01	Fills of features in activity area	5:43
401.00	411.01	Fills of pits	60:255
500.00	547.01	Fills of ditch	5:14
500.00	548.01	Fills of ditch	6:18
<b>Total</b>			<b>166:797</b>

**Table 11: Phase 4 Pottery by landscape and group**

#### 4.3.4.4 Assessment Phase 5

Over 40% of the ceramic assemblage derived from features assigned to Phase 5. The range of fabric types is considerably broader than the preceding phases, and includes pottery tempered with quartz sand or combinations of quartz and other tempering materials, (types F28, F29, F19, F30, F35, F30 and F03), shell (types F16, F16A, F27), argillaceous material (types F14, F17, F37) and flint (types F01A/B/C). The presence of the latter indicates the continued use of late Bronze Age fabric types and reflects the overlap between the late Bronze Age and early Iron Age periods. Finewares and coarsewares are represented, the former including a small number of burnished vessels of probable Chinnor-Wandlebury tradition (Cunliffe 1991). Diagnostic forms comprise round-shouldered and carinated vessels, bowls and large storage jars. Four strap handle fragments were identified. Rims are upright, rounded, flaring or flat: bases are mainly flat, although examples of footring and pinched-out types occur. Decoration comprises burnishing, twig-brushing and finger tip impressions on vessel shoulders, rims and girths.

The absence of residual and intrusive material suggests the early to middle Iron Age deposits are largely undisturbed. Despite a low average sherd weight (8g), the incidence of abrasion is low among the Phase 5 types. The majority of the assemblage is associated with Weston Hills activity group AL402, in particular the fills of pits / post holes AG410 which contained 7.0kg of pottery, and pit / post holes, AG407 and AG409, which each yielded approximately 3.0kg. Thirty-four vessels within these features are represented by more than one sherd.

AL	AG	Group Description	Sherd No : Wgt (g)
102.00	541.01	Fills of pit	52:311
102.00	543.01	Fills of pits	1:1
102.00	544.01	Fill of pit group	2:9
103.00	537.01	Fills of postholes	5:30
203.00	524.01	Fills of pit	9:51
204.00	525.01	Fill of pit	15:47



301.00	701.01	Primary / use fill of ditch	8:185
301.00	701.02	Secondary / use-disuse fill of ditch	5:90
402.00	407.01	All fills contained within pits / post holes	607:3222
402.00	408.01	Primary pit fills	170:2086
402.00	408.02	Slumping / capping layers	4:58
402.00	408.03	Secondary and/ or final deposits	197:1730
402.00	409.01	All fills of pits / post holes	315:3099
402.00	410.01	Fills of pits / post holes	874:7075
402.00	410.02	Cut and fill of cremation grave	1:1
402.00	416.01	All fills of ditch	1:2
402.00	418.01	Fills of pits	105:813
402.00	421.01	Fills of pits / post holes	55:477
		<b>Total</b>	<b>2426:19287</b>

**Table 12: Phase 5 Pottery by landscape and group**

#### 4.3.4.5 Assessment Phase 6

Features assigned to Phase 6 contained approximately 35% of the ceramic assemblage. Over half of this material comprises wheel-thrown and hand-made grog-tempered vessels (types F06A/B/C and F05) in the 'Belgic' tradition, characteristic of Thompson's Zone 7 (1982). A small proportion of shell and sand tempered vessels also occur (types F07 and F09/F34 respectively). Late Iron Age forms include lid-seated jars, everted, bead rim and cordoned jars, necked jars, storage jars, pedestal urns, and a single butt beaker. Decorative elements comprise linear and random combing, rouletting, burnishing, horizontal grooves and finger tip impressions.

The early Roman assemblage comprises 554 sherds, weighing 6.0kg. The majority are sand tempered wares (fabrics R05/R06/R07/R14), principally ubiquitous greyware types of probable local manufacture. Whitewares from the Verulamium region are well represented, and there is a small quantity of Hadham oxidised ware. Imported vessels comprise plain and decorated samian ware, and storage vessels (*amphorae*) from the continent. Forms are fineware bowls, cups and dishes, plain and ring-necked flagons, folded beakers, lid-seated and cordoned jars, plain rim bowls, dog dishes, triangular rim and necked jars, storage jars, *mortaria*, *amphorae* and single examples of a strainer and unguent flask. Many possess elements similar to the preceding Belgic tradition, in the form of cordons or corrugations. Decoration comprises combed panels and random combing, incised lattice motifs, rouletting and rilling. Late Iron Age and early Roman fabric types and forms are readily paralleled by those recovered from earlier excavations at Baldock (Stead and Rigby 1986).

Significant late Iron age/early Roman pottery assemblages were associated with the cremation cemetery within Barrow II ditch AL100, AG102.04, which contained 4.2kg of pottery, the final fills of Barrow II ditch AL100, AG102.06, and the construction of the built up agger AL207, AG244, which each yielded over 2.0kg.

Residual material of early-middle Iron Age date (264 sherds, weighing 1.7kg) constitutes less than 1% of the assemblage, and was present within various



features. Intrusive sherds total 1.2% and comprise 23 sherds (145g) of medieval and post-medieval pottery, the former deriving from the final ditch fills of Barrow II, AL100.03, and the latter from pit group AL209.

AL	AG	Group Description	Sherd No : Wgt (g)
100.01	101.01	Single fill of Barrow I	7:35
100.01	102.03	Tertiary fill of Barrow II ditch	64:416
100.01	103.01	Primary fill of Barrow III	40:337
100.01	103.02	Secondary fill of Barrow III	99:472
100.01	104.02	Upper fills of Barrow IV	1:1
100.01	106.01	Fill of ditch of Barrow VI	4:18
100.01	107.02	Secondary fill of Barrow VII	4:18
100.02	102.04	Cremation cemetery within ditch of Barrow II	364:4208
100.02	106.03	Cremation. Possible satellite burial of Barrow VI	8:46
100.03	102.05	Stony fill of Barrow II ditch	131:671
100.03	102.06	Final fills of Barrow II ditch	408:2844
100.06	101.02	Decapitation burial + cremation	3:4
104.00	561.01	Fill of pit	3:9
105.00	533.02	Use/disuse fill	51:675
106.00	531.01	All fills	1:3
205.00	526.01	Use + use/disuse fills of ditch	4:40
206.00	224.01	Use and use/disuse fills of ditch	19:259
207.00	244.00	Roman road	242:2100
207.00	244.01	Soils sealed beneath road construction	54:373
207.00	246.01	Fills of ditch	2:8
208.00	253.01	Fill of pit	5:41
209.00	254.01	Fills of pit group	50:457
210.00	255.01	Fills of ditch terminal	6:58
211.00	519.01	Fills of ditch	1:105
212.00	520.01	Fills of ditch	42
302.00	307.02	Secondary / use/disuse fills of ditch	33:645
302.00	308.02	Secondary use/disuse fills of ditch + possible post hole	1:2
302.00	308.03	Tertiary / disuse fills of ditch	6:8
302.00	309.01	Fills of initial cut within boundary	2:11
303.00	305.01	Use fills of ditch	1:3
303.00	305.02	Use/disuse fills of ditch	91:866
303.00	305.03	Disuse fills of ditch	173:1886
403.00	404.01	Single fill of ring ditch	2:5
501.00	508.01	Fill of ditch	4:4
		<b>Total</b>	<b>1893:16670</b>

**Table 13: Phase 6 Pottery by landscape and group**

#### 4.3.4.6 Assessment Phase 7

Approximately 10% of the ceramic assemblage derived from features assigned to Phase 7. There exists a degree of overlap and continuity between the Phase 6 and 7 assemblages, evidenced by their similar composition. The most notable difference is the reduced quantity of late Belgic Iron Age pottery. The Phase 7 assemblage is characterised by a prevalence of locally manufactured sand tempered wares (fabrics R05/R06/R07/R14). Other products of local industries



comprise vessels from Hadham and the Verulamium region. A small proportion of shell tempered storage jars and cooking vessels occur. Vessels of 3<sup>rd</sup>-4<sup>th</sup> century date are present, although only in small quantities, and mainly comprise colour coated finewares from Oxfordshire and the Nene Valley. In common with the Phase 6 assemblage, imported continental vessels, including samian ware and *amphorae*, are poorly attested. Diagnostic vessels represent a low status, utilitarian assemblage. Forms are fineware vessels, reeded-rim jars and bowls, plain and ring-necked flagons, lid-seated jars and bowls, undercut and triangular rim jars, storage jars, *mortaria*, *amphorae*, plain rim bowls and a single folded beaker. Decoration comprises combed panels and random combing, incised lattice motifs, rouletting, barbotine, slipping and rilling.

The Roman assemblage is fairly dispersed, with few groups containing significant assemblages. Only two groups, boundary dyke AL107, AG110.02 and ditch fill AL207.01, AG2460.2 yielded over 500g of pottery. The majority of the assemblage was associated with boundary and enclosure ditches, and ditches flanking road AL207 (north) / AL302 (south).

Residual material of pre-Roman date (140 sherds, weighing 1.2kg) constitutes 27% of the assemblage. Intrusive pottery totals 2% and comprises ten sherds (32g) of medieval and post-medieval date, the former deriving from the disuse fills of ditches AL207, AL305 and road AL207.01, and the latter from possible boundary dyke AL107.



AL	AG	Group Description	Sherd No : Wgt (g)
107.00	109.01	Dyke primary fill	3:21
107.00	109.02	Dyke secondary fill	5:19
107.00	109.03	Dyke tertiary - final fill	4:7
107.00	110.02	Dyke secondary fills	37:626
107.00	110.05	Dyke final disuse fills	18:146
108.00	113.01	Fill of ditch	3:11
108.00	115.01	Fills of ditch	6:26
108.00	124.01	Layers filling erosion hollow	2:15
109.00	530.02	Uppermost fill of pit	3:14
110.00	553.01	Fill of pit	1:10
111.00	706.01	Deposits within grave	1:1
205.01	526.02	Disuse fills of ditch	11:51
207.01	244.02	Disuse of road	15:149
207.01	245.02	Fills of ditch northern side of road	13:87
207.01	245.03	Fills of ditch northern side of road	11:66
207.01	246.02	Fills of ditch	79:689
207.01	246.03	Fills of ditch	2:45
213.00	249.01	Fill of linear feature	8:85
213.00	250.01	Fill of linear feature	8:85
302.01	307.03	Tertiary / disuse fills of ditch	54:554
302.01	309.02	Construction/fills of first recut	72:338
302.01	309.04	Final disuse fills of last/second recut	8:40
304.00	312.01	Fills of ditch	13:149
305.00	517.02	Use/disuse fills of ditch	14:71
305.00	517.03	Disuse fills of ditch	18:65
305.00	517.04	Possible recut and fills	7:21
306.00	514.01	Fills of pit	47:349
404.00	405.01	All fills of ditches	61:544
404.00	415.01	Single fill of ditch	1:4
405.00	406.01	All fills of ditches	28:130
		<b>Total</b>	<b>553:4418</b>

**Table 14: Phase 7 Pottery by landscape and group**

#### 4.3.4.7 Assessment Phase 10

Features assigned to Phase 10 yielded 106 pottery sherds (2.1kg) of predominantly 11<sup>th</sup>-13<sup>th</sup> century date, constituting approximately 2% of the total ceramic assemblage. The majority occur in coarse or fine reduced sand tempered fabrics (types C01, C02, C03, C53, C59A, C60, C61, C71), likely to be of local manufacture. Three shell tempered coarseware sherds (types B01A and B07) of unknown source are present. Finewares comprise four glazed sherds of Hedingham ware, a regional import from Essex datable to the 13<sup>th</sup>-15<sup>th</sup> century, and a possible sherd of late medieval Hertfordshire glazed ware. Diagnostic forms are rare and comprise undecorated everted and square rim jars, jugs and a two-handled jar. Single examples of slashed rod and strap handles occur.



The majority of the assemblage was associated with the Hospital of St Mary Magdalene AL114, in particular fills of well AG600, which contained 1.6kg of pottery. The latter included eight sherds, each with an average weight of 161g, deriving from a single jar.

Residual early Iron Age and Roman material (19 sherds, weighing 64g) constitutes nearly 18% of the assemblage, and intrusive post-medieval pottery (6 sherds, weighing 25g) approximately 6%.

AL	AG	Group Description	Sherd No : Wgt (g)
112.00	139.01	Fill of irregular features	36:217
113.00	118.01	Large pit. Primary fills	1:5
113.00	118.04	Large pit. Final disuse fills	17:141
114.00	150.02	Secondary fill of ditch	3:30
114.00	150.03	Final and undifferentiated fill of ditch	13:49
114.00	600.01	Fills of well	29:1630
114.00	603.01	Fills of pit	6:49
115.00	534.01	Fills of postholes	1:2
<b>Total</b>			<b>106:2123</b>

**Table 15: Phase 10 Pottery by landscape and group**

#### 4.3.4.8 Assessment Phase 11

Only 9 of the 71 sherds recovered from features assigned to Phase 11 are datable to the post-medieval period. The majority comprise fine glazed red earthenware: single sherds of Staffordshire slipware and salt-glazed stoneware are also present. All are of 17<sup>th</sup>-18<sup>th</sup> century date, and are mainly associated with the recut and fill (AG515.01) of boundary ditch AL310. Residual material constitutes 86% of the assemblage, and comprises a range of pottery dating from the early Bronze Age to the late medieval periods, the majority being of late Iron Age/early Roman origin.

AL	AG	Group Description	Sherd No : Wgt (g)
117.00	131.00	Layer overlying Barrows II and III	18:130
123.00	528.01	Use phase of postholes / pits	3:6
123.00	528.02	Disuse fill of postholes/pits	8:40
123.00	532.01	Fills of posthole	1:1
123.00	551.01	Fills of posthole	2:16
123.00	552.01	Fills of ditch	1:3
215.00	203.02	Use/disuse fills of ditch	3:7
215.00	204.01	All fills of ditch	1:7
215.00	205.01	All fills of ditch	3:12
216.00	210.01	Fill of pit	1:3
217.00	223.00	Layer formed by headland	17:123
307.00	702.01	Fill of ditch	2:16
308.00	306.01	Fill of possible quarry pits	1:3
310.00	515.01	Fill of initial cut of ditch	1:2
310.00	515.02	Recut/ fill of boundary ditch	9:453
406.00	513.01	Fill of ditch	1:43
407.00	403.01	Fills of quarry pits	3:9





408.00	510.01	Fills of pit	1:21
<b>Total</b>			<b>76:895</b>

**Table 16: Phase 11 Pottery by landscape and group**

#### 4.3.4.9 Assessment Phase 12

Unstratified material recovered from topsoil and subsoil deposits across the study area (mainly Areas 1 and 4) constitutes the majority of the Phase 12 assemblage. Exceptions are a late Iron Age sherd (53g) deriving from the construction make-up of the modern road, AL249, and three modern sherds (5g) from the fills of pit AL509. Modern pottery comprises five sherds of flower pot. Residual material constitutes 97% of the assemblage, and comprises a range of pottery dating from the late Bronze Age to the post-medieval periods, the majority being of late Bronze Age/early Iron Age origin.

AL	AG	Group Description	Sherd No : Wgt (g)
147.00	128.00	Topsoil	62:410
248.00	241.00	Subsoil	11:76
249.00	256.00	Construction make-up of modern road	1:53
420.00	400.00	Topsoil	97:941
507.00	500.00	Topsoil	6:90
508.00	501.00	Subsoil	4:4
509.00	550.01	Fills of pit	3:5
<b>Total</b>			<b>184:1579</b>

**Table 17: Phase 12 Pottery by landscape and group**

#### 4.3.4.10 Undated

Pottery recovered from undated features constitutes 2% of the ceramic assemblage (130 sherds, weighing 761g) and comprises a range of material dating from the late Bronze Age/early Iron Age to the present day. The majority of this assemblage is datable to the late Iron Age/early Roman periods. Table 18 gives a spotdate (based on the date of the latest pottery in the feature) for each undated group. It may subsequently be possible to assign some of these groups to a phase.

AL	AG	Group Description	Pottery spotdate	Sherd No : Wgt (g)
100.05	105.02	Cremation	Modern	1:1
124.00	100.01	Layers within palaeochannel	Medieval	12:74
125.00	120.00	Layer	Post-medieval	2:2
127.00	119.01	Tree hole fills	Roman	2:2
135.00	538.01	Fill of palaeochannels	Early Iron Age	1:2
139.00	540.01	Fills of pit	Roman	1:1
140.00	558.01	Fill of hollow including possible cremation	-	2:2
146.00	554.00	Construction and fills of furrows	Medieval	2:5
224.00	243.01	Fills in lower part of palaeochannel	-	2:4
226.00	523.02	Final fill of pit	Late Iron Age	4:8
228.00	261.01	Fill of pit	Roman	3:2
230.00	260.00	Dog burial	-	2:2



233.00	265.00	Second gravel fan	Roman	3:8
234.00	266.00	Colluvium layer	Late Iron Age/early Roman	41:315
237.00	507.01	Fills of tree throws	Roman	5:41
316.00	316.01	Fills of tree holes / root disturbance	Modern	1:1
317.00	506.01	Fills of natural features	Late Bronze Age/early Iron Age	2:78
319.00	518.01	All fills of pits	-	1:4
410.00	413.01	All fills of pit / postholes	-	4:1
411.00	414.01	Single fill of ditches	Late Bronze Age/early Iron Age	1:6
419.00	512.00	Ditch aligned E-W	Early Iron Age	3:5
419.00	512.01	Fills of ditch	Early Iron Age	3:3
503.00	504.00	Colluvium	Late Iron Age/early Roman	25:144
504.00	505.00	Colluvium	Late Iron Age	7:50
			<b>Total</b>	<b>130:761</b>

**Table 18: Undated Pottery by landscape and group**

#### 4.4 Ceramic Building Material

##### 4.4.1 Methodology

For each context, ceramic building material (comprising brick/tile and fired clay), was recorded by fabric type in accordance with the Bedfordshire Ceramic Type Series, and quantified by minimum fragment count and weight. Where possible, the brick and tile was also spotdated.

##### 4.4.2 Quantification

Approximately 443 fragments of brick and tile weighing 12.8kg were recovered, the majority deriving from features in Area 1. Fired clay fragments weighing 1.2kg were collected, mainly associated with features in Area 5.

Area No.	Brick & tile	Fired clay	Total (g)	% Total
1	4420	122	4542	32.4
2	2194	376	2570	18.4
3	3663	174	3837	27.4
4	1901	529	2430	17.4
5	615	-	615	4.4

**Table 19: Quantity of ceramic building material by Area**

##### 4.4.3 Range and variety

###### 4.4.3.1 Brick and tile

Sand tempered peg tiles and brick fragments dating from the late medieval period onwards comprise over ninety percent (by weight) of the identifiable assemblage. Fragments are all fairly small (average fragment weight 27g) and display variable abrasion. No complete examples were recovered: the only measurements taken were the thicknesses of flat tiles, which range between 10-18mm, with an average thickness of 16mm. Attachment of flat roof tiles by both wooden pegs (circular holes) and iron nails (square holes) is attested. No nib tiles were identified. Single examples of a possible curved tile (differing



from a ridge tile in both thickness and curvature) and an unglazed paviour 23mm thick were present.

Nine percent of the assemblage is datable to the Roman period. Eighteen diagnostic pieces (weighing 1.2kg) comprise oxidised sand tempered brick, *tegulae* and a single *imbrex* fragment. Although all Roman fragments are highly abraded, the average fragment weight (70g) is greater than the post-Roman material.

#### 4.4.3.2 Fired clay

The majority of the fired clay assemblage comprises amorphous and abraded fragments in an oxidised calcareous and sand tempered fabric, while fragments in purely sand tempered, and organic fabrics constitute the remainder. Exterior surfaces of some of the former are oxidised, while the core, which in some cases is only partially fired, is reduced to a grey/black colour. None of the pieces appear to retain wattle or lath impressions, although the fragmentary nature of the material (average fragment weight 8g) hinders identification.

The assemblage includes fragments from approximately seven handmade fired clay slabs, weighing 682g. They range in thickness between 18-25mm and have finger-smoothed faces and edges. Four occur in an organic fabric type and the remainder are sand tempered. The majority are associated with Phase 6 late Iron Age/early Roman features.

#### 4.4.4 Provenance

##### 4.4.4.1 Brick and tile

Post-medieval and modern features assigned to Phases 11 and 12 respectively contained 33.9% and 21.6% (by weight) of the brick and tile assemblage. Eighteen percent derived from medieval Phase 10, and small quantities from pre-medieval Phases 5 (0.9%), 6 (4.8%) and 7 (8.0%). Thirteen percent occurred in undated features. Only four groups, (Phases 10, 11 and 12), contained in excess of 1kg of brick and tile. Three groups contained between 500-1000g and the remainder less than 350g. Excluding unphased and modern features, intrusive material comprises over twenty percent of the assemblage (Table 20).

Brick & tile date	Assessment Phase							Total
	5	6	7	10	11	12	0	
Roman		3	9		1	1	4	18
Late / post-medieval	6	27	13	65	72	90	41	314
Post-medieval			1		15	1		17
Modern						33		33
<b>Total</b>	6	30	23	65	88	125	45	<b>382</b>
<b>% Intrusive material by phase</b>	100	90	60.8	-	-	-	-	

**Table 20: Assemblage composition by phase and fragment count**

(excludes unidentified fragments: shaded area indicates contemporary material)



Brick and tile contemporary with medieval and later features is associated principally with the leper hospital boundary ditch AL114 (AG150) (Phase 10) and ditches AL700 (AG702) and AL310 (AG515) (Phase 11). Roman brick and tile derives mainly from ditches associated with the Phase 6 and 7 roads AL207 (AG245) and AL302 (AG307) the north and south of the A507.

Phase	AL	AG	Group Description	Frag no: Wgt (g)
3	201.00	521.01	Pit	1:1
5	301.00	701.01	Primary / use fill of ditch	4:93
	301.00	701.02	Secondary / use-disuse fill of ditch	2:25
6	100.01	103.01	Primary fill of Barrow III	2:52
	100.01	103.02	Secondary fill of Barrow III	4:37
	100.01	104.02	Upper fills of Barrow IV	2:33
	100.01	107.02	Secondary fill of Barrow VII	3:39
	100.03	102.06	Final fills of Barrow II ditch	11:165
	206.00	224.01	Use and use/disuse fills of ditch	2:33
	206.00	224.02	Disuse fills of ditch	1:23
	207.00	246.01	Primary fills of ditch	3:55
	209.00	254.01	Fills of pit group	5:121
	303.00	305.03	Disuse fills of ditch	1:57
	7	108.00	113.01	Fill of ditch
108.00		115.01	Fills of ditch	1:10
205.01		526.02	Disuse fills of ditch	2:244
207.01		245.02	Secondary fills of ditch	11:188
207.01		246.02	Secondary fills of ditch	5:161
207.01		246.03	Tertiary fills of ditch	2:44
213.00		251.01	Fill of linear	2:24
214.00		247.01	Fills of inter-cut pits	7:29
302.01		307.03	Tertiary / disuse fills of ditch	5:230
305.00		517.02	Use/disuse fills of ditch	1:63
305.00		517.03	Disuse fills of ditch	2:4
10	112.00	139.01	Fill of irregular features	42:1130
	114.00	150.01	Primary fill of ditch	5:286
	114.00	150.02	Secondary fill of ditch	7:351
	114.00	150.03	Final fill of ditch	9:513
	114.00	600.01	Fills of well	2:20
	114.00	607.00	Holloway + wheel ruts	1:14
	115.00	534.01	Fills of postholes	1:1
11	105.01	533.03	Final deposit of waterhole	4:134
	116.00	108.01	Fill of holloway	2:31
	117.00	131.00	Layer overlying Barrows II and III	6:162
	120.00	151.01	Primary fill of ditch	1:25
	121.00	536.01	Skeleton and fill of burial pit	2:30
	122.00	705.00	Possible holloway/ associated wheel ruts	1:1
	123.00	528.01	Use phase of postholes / pits	2:34
	123.00	528.02	Disuse fill of postholes/pits	14:48
	123.00	552.01	Fills of ditch	2:35
	215.00	203.02	Use/disuse fills of ditch	3:49
	215.00	203.03	Disuse fills of ditch	2:9
	215.00	205.01	Fills of ditch	10:169



	216.00	210.01	Fill of pit	3:45
	307.00	702.01	Fill of ditch	9:1715
	309.00	700.01	Fills of gullies	4:106
	310.00	515.01	Fill of initial cut of ditch	1:7
	310.00	515.02	Recut and fill of boundary ditch	38:1363
	406.00	513.01	Fill of ditch	2:170
	407.00	403.01	Fills of quarry pits	3:213
	408.00	510.01	Fills of pit	2:15
<b>12</b>	147.00	128.00	Topsoil	7:120
	148.00	130.01	Fills of modern features	1:7
	151.00	154.00	Topsoil	6:142
	248.00	241.00	Subsoil	7:595
	420.00	400.00	Topsoil	72:1503
	507.00	500.00	Topsoil	22:253
	508.00	501.00	Subsoil	4:145
	509.00	550.01	Fills of pit	2:6
<b>0</b>	124.00	100.01	Layers within palaeochannel	28:969
	125.00	120.00	Layer sloping side of palaeochannel	2:9
	127.00	119.01	Tree hole fills	5:47
	128.00	121.01	Fills of features in two pits	1:1
	137.00	545.01	Deposits within grave cut	1:5
	139.00	540.01	Fills of pit	3:2
	218.00	202.00	Natural Strata	3:48
	223.00	242.00	Natural geological stratum	1:10
	226.00	523.02	Final fill of pit	7:59
	229.00	257.00	Construction/fills of furrows/ploughscars	1:30
	234.00	266.00	Colluvium	4:253
	235.00	267.00	Isolated small pit	1:1
	237.00	507.01	Fills of tree throws	1:4
	503.00	504.00	Colluvium	4:200
	504.00	505.00	Colluvium	1:11
			<b>Total</b>	<b>443:12854</b>

**Table 21: Quantity of brick and tile by Phase, Landscape and Group**

#### 4.4.4.2 Fired clay

Early-middle Iron Age and late Iron Age/early Roman features assigned to Phases 5 and 6 respectively contained 43.4% and 36.9% (by weight) of the fired clay assemblage. Small quantities (3.5%) derived from Phases 7 and 11, and 0.5% from Phase 12. Twelve percent occurred in undated features. Only two groups, of early-middle Iron Age date, contained in excess of 200g of fired clay. All other groups contain less than 150g. The material represents secondary deposition of occupation material and cannot be directly associated with the use of the features from which it was collected.

Phase	AL	AG	Group Description	Wgt (g)
<b>5</b>	102.00	541.01	Fills of pit	25
	204.00	525.01	Fill of pit	1
	402.00	409.01	Fills of pits / post holes	236
	402.00	410.01	Fills of pits / post holes	88



	402.00	418.01	Fills of pits	205
<b>6</b>	100.01	101.01	Single fill of Barrow I	7
	100.02	102.04	Cremation cemetery within ditch of Barrow II	45
	100.03	102.06	Final fills of Barrow II ditch	29
	100.06	101.02	Decapitation burial + cremation, satellite of Barrow I	1
	104.00	561.01	Fill of pit	1
	105.00	533.02	Use/disuse fill	6
	207.00	244.00	Roman road	144
	207.00	244.01	Soils sealed beneath road construction	36
	209.00	254.01	Fills of pit	33
	303.00	305.02	Use/disuse fills of ditch	149
	303.00	305.03	Disuse fills of ditch	22
<b>7</b>	207.01	244.02	Disuse of road. Layers lying directly above road surfaces	29
	207.01	246.02	Fills of ditch	16
	214.00	247.01	Fills of intercut pits	1
<b>11</b>	118.00	116.01	Fill of wheel ruts, track	1
	123.00	528.01	Use phase of postholes / pits	4
	215.00	205.01	All fills of ditch	39
	308.00	306.01	Fill of possible quarry pits	2
<b>12</b>	248.00	241.00	Subsoil	6
<b>0</b>	146.00	554.00	Construction and fills of furrows	3
	224.00	243.01	Fills in lower part of palaeochannel	7
	230.00	260.00	Dog burial to the north of A507	2
	234.00	266.00	Colluvium layer	142
	316.00	316.01	Fills of tree holes / root disturbance	1
		<b>Total</b>	<b>1281</b>	

**Table 22: Quantity of fired clay by Phase, Landscape and Group**

## 4.5 Flint

### 4.5.1 Methodology

The flint was recorded by context and by broad term. A rapid scan of the assemblage was undertaken to note the number of complete, edge damaged, patinated, cortical and burnt pieces. Objects have been quantified by number or weight (burnt flint) as appropriate.

### 4.5.2 Quantification of assemblage

Fieldwalking in advance of excavation yielded a small, undiagnostic assemblage of 15 struck pieces. A total of 1067 pieces of flint was recovered from excavated contexts, including test pitting in Area 4. Quantities of struck flint and weight of burnt flint by Assessment Phase, Landscape and Group are shown in Table 23.

Assessment Phase	Assessment Landscape	Assessment Group	Struck qty	Burnt wt (g)
3.00	201.00	521.01	166	1615.80
4.00	300.00	304.01		13.50
4.00	400.00	412.01	2	
4.00	401.00	411.01	7	



4.00	500.00	548.01	1	
5.00	102.00	541.01	154	74.80
5.00	102.00	543.01	7	
5.00	102.00	544.01	3	
5.00	103.00	537.01	14	4.40
5.00	204.00	525.01	9	9.10
5.00	301.00	701.02	2	
5.00	402.00	407.01	5	
5.00	402.00	408.01	2	
5.00	402.00	409.01	2	
5.00	402.00	410.01	3	
5.00	402.00	418.01		139.80
6.00	100.01	102.03	1	
6.00	100.01	107.02	1	
6.00	100.02	102.04	141	258.8
6.00	100.06	101.02		30.80
6.00	104.00	561.01	5	34.00
6.00	209.00	254.01	1	
6.00	302.00	308.03	1	
6.00	303.00	305.02	1	
6.00	403.00	404.01	17	
7.00	107.00	110.05	1	
7.00	108.00	115.01	4	
7.00	302.01	307.03	1	
7.00	306.00	514.01		34.00
7.00	404.00	405.01	11	
7.00	405.00	406.01	4	
10.00	113.00	118.01	1	
10.00	115.00	534.02	2	
10.00	115.00	534.03	1	
11.00	123.00	528.01	7	2.10
11.00	123.00	528.02	15	74.00
11.00	407.00	403.01	14	
11.00	408.00	510.01	1	
12.00	420.00	400.00	289	199.40
12.00	507.00	500.00	4	
12.00	508.00	501.00	2	
.00	140.00	560.01	5	
.00	224.00	243.01	2	
.00	226.00	523.01	2	
.00	226.00	523.02	2	
.00	240.00	559.01	3	
.00	410.00	413.01	12	5.90
.00	414.00	420.01	12	
.00	503.00	504.00	6	
			946	2375.00

**Table 23: Struck and burnt flint by Assessment Phase, Landscape and Group**



### 4.5.3 Range, variety, provenance and date

The struck flint is mostly hard hammer struck, comprising frequently large, often irregular pieces. About half of the assemblage is patinated, or exhibits cloudy surfaces. Unpatinated flint varies from light to dark grey in colour with occasional 'cherty' flint. There is a high incidence of edge damage.

A total of 24 cores, or core fragments were present and along with other knapping debris, in the form of unmodified flakes and shatter pieces, indicate that flint-working was occurring at the site. Only 16 blades were present (1.7% of the struck assemblage), the vast majority of the assemblage (89.9%) comprising flake debitage. Retouched and utilised flakes and blades were present, as well as more formal tools.

Broad term	Quantity	Broad Term	Quantity
ADZF	1	DENT	5
ARWF	1	FLAK	854
AWL	1	MCRL	1
AXES	2	NOTF	2
BLAD	16	PECR	2
CORE	24	RETF	14
CUTB	3	SCPF	14
CUTF	6		

**Table 24: Flint assemblage by Broad Term**

#### 4.5.3.1 Assessment Phase 3

A total of 166 pieces of struck flint was recovered from deposits phased to the early Bronze Age. All derived from the fills of one pit (L201, AG521.01) situated in Area 2. The assemblage in the main comprised debitage, a total of 5 core fragments (including one nodule testing core) and 155 flakes. The flakes were hard hammer struck, frequently retaining areas of cortex. Two flakes displayed areas of polish, indicating derivation from polished flint axe. Both of these flakes were of similar coloured flint and were heat affected, suggesting they may have derived from the same axe. Heat exposure was also noted on three of the core fragments and 20 debitage flakes. A damaged oblique arrowhead and three denticulated flakes represented more formal tools. There was a mix of patinated and unpatinated flint, the latter more numerous. The assemblage as a whole suggests a late Neolithic – early Bronze Age date.

#### 4.5.3.2 Assessment Phase 4

A limited quantity of flint, totalling 10 pieces, was recovered from deposits assigned to the late Bronze Age. These comprised mainly debitage flakes, with only one possible microlith found in association with two flakes (L401 AG411.01).

#### 4.5.3.3 Assessment Phase 5

A total of 201 struck flints were recovered from deposits phased to the early to middle Iron Age. The majority of this assemblage comprised debitage flakes (187), with only 7 blades or utilised blades identified. Tools comprised a single





notched flake and five scrapers. The latter tools tended to be fairly crudely made, most retaining areas of cortex, and on the large size, four out of five exceeding 50mm in length. A higher incidence of patination was noted on this assemblage.

L102 AG541.01 produced the largest assemblage (154 pieces) all deriving from the fills of a single pit. The assemblage consisted of a quantity of debitage including flakes (143) and blades (7). The blades were all incomplete and exhibited edge damage. Tools were restricted to three scrapers. Although the condition of the blades is suggestive of residuality, the composition and physical attributes of the remaining assemblage should be considered in light of the suggestion of continuing flint usage into the Iron Age (Young and Humphrey 1999).

#### **4.5.3.4 Assessment Phase 6**

A total of 168 struck flints were allocated to the late Iron Age-early Roman period. These are all likely to be residual within these contexts. High levels of patination and secondary damage were noted. One boldly denticulated flake, with saw-like concave cutting edge, and one possible piercer were noted. The remaining assemblage comprised debitage with an overwhelming majority of flakes.

#### **4.5.3.5 Assessment Phase 7**

The assemblage from Roman deposits was limited both in quantity (21 struck pieces) and range, all comprising debitage. Unsurprisingly a high incidence of secondary damage was noted.

#### **4.5.3.6 Assessment Phase 10**

A total of four debitage flakes derived from deposits assigned to the medieval period. All exhibit patination and are residual.

#### **4.5.3.7 Assessment Phase 11**

Post-medieval deposits yielded 37 struck flint pieces, the majority flake debitage, with single examples of a retouched flake and a notched flake. Again, secondary damage was evident.

#### **4.5.3.8 Assessment Phase 12**

Modern deposits yielded 295 pieces of struck flint, the majority comprising debitage including core fragments (15), blades and utilised blades (9), flakes and utilised flakes (248). Tools included scrapers, a piercer and retouched flakes, but also the first instance of an awl. The bulk of the assemblage derived from topsoil and subsoil deposits and displayed a high level of plough damage.

#### **4.5.3.9 Undated**

A total of 44 struck flints were identified in undated deposits, 90% of which comprised debitage flakes. The only new tool type present was a possible adze rough-out, the completion of which may have been abandoned due to an imperfection in the nodule.



## 4.6 Registered and bulk non-ceramic artefacts

### 4.6.1 Methodology

Each object has been assigned a broad term and functional category. Provisional narrow terms and short descriptions have been entered into the site database. Objects have been quantified by number and/or weight and, where possible, date ranges have been allocated by reference to standard typological works. As per IFA standards (IFA 2000) all ironwork and selected non-ferrous objects were x-rayed by Lincolnshire Archives Conservation Lab. The x-ray plate numbers have been entered into the database. The coins were identified and assessed by Peter Guest.

### 4.6.2 Quantification

A total of 393 artefacts, including coins and jettons, were recovered. Table 25 quantifies the artefacts by material type.

Material	Quantity	%	Material	Quantity	%
Silver	7	1.78%	Lead alloy	10	2.54%
Gold	2	0.51%	Plaster	1	0.25%
Bone	3	0.76%	Shell	1	0.25%
Copper alloy	101	25.70%	Slag	175.2 g	
Ceramic	3	0.76%	Stone (worked)	4	1.02%
Iron	232	59.03%	Stone (burnt)	6906 g	
Glass	28	7.12%	Wood	1	0.25%

**Table 25: Quantification of registered and non-ceramic artefacts by material**

### 4.6.3 Range, variety, provenance and date

The range of material types is presented in Table 25. The variety of object types is presented by functional category and broad term in Table 26.

Functional category	Broad Term	Quantity	Functional category	Broad Term	Quantity
Building materials	Stake	1	Pastimes	Gaming piece	2
Building materials	Wall plaster	1	Animal trappings & transport	Rumbler bell	1
Building materials	Window glass	3	Animal trappings & transport	Buckle	2
Fastenings & Fittings	Bolt	2	Animal trappings & transport	Horse shoe	1
Fastenings & Fittings	Door stud	1	Animal trappings & transport	Shoeing nail	17
Fastenings & Fittings	Hinge	4	Animal trappings & transport	Snaffle	2
Fastenings & Fittings	Lock	1	Animal trappings & transport	Spur fitting	2
Fastenings & Fittings	Nail	101	Agriculture & Subsistence	Goad	2
Fastenings & Fittings	Staple	3	Agriculture & Subsistence	Quern	2
Fastenings & Fittings	Tack	3	Agriculture & Subsistence	Rake	1
Fastenings & Fittings	Timber dog	1	Weaponry	Bullet	1
Fastenings & Fittings	Wall hook	1	Weaponry	Quillon	1
Household	Burnt stone	6906 g	Weaponry	Shot	2
Household	Bucket	1	Personal adornment	Amulet	1
Household	Ewer	1	Personal adornment	Badge	1
Household	vessel	10	Personal adornment	Buckle	2
Household	wine glass	1	Personal adornment	Bead	4



Craft & Industry	Awl	1	Personal adornment	Brooch	12
Craft & Industry	Chisel	1	Personal adornment	Button	3
Craft & Industry	Cinder	0.80 g	Personal adornment	Chape	1
Craft & Industry	Cloth seal	1	Personal adornment	Finger ring	1
Craft & Industry	Loom weight	1	Personal adornment	Hob nail	39
Craft & Industry	Needle	1	Personal adornment	Pendant	1
Craft & Industry	Off-cut	2	Personal adornment	Pin beater	1
Craft & Industry	Pin beater	1	Personal adornment	Strap mount	1
Craft & Industry	Slag	174.4 g	Toiletry	Tweezers	1
Craft & Industry	Spindle whorl	1	Multipurpose	Chain	1
Bladed tools & sharpeners	Scissor	1	Multipurpose	Ferrule	1
Commerce	Coin	67	Multipurpose	Ring	3
Measurement	Jetton	2	Uncertain	Fragments	54
Measurement	Weight	1	Uncertain	Unidentified	11
Written communication	Stylus	3			

**Table 26: Quantification of registered and non-ceramic artefacts by object type**

A scan of typologically datable artefacts indicates a date range spanning the late Bronze/early Iron Age to the post-medieval/modern periods. A single copper alloy dress pin has been provisionally identified as a Heathery Burn nail headed type, thought to have been in use from the late Bronze Age and into the early Iron Age. A gouge type pin beater and a small triangular loom weight can be dated to the Iron Age, but as both objects continue in use throughout this period, closer dating is not possible. A pierced canine pendant or amulet may also belong to this period, although Roman examples are known.

The late Iron Age to early Roman period is better represented. The assemblage includes seven Iron Age coins comprising a tinned bronze ‘potin’, four copper alloy units and two rare gold issues (a quarter-stater of Cunobelin and a stater of Tasciovanus). Two 1<sup>st</sup> century Roman coins (Nero and Domitian) were also recovered. Seven brooches, dating to the between the late 1<sup>st</sup> century BC to the late 1<sup>st</sup> century AD were also found. A pair of tweezers, two quern stones, as well as hob nails, a needle and three possible iron styli, can be generally dated to the Roman period. The second and third centuries are represented by three brooches, a bead and seven coins. The majority of the coins, however date to the 4<sup>th</sup> century (40 examples).

A range of medieval and early post-medieval finds were identified and comprise items related to dress (buckles, buttons and a finger ring), the household (cast ewer foot and jettons), weaponry (a chape, a quillon and lead shot) and an assemblage of shoeing nails (both medieval and later forms). Five coins spanning the 12<sup>th</sup> to 13<sup>th</sup>/14<sup>th</sup> centuries were also recovered.

The assemblage from each Assessment Phase is considered below in relation to residual and intrusive components. The shaded entries on the accompanying table indicate intrusive finds.



#### 4.6.3.1 Assessment Phase 3

Deposits dated to the late Neolithic/early Bronze Age produced a limited assemblage comprising 6704g of unworked, burnt stone. The burnt stone derived from the same pit (AL201, AG521.01) which produced an assemblage of 166 pieces of struck flint (see Section 4.5.3).

#### 4.6.3.2 Assessment Phase 5:

The small assemblage deriving from early to middle Iron Age deposits provides limited evidence for occupation, in the form of weaving equipment and a small quantity of ferrous working by-products and also items of dress. The bulk of this assemblage derived from pit fills and deposition patterns in relation to other finds should be examined in light of Hill's studies (1995). Intrusive activity is indicated by the presence of post-medieval to modern glass splinters within the fill of a pit (AL 204 AG 525.01). These splinters were recovered from a soil sample and the size of the remains suggests they could have been introduced into the deposit by worm activity.

AL no.	AG no.	Narrow Term	Material	Date range	Quantity
102.00	541.01	gouge type pin beater	Bone	IA	1
204.00	525.01	burnt stone (hearth?)	Stone		90 g
204.00	525.01	vessel glass splinters	Glass	p-med/modern?	1
301.00	701.02	pierced canine tooth	Bone	IA - Roman	1
402.00	408.02	Triangular loom weight	Ceramic	IA	1
402.00	408.03	ferrous slag	Slag		148 g
402.00	410.01	dress pin(?)	Copper alloy	LBA/early IA	1

**Table 27: Phase 5 registered and non-ceramic artefact assemblage**

#### 4.6.3.3 Assessment Phase 6

There is a marked increase in the quantity of metalwork recovered from deposits phased to the late Iron Age to early Roman periods, but there is also an increase in the incidence of intrusive objects. Intrusive objects were recovered from L100.01 (Barrow III fills), L100.03, the final fills of Barrow II, pits L104 and L209, the fills of southern roadside ditch L207, enclosure ditch L206 and ditch terminal L210. Intrusive finds included coinage of 3<sup>rd</sup>, 4<sup>th</sup> and 13<sup>th</sup> century date, five shoeing nails of 13<sup>th</sup> century and later date, a lock plate of 16<sup>th</sup> to 17<sup>th</sup> century and a sherd of window glass. The latter was recovered from a soil sample and may have been introduced through worm action. The shoeing nails and lock plate may suggest disturbance by later ploughing.

The assemblage is suggestive of some degree of occupation activity during this period, for example three brooches, a gaming piece and building fasteners. The largest assemblages of finds however were mainly recovered from the fills of the barrow ditch (L100.03), roadway L207 and boundary ditch L303, and not directly associated with any evidence for settlement structures. The assemblage of finds from boundary ditch L303 (tertiary fills AG305.03), in particular the presence of two styli, a gaming piece, a brooch, and 19 hobnails, along with two Iron Age coins, hints at occupation in the vicinity. Finds from construction layers of road L207 suggest that construction occurred sometime after the mid



1<sup>st</sup> century AD. Few finds, and none closely datable, were found associated with the parallel roadway L302.

AL no	AG no.	Narrow Term	Material	Date range	Quantity
100.01	102.03	strip fragment	Iron		1
100.01	103.02	Coin Gloria Exercitus	Copper alloy	0335-0340	1
100.01	103.02	strip fragment	Iron		1
100.01	107.02	nail shank	Iron		1
100.02	102.04	small awl(?)	Iron		1
100.02	102.04	fragment	Glass		3
100.02	102.04	strip fragment	Iron		1
100.02	102.04	vessel fragments?	Glass		2
100.02	102.04	vessel? Fragment	Glass		1
100.02	102.04	Sheet fragment	Iron		1
100.02	102.04	Burnt chalk?	Stone		1
100.03	102.05	Cast Potin	Tin bronze	L.2 <sup>nd</sup> – E.1 <sup>st</sup> BC	1
100.03	102.05	ANDO stater	Gold	Late 1 <sup>st</sup> c BC	1
100.03	102.06	Nauheim variant/derivative	Copper alloy	late IA to mid 1 <sup>st</sup> AD	1
100.03	102.06	Urbs Roma AE3	Copper alloy	0330-0340	1
100.03	102.06	Genio Pop Roma AE2	Copper alloy	0307-0318	1
100.03	102.06	Gloria Novi Saeculi AE3	Copper alloy	0367-0375	1
100.03	102.06	Long cross cut half penny	Silver	13 <sup>th</sup>	1
100.03	102.06	plate-lock	Iron	16 <sup>th</sup> -17 <sup>th</sup>	1
100.03	102.06	flat headed timber nail	Iron		1
100.03	102.06	nail shank	Iron		1
100.03	102.06	bone working waste	Bone		1
100.03	102.06	rotary quern stone fragment	Stone		1
100.03	102.06	annular ring	Iron		1
100.03	102.06	shoeing nail	Iron	mid-11 <sup>th</sup> to 13 <sup>th</sup>	1
100.03	102.06	Flat round headed tack	Iron		1
100.03	102.06	arm of timber dog?	Iron		1
100.03	102.06	stud head/musket ball/lump?	Lead alloy		1
100.06	101.02	nail?	Iron		1
100.06	101.02	Fragment	Glass	Uncertain	1
104.00	561.01	window glass fragment	Glass	p-med to modern	1
105.00	533.02	rotary quern	Stone	Roman	1
206.00	224.02	Domitian AE2	Copper alloy	0081-0096	1
206.00	224.02	Denarius (plated?)	Silver	Early 3rd	1
207.00	244.00	Bagendon type brooch	Copper alloy	1 <sup>st</sup> half of 1 <sup>st</sup> AD	1
207.00	244.00	Camulodumum Type VII	Copper alloy	mid 1 <sup>st</sup> century	1
207.00	244.00	Colchester brooch	Copper alloy	1 <sup>st</sup> half of 1 <sup>st</sup> AD	1
207.00	244.00	bar fragment	Iron		1
207.00	244.00	sheet fragment	Copper alloy		1
207.00	244.00	Tweezers	Copper alloy	Roman	1
207.00	244.01	oval chain link	Iron		1
207.00	246.01	flat headed nail	Iron		3
207.00	246.01	nail shank	Iron		2
207.00	246.01	shoeing nail	Iron	later medieval	2
209.00	254.01	Strip fragment	Iron		1
209.00	254.01	flat headed nail	Iron		1



209.00	254.01	Nail	Iron		1
209.00	254.01	Fragment	glass	Uncertain	1
209.00	254.01	off-set flat headed nail	Iron		1
209.00	254.01	shoeing nail	Iron	later medieval	1
209.00	254.01	ferrous slag	Slag		25 g
209.00	254.01	flat oval head	Iron		1
210.00	255.01	Flat headed nail	Iron		3
210.00	255.01	nail shank	Iron		1
210.00	255.01	shoeing nail	Iron	13 <sup>m</sup> -14 <sup>m</sup>	1
302.00	308.02	Fragment	Glass	Modern?	1
302.00	308.03	flat headed nail	Iron		1
302.00	311.00	Uncertain -foot from grid iron/handle?	Iron		1
303.00	305.02	One-piece wire bow brooch	Copper alloy	1 <sup>st</sup> AD	1
303.00	305.03	Unit	Copper alloy	Early 1 <sup>st</sup> AD	1
303.00	305.03	Cunobeline quarter stater	Gold	Early 1 <sup>st</sup> AD	
303.00	305.03	gaming piece	Ceramic	late IA/RB	1
303.00	305.03	strap hinge fragment?	Iron		1
303.00	305.03	Hobnails	Iron	Roman	19
303.00	305.03	stylus(?)	Iron	Roman	1
303.00	305.03	stylus	Iron	Roman	1

**Table 28: Phase 6 registered and non-ceramic artefact assemblage**

#### 4.6.3.4 Assessment Phase 7

Deposits phased to the Roman period yielded one of the largest assemblages, 149 items. However, 34.9% of this assemblage comprised nails. Intrusive activity was noted in L108, a shoeing nail, L111 (?modern window glass) and to a greater extent in road L 207.01. The fills of the southern roadside ditch (AG246.02 and 246.03) of L207.01 in particular produced an assemblage of later medieval artefacts, with only two possible intrusive items in the northern roadside ditch (AG245.03). Five categories of landscape groups produced non-ceramic artefacts – ‘short linears’ (L107; 213 and 304); pits (L109, 214 and 306); boundary ditches (L108, 205.01, 305 and 404); roads (L207.01 and L302.01), and a burial (L111).

The assemblage from the ‘short linear’ ditches, two of which are adjacent to roadways, are of little assistance in helping to either date or define these features. Only one pit group, L214 yielded items which could be typologically dated; a Manning type 4 stylus (1985, 85-7) and the remains of a brooch coil. Boundary ditches L205.01 and L305 produced only nails, while L108 yielded, in addition to the intrusive shoeing nail, a two-link snaffle bit the form of which changed little between the late Iron Age and medieval periods. The fills of the roadside ditches, L207.01 and L302.01, were marginally more informative. Although the southern ditch of L207.01 displayed a marked incidence of intrusive finds, the northern ditch showed little in the way of intrusive activity, yielding two ox goads, hobnails and a 3<sup>rd</sup> to early 4<sup>th</sup> century brooch. The datable assemblage from L302.01 yielded a Colchester B brooch, a triangular headed nail, hob nails and a ceramic gaming piece. None of these items would be out of place in the earlier Roman period, but the assemblage of coins



suggests that this roadway may have continued in use into the later Roman period (see below). L111 comprised an isolated extended inhumation. The fill of the grave yielded four small beads and the fragmentary remains of a possible toilet spoon. The beads suggest a date of 3<sup>rd</sup> century or later for this burial.

AL no	AG no	Narrow Term	Material	Date range	Quantity
107.00	110.05	Sheet fragment	Copper alloy		2
107.00	110.05	rake prong(?)	Iron		1
108.00	115.01	Flavius Victor half siquila	Silver	0387-0388	1
108.00	115.01	nail shank	Iron		1
108.00	115.01	shoeing nail	Iron	mid 11 <sup>th</sup> – mid 13 <sup>th</sup>	1
108.00	115.01	Snaffle two link bit & ring cheek pieces	Iron	late IA - medieval	1
108.00	115.01	wire or plain bracelet fragment	Copper alloy		1
109.00	530.01	unfinished object?	Stone		1
111.00	706.01	Bead	Glass	3 <sup>rd</sup> century or later	1
111.00	706.01	Bead	Glass	Late Roman	1
111.00	706.01	Bead	Glass	Late Roman	1
111.00	706.01	Bead	Glass	Late Roman	1
111.00	706.01	Window	Glass	?modern	1
111.00	706.01	sheet fragment	Copper alloy		1
205.01	526.02	flat headed nail	Iron		1
207.01	244.02	strip fragment	Iron		1
207.01	244.02	drop hinge?	Iron		1
207.01	245.02	strip fragment	Iron		1
207.01	245.02	Fel temp Reparatio AE3 copy	Copper alloy	0353-0360	1
207.01	245.02	Gallienus Radiate	Copper alloy	0260-0268	1
207.01	245.02	Securitas Republicae AE3	Copper alloy	0364-0378	1
207.01	245.02	Uncertain Radiate	Copper alloy	0260-0294	1
207.01	245.02	Beata Tranquillitas AE3	Copper alloy	0318-0324	1
207.01	245.02	Gloria Romanorum AE3	Copper alloy	0364-0378	1
207.01	245.02	Fel temp Reparatio AE3 copy	Copper alloy	0353-0360	1
207.01	245.02	Uncertain AE3/4	Copper alloy	4th	1
207.01	245.02	hob nail	Iron	Roman	3
207.01	245.02	nail shank only	Iron		1
207.01	245.03	Virtus Exercit AE3	Copper alloy	0318-0324	1
207.01	245.03	Magnentius AE3	Copper alloy	0350-0353	1
207.01	245.03	Uncertain coin	Copper alloy	18th??	1
207.01	245.03	Fel temp Reparatio AE3 copy	Copper alloy	0353-0340	1
207.01	245.03	Uncertain AR4?	Silver	medieval?	1
207.01	245.03	Gloria Exercitus AE3	Copper alloy	0335-0340	1
207.01	245.03	House of Valentinian AE3	Copper alloy	0364-0378	1
207.01	245.03	Gloria Novi Saeculi AE3	Copper alloy	0367-0375	1
207.01	245.03	Gloria Exercitus AE3	Copper alloy	0335-0340	1
207.01	245.03	Victoria Augg(g) AE3	Copper alloy	0388-0402	1
207.01	245.03	Bolt domed head	Iron		2
207.01	245.03	Glass centre-boss brooch	Copper alloy	3 <sup>rd</sup> – early 4 <sup>th</sup>	1
207.01	245.03	short cylindrical collar	Iron		1
207.01	245.03	bar fragment	Iron		1
207.01	245.03	sheet fragment	Lead		1
207.01	245.03	strip fragments	Iron		3



207.01	245.03	ox goad	Iron	Roman - med	1
207.01	245.03	ox goad	Iron	Roman - med	1
207.01	245.03	strap hinge fragment?	Iron		1
207.01	245.03	Hobnail	Iron	Roman	2
207.01	245.03	flat headed nail	Iron		7
207.01	245.03	flat headed nail	Iron		10
207.01	245.03	Flat, narrow rectangular head	Iron		1
207.01	245.03	nail shanks	Iron		1
207.01	245.03	nail shanks only	Iron		5
207.01	245.03	single link from snaffle bit	Iron		1
207.01	245.03	strap mount or buckle plate??	Copper alloy		1
207.01	245.03	flat narrow rectangular	Iron		1
207.01	246.02	hob nail	Iron	Roman	1
207.01	246.02	flat headed nail	Iron		1
207.01	246.02	nail shank	Iron		4
207.01	246.02	Needle	Copper alloy	3 <sup>rd</sup> -4 <sup>th</sup>	1
207.01	246.02	dagger quillon	Copper alloy	15 <sup>th</sup> - 16 <sup>th</sup>	1
207.01	246.03	harness buckle	Iron	Med- p-med	1
207.01	246.03	solid cast button with wire loop	Copper alloy	13 <sup>th</sup> - p-med	1
207.01	246.03	Two-disc cloth seal	Lead	late 14 <sup>th</sup> - 19 <sup>th</sup>	1
207.01	246.03	perforated strap fragment	Iron		1
207.01	246.03	hob nail	Iron	Roman	3
207.01	246.03	flat headed nail	Iron		1
207.01	246.03	nail shank	Iron		2
207.01	246.03	annular ring	Iron		1
207.01	246.03	shoeing nail	Iron	later med- p-med	1
207.01	246.03	shoeing nail(?)	Iron	later med	1
213.00	251.01	strip fragment	Iron		1
214.00	247.01	Awl?	Iron		1
214.00	247.01	coil from brooch	Copper alloy	late IA - RB	1
214.00	247.01	flat headed nail	Iron		1
214.00	247.01	Stylus	Iron	Roman	1
302.01	307.03	Uncertain AE3	Copper alloy	Roman?	1
302.01	307.03	Constantinopolis AE3	Copper alloy	0330-0340	1
302.01	307.03	Gloria Exercitus AE3	Copper alloy	0335-0340	1
302.01	307.03	Victoria Augg(g) AE4	Copper alloy	0388-0402	1
302.01	307.03	Victoria Augg(g) AE4	Copper alloy	0388-0402	1
302.01	307.03	Cylindrical fragment	Copper alloy		1
302.01	307.03	sheet fragment	Copper alloy		1
302.01	307.03	window or vessel fragment	Glass		1
302.01	307.03	strap hinge fragment?	Iron		1
302.01	307.03	hobnail	Iron	Roman	1
302.01	307.03	Hobnail	Iron	Roman	1
302.01	307.03	Hobnail	Iron	Roman	2
302.01	307.03	flat headed nail	Iron		1
302.01	307.03	flat headed nail	Iron		2
302.01	307.03	flat headed nails	Iron		3
302.01	307.03	nail shank	Iron		1
302.01	307.03	Triangular headed nail	Iron	Roman	1
302.01	307.03	Indeterminate vessel fragment	Glass		1





302.01	309.04	Colchester B brooch	Copper alloy	0050-0070AD	1
302.01	309.04	gaming piece	Ceramic	Roman	1
302.01	309.04	pan weight??	Lead		1
304.00	312.01	Indeterminate vessel fragment	Glass		1
305.00	517.03	nail	Iron		1
305.00	517.04	flat headed nail	Iron		1
306.00	514.01	sheet fragments	Iron		3
306.00	514.01	flat headed nail	Iron		1
306.00	514.01	nail shank	Iron		1
306.00	514.01	nail shank fragment	Iron		1
404.00	405.01	hob nail	Iron	Roman	2

**Table 29: Phase 7 registered and non-ceramic artefact assemblage**

#### 4.6.3.5 Assessment Phase 10

Deposits phased to the medieval period yielded little that was typologically datable, beyond the shoeing nails and horseshoe, nor does the assemblage contribute to characterising the nature of the deposits.

AL no	AG no	Narrow Term	Material	Date range	Quantity
112.00	139.01	flat headed nail	Iron		1
112.00	139.01	flat headed timber nail	Iron		1
113.00	118.03	shoeing nail	Iron	11 <sup>th</sup> -13 <sup>th</sup>	1
114.00	150.01	horseshoe fragment	Iron	1350+	1
114.00	150.02	nail or spike?	Iron		1
114.00	150.02	sheet metal vessel - rim fragment	Copper alloy		1
114.00	150.03	tapering strip	Iron		1
114.00	150.03	curved strip/ring or nail?	Iron		1
114.00	605.01	Buck shot	Lead	modern	1
114.00	605.01	Fragment	Glass	p-med – modern?	1
115.00	534.03	vessel fragment	Glass	Modern	1

**Table 30: Phase 10 registered and non-ceramic artefact assemblage**

#### 4.6.3.6 Assessment Phase 11

The deposits dated to the post-medieval period have both residual (Roman coins, a possible Roman glass vessel and medieval shoeing nails) and intrusive (buck shot) items. The rest of the assemblage is not particularly diagnostic of either date or activity type.

AL no	AG no	Narrow Term	Material	Date range	Quantity
117.00	131.00	shoeing nail	Iron	mid 11 <sup>th</sup> - 13 <sup>th</sup>	1
118.00	116.01	Gloria Romanorum AE3	Copper alloy	0364-0378	1
120.00	151.02	Shoeing nail	Iron	early medieval	1
123.00	528.01	buck shot	Lead	modern	1
123.00	528.02	burnt stone	Stone		49 g
123.00	552.01	perforated strip fragment	Iron		1
123.00	552.01	strip fragment	Iron		1
123.00	552.01	flat headed nail	Iron		1
123.00	552.01	rectangular staple	Iron		1



215.00	203.02	strip fragment	Iron		1
215.00	203.02	Flat headed nail	Iron		1
215.00	205.01	nail	Iron		1
215.00	205.01	Vessel rim fragment	Glass	Roman(?)	1
217.00	223.00	Gloria Novi Saeculi AE3	Copper alloy	0367-0375	1
217.00	223.00	military badge/crest?	Copper alloy	p-med-modern?	1
307.00	702.01	nail	Iron		1
308.00	306.01	shoeing nail	Iron	15 <sup>th</sup> -16 <sup>th</sup>	1
310.00	515.02	burnt stone	Stone		63 g
310.00	515.02	cinder	Slag		0.8 g
310.00	515.02	sheet fragment	Iron		1
310.00	515.02	sheet fragments	Iron		7
310.00	515.02	flat headed nail	Iron		1
310.00	515.02	Scissors	Iron	med-p-med	1
406.00	513.01	kick from wine bottle	Glass	1640+	1

**Table 31: Phase 11 registered and non-ceramic artefact assemblage**

#### 4.6.3.7 Assessment Phase 12

Modern deposits, unsurprisingly, contained in the main residual objects including Roman coinage, a hobnail and two 2<sup>nd</sup> century brooches. Finds of late medieval date were the most numerous class of residual find, with a slight concentration on horse-related items (shoeing nails, rumbler bell, spur fittings). As this assemblage derived almost entirely from topsoil and subsoil deposits, it has limited potential to address the aims of the project beyond providing additional evidence for the already identified phases of activity.

AL no	AG no	Narrow Term	Material	Date range	Quantity
147.00	128.00	Suspender button	Copper alloy	p-med-modern	1
147.00	128.00	rumbler bell	Copper alloy	13 <sup>th</sup> +	1
147.00	128.00	cast vessel	Copper alloy	p-med	1
147.00	128.00	wine bottle(?)	Glass	1640+	1
147.00	128.00	wall hook	Iron	14th onwards	1
148.00	130.01	window glass fragment	Glass	modern	1
150.00	153.01	tip of stake	Wood	modern	1
244.00	201.00	Urbs Roma AE3	Copper alloy	0330-0340	1
244.00	201.00	Hadrian AE2	Copper alloy	0117-0138	1
244.00	201.00	Securitas Republicae AE3	Copper alloy	0364-0378	1
244.00	201.00	Hanns Krauwinkel rose orb	Copper alloy	17th	1
244.00	201.00	short cross –cut farthing	Silver	1180-1247	1
244.00	201.00	long cross cut farthing	Silver	13th	1
244.00	201.00	Gratian? AE3	Copper alloy	0367-0378	1
244.00	201.00	Gloria Exercitus AE3	Copper alloy	0335-0340	1
244.00	201.00	Sol invicto Comiti AE2	Copper alloy	0307-0318	1
244.00	201.00	Radiate	Copper alloy	0260-0294	1
244.00	201.00	Uncertain AE3	Copper alloy	late 3rd-4th	1
244.00	201.00	Victoria dd nn Augg qnn AE4	Copper alloy	0347-0348	1
244.00	201.00	Victory I AE4	Copper alloy	0388-0402	1
244.00	201.00	Fel temp Reparatio AE4 copy	Copper alloy	0353-0360	1
244.00	201.00	Cross & crosslets half penny	Silver	12th	1



244.00	201.00	Hanns Krauwinkel rose orb	Copper alloy	17th	1
244.00	201.00	Cu A unit	Copper alloy	late 1st c BC	1
244.00	201.00	Cu A unit	Copper alloy	early 1st AD	1
244.00	201.00	Bow and fantail brooch	Copper alloy	late 1 <sup>st</sup> -2 <sup>nd</sup>	1
244.00	201.00	Plate Brooch	Copper alloy	2 <sup>nd</sup>	1
244.00	201.00	cast ewer(?) foot	Copper alloy	L 13 <sup>th</sup> /14 <sup>th</sup> - e p-med	1
244.00	201.00	woven wire finger ring(?)	Copper alloy	14 <sup>th</sup> -16 <sup>th</sup>	1
244.00	201.00	Hanns Krauwinkel Jetton	Copper alloy	16 <sup>th</sup> -17 <sup>th</sup>	1
244.00	201.00	strip off cut	Copper alloy		1
244.00	201.00	annular ring	Copper alloy		1
244.00	201.00	spindle whorl	Lead	medieval	1
244.00	201.00	cast object	Copper alloy	p-med?	1
244.00	201.00	ewer/cauldron foot	Copper alloy	L13 <sup>th</sup> /14 <sup>th</sup> - e p-med	1
246.00	221.00	Gloria Novi Saeculi AE3	Copper alloy	0367-0375	1
246.00	221.00	Marcus Aurelius sestertius	Copper alloy	0161-0180	1
246.00	221.00	Sterling half penny	Silver	13th-14th	1
248.00	241.00	Divo Claudio radiate	Copper alloy	0270	1
248.00	241.00	Securitas Republicae AE3	Copper alloy	0364-0378	1
248.00	241.00	Fel temp Reparatio AE3 copy	Copper alloy	0353-0360	1
248.00	241.00	bucket mount	Iron	Roman to p-med	1
248.00	241.00	strip fragment	Iron		1
248.00	241.00	hobnail	Iron	Roman	1
248.00	241.00	flat headed nail	Iron		2
248.00	241.00	nail	Iron		1
248.00	241.00	shanks only	Iron		3
248.00	241.00	shoeing nail	Iron	mid-14 <sup>th</sup> -15 <sup>th</sup>	1
248.00	241.00	shoeing nail	Iron	late med-p-med	1
248.00	241.00	Hooked spur fitting	Iron	mid-13 <sup>th</sup> to 15 <sup>th</sup>	1
248.00	241.00	spur attachment	Iron	13 <sup>th</sup> -14 <sup>th</sup>	1
248.00	241.00	U-shaped staple	Iron		1
248.00	241.00	perforated strip (shoe iron??)	Iron		1
248.00	241.00	strip fragment	Iron		1
251.00	226.00	Securitas Republicae AE3	Copper alloy	0364-0378	1
249.00	256.00	flat headed nail	Iron		1
251.00	226.00	musket ball	Lead	P-med	1
420.00	400.00	Flat headed nail	Iron		1
420.00	400.00	shoeing nail	Iron	13 <sup>th</sup> -14 <sup>th</sup>	1
420.00	400.00	Vessel body sherd	Glass	late med - p-med	1
507.00	500.00	sheet fragment	Lead		1
507.00	500.00	wall plaster - white wash	Plaster		1
508.00	501.00	bow brooch fragment	Copper alloy	Late IA – early RB	1
508.00	501.00	Livery or blazer button	Copper alloy	p-med	1

**Table 32: Phase 12 registered and non-ceramic artefact assemblage**

#### 4.6.3.8 Undated

The assemblages from four landscape groups may assist in dating. Deposits in L124, although yielding some Roman coins, produced a preponderance of later medieval items, suggesting that the final fills of the palaeochannel may have occurred in the late medieval or early post-medieval period. The assemblage



from L231 was predominantly of 1<sup>st</sup> century date, but as this collection resulted from metal detecting it has low potential to assist in achieving the aims of the project, beyond providing additional evidence for previously identified phases of activity. Deposits in both L234 and L236 produced two hobnails, suggestive of a date within the Roman period for the formation of these fills. The assemblages from L225, L233, L316 and L419 are not diagnostic of a specific period and therefore cannot assist in assigning a date range to these deposits. L223 produced a single late medieval shoeing nail, but as the occurrence of shoeing nails in other deposits has been intrusive, it is perhaps unwise to attribute too much weight to its presence. Research for parallels for the inclusion of perforated cockle shells within burials, such as (AG105.02, L100.05), has moderate potential to assist in phasing this inhumation.

AL no	AG no	Narrow Term	Material	Date range	Quantity
100.04	102.07	Fragment	Glass	Uncertain	1
100.05	105.02	cockle shell pendant	Shell		1
124.00	100.01	AE3 Gloria Exercitus (1 std)	Copper alloy	0335-0340	1
124.00	100.01	Nero As	Copper alloy	0054-68AD	1
124.00	100.01	Constantinopolis AE3	Copper alloy	0330-0340	1
124.00	100.01	oval buckle	Copper alloy	late 12 <sup>th</sup> - late 14 <sup>th</sup>	1
124.00	100.01	Rectangular buckle	Iron	late med - p-med	1
124.00	100.01	Socketed tapering chape	Copper alloy	med	1
124.00	100.01	door stud	Iron		1
124.00	100.01	flat headed timber nail	Iron		1
124.00	100.01	shoeing nail	Iron	13 <sup>th</sup> - mid-14 <sup>th</sup>	1
124.00	100.01	clip or staple	Copper alloy		1
124.00	100.01	cast decorative frame or miscast?	Lead alloy	late med/p-med	1
128.00	127.01	fuel ash slag	Slag		1.4 g
223.00	242.00	nail shank	Iron		2
223.00	242.00	shoeing nail	Iron	later med	1
225.00	248.01	nail shank	Iron		1
231.00	262.00	Victoria dd nn Augg qnn AE3		0347-0348	1
231.00	262.00	unit		late 1st c BC	1
231.00	262.00	Fel temp Reparatio AE3 copy		0353-0360	1
231.00	262.00	Uncertain AE3/4		4th c	1
231.00	262.00	Hod Hill brooch	Copper alloy	0043- 0070	1
233.00	265.00	part of pruning hook?	Iron		1
233.00	265.00	flat headed nail	Iron		1
234.00	266.00	Hobnail	Iron	2 <sup>nd</sup> - 4 <sup>th</sup>	1
234.00	266.00	hob nail	Iron	2 <sup>nd</sup> - 4 <sup>th</sup>	1
236.00	263.00	strip fragment	Copper alloy		1
236.00	263.00	hob nail	Iron	2 <sup>nd</sup> - 4 <sup>th</sup>	2
236.00	263.00	flat headed nail	Iron		1
236.00	263.00	nail shank fragments	Iron		2
316.00	316.01	window fragment?	Glass		1
316.00	316.01	flat headed nail	Iron		1
419.00	512.01	Uncertain? quern fragment	Stone		1

**Table 33: Undated Landscapes registered and non-ceramic artefact assemblage**



## 4.7 Human Bone

J McKinley

### 4.7.1 Methodology

All the bone was subject to a rapid scan to assess its condition (grading for unburnt bone preservation according with McKinley 2004a, fig 6), demographic information and the presence of pathological lesions. Assessments were based on standard ageing and sexing methodologies (Buikstra and Ubelaker 1994; Scheuer and Black 2000). The unburnt bone was also assessed for the potential for recovery of skeletal indices.

The cremated bone from each context was weighed and the potential presence of pyre goods/debris in the deposits was noted. The nature of the cremation-related deposits was also rapidly assessed from the available site context data together with the results of the scan.

### 4.7.2 Quantification and provenance

Human remains – cremated and unburnt – were recovered from a total of 52 contexts. Cremated bone was recovered from 42 contexts including four urned (one early Bronze Age, three late Iron Age/early Romano-British) and eight unurned burials (five late Iron Age/early Romano-British and three undated). Four other deposits (one early/middle Iron Age and three late Iron Age/early Romano-British) may represent the remains of either un-urned burials with redeposited pyre debris or just redeposited pyre debris. Other deposits appear to comprise redeposited pyre debris (Table 34).

Unburnt human bone was collected from ten contexts including the remains of four inhumation burials; one late Bronze Age/early Iron Age, one late Iron Age/early Romano-British, one Romano-British and one undated. Other bone was redeposited, some in grave fills but there were two instances of disarticulated remains recovered from a Phase 5 pit (AL203) and the fills of Phase 6 waterhole (AL105).

### 4.7.3 Range and condition

A summary of the results is presented in Tables 34 (cremated bone) and 35 (unburnt bone). Several of the cremation graves had been truncated due to ploughing which may have resulted in the loss of some bone. A moderate degree of plough damage had also been sustained by some of the inhumation burials. Most of the cremated bone is at least slightly worn and chalky in appearance, and trabecular bone is either absent or poorly represented in most deposits. The condition of the unburnt bone is very poor, with extensive erosion and root marking, and crumbling or loss of trabecular bone. This poor bone preservation is reflected in the low-moderate levels of skeletal recovery from the inhumation burials (Table 35) and will probably have affected the quantity of surviving bone in the cremation burials (Table 34).

A broad range of ages is represented amongst the inhumed *in situ* remains, and both males and females are represented amongst the adults (Table 35). Only one immature individual was evident amongst the cremated remains, and



evidence to indicate the sex of the adults was noted in only two cases (Table 34).

Pathological lesions were observed in the remains of a minimum of four individuals; two cremated and two unburnt. A range of conditions is indicated including non-specific infections, dental disease and degenerative joint disease.

Some of the cremated bone from most contexts shows variations in colour from the white of fully oxidised bone; much is blue/black or occasionally grey, indicative of incomplete oxidation (Holden *et al* 1995a and b). In many cases, a large proportion of the bone fragments within the deposits are relatively small in size (<35mm), a reflection of the levels of disturbance, the sedimentary matrix of the burial environment (see above) and possibly the deposit type. No pyre goods were observed in any of the cremation-related deposits.



Phase	AL no	AG no	context	cut	deposit type	weight	age/sex	pathology	comment
3	100.00	106.02	1103	1107	u. b.	950g	subadult/adult		chalky, little trabecular; needs rewashing; ?difference between <2> and <3>?
3	100.00	106.02	1104	1107	1103	21g	subadult/adult		as 1103
3	100.00	106.02	1106	1107	1103	6g			as 1103
5	402.00	410.02	776	775	?un.b.+ rpd/?rpd	196g	subadult/adult		charcoal stained ; slightly worn
6	100.02	102.04	1250	1253	un. b. + rpd	151g	adult	?periosteal new bone	some heavily degraded u/b bone; worn & chalky; little trabecular
6	100.02	102.04	1251	1253	1250	157g	adult		worn & chalky, charcoal stained
6	100.02	102.04	1252	1253	1250	66g	adult		as 1251
6	100.02	102.04	1254	1270	?rpd	63g	subadult/adult		worn & chalky
6	100.02	102.04	1255	1270	1254	2g	subadult/adult		worn & chalky
6	100.02	102.04	1256	1258	?un. b. + rpd	140g	adult male		worn & chalky; little trabecular; much blue/black <17> & <18>
6	100.02	102.04	1257	1258	1256	154g	adult >25 yr.	op – finger phalanx	worn & chalky; little trabecular; blue/black
6	100.02	102.04	1260	1261	?redep.	.3g			human
6	100.02	102.04	1276	1277	?crd	9g	subadult/adult		
6	100.02	102.04	1282	1284	?un. b + rpd	73.3g	subadult/adult		worn & chalky; some black
6	100.02	102.04	1283	1284	1282	71.7g	subadult/adult		2 bags, one <14>?
6	100.02	102.04	1291	1289		11.8g	?immature		slightly worn & chalky, no trabecular bone.
6	100.02	102.04	1293	1292	?rpd	.1g	?!		
6	100.02	102.04	1416	1415	?rpd	6g	subadult/adult		worn & chalky
6	100.02	102.04	1418	1417	>un. b. + rpd	226g	subadult/adult		slightly worn & chalky; little trabecular; some blue
6	100.02	102.04	1435	1436	?rpd	18g	subadult/adult		little trabecular bone
6	100.02	102.04	1437	1438	?rpd	8g	subadult/adult		worn; much bluer
6	100.02	102.04	1439	1440	rpd	1g	>infant		slightly worn
6	100.02	102.04	1493	1495	u. b.	144g	subadult/adult		worn & chalky



6	100.02	102.04	1497	1499	u.b. + ?rpd	530g	adult >21 yr.		<51> ?rpd & <52> urned burial; slightly worn & chalky
6	100.02	102.04	1500	1503	u.b.+rpd	144g	subadult/adult		worn & chalky; some blue/black ; <54> ?redepos. & <55> u. burial
6	100.02	102.04	1502	1503	?rpd or un.b.	265g	adult		fill surrounding urned burial 1500; slightly worn & chalky; some blue/black.
6	100.02	102.04	1535	1534	?un. b. + rpd/?rpd	30g	adult		2 sub-contexts; some black
6	100.02	102.04	1536	1537		13g	subadult/adult		worn & chalky; much black
6	100.02	103.03	9416, 9419-21	9415	?un.b. + rpd/?rpd	84g	subadult/adult		excavated in a series four 5cm spits, bone + fuel ash conc. in upper 0.10m; little trabecular bone; some blue/black
6	100.02	106.03	1456	1455	un. b.	949g	adult ??female		worn & chalky; unburnt teeth,
6	100.02	106.03	1457	1455	1456	242g	adult		worn & chalky; unburnt teeth
6	100.06	101.02	1161	1164	?rpd	42g	subadult/adult		worn & chalky; no trabecular bone. <6> & <7> = different spits)
6	100.06	101.02	1162	1164	1161	13.3g	>infant		small mixed bag cremated & u/b animal bone; upper fill
6	100.06	101.02	1163	1164	1161				small bag mixed cremated & unburnt bone.
6	100.06	101.02	9311	9312	?un.b.+ rpd/?rpd	87g	subadult/adult		some highly degraded u/b. Note: cut 9312 = cut 1164 (9312 from evaluation; 1164 from full excavation)
0	100.04	102.07	8014/16	8015/17	?un. b. + rpd	1510g	adult		needs re-rinse; slightly chalky & blue/grey; two halves same grave fill – cut also given two nos.
0	140.00	560.01	17234	17233	?un.b.	95g	adult		worn & chalky
0	140.00	560.01	17254	17253	?un. b. + rpd	163g	subadult/adult		worn & chalky .

**Table 34: Summary of results from scan of cremated human bone**

KEY: un.b. – un-urned burial; u.b. – urned burial; rpd = redeposited pyre debris; crd - cremation-related deposit; op - osteophytes





Phase	AL no	AG no	context	cut	deposit type	skeletal recovery	age/sex	pathology	comment
4	101	535.05	17552	17550	inh burial	85%	adult >50 yr male	<i>ante mortem</i> tooth loss; abscesses; osteoarthritis – cervical; degenerative disc disease – cervical; osteophytes – thoracic/lumbar; morphological variation - wormian bones	eroded & root marked (4-5; very little trabecular bone. Some cranial indices; no stature estimation.
*5	203	524.01	17448	17160	Pit fill	7 pieces			Femur shaft
6	100.06	101.02	1166	1168	grave fill	<1%	adult		bag of fragments
6	100.06	101.02	1167	1168	inh burial	95%	adult c. 30-45 yr male	<i>ante mortem</i> tooth loss; abscesses; calculus; Schmorl's nodes; osteophytes – vertebrae	extensive reconstruction needed; all but legs poor condition (4) & heavily fragmented (much recent).
*6	105	533.02	17256	17252	Waterhole fill	14 pieces			Atlas, axis, skull & maxillae
6	303	305.02	3065	3059	redep				7 small frags animal?
10	114	605.01	8913	8912	redep in grave fill	100 small frags	adult		from grave fill overlying unexcavated medieval burials; degraded 3-4.
7	111	706.01	10113	10115	grave fill	<1% s./u./l?	sub adult/young adult		heavily degraded (5) and fragmented
7	111	706.01	10114	10115	inh burial	c. 2% s./u./l?	sub adult/young adult ??female		heavily degraded (5)
0	100.05	105.02	1402	1403	inh burial	1%	infant/juvenile 4-7 yr		heavily root marked teeth

**Table 35: Summary of results from scan of unburnt human bone**

KEY: s. – skull; a. - axial skeleton; u. – upper limb; l. – lower limb; \* found in with animal bone assemblage and identified by J Rackham



## 4.8 Animal Bone

**J Rackham**

### 4.8.1 Methodology

The animal bone has been identified and recorded, and each individual fragment or group of similar fragments allocated a data line in the catalogue. The recording procedures are those used by The Environmental Archaeology Consultancy. Fragments that had undergone breakage during excavation and subsequent washing and drying were joined together where possible and recorded as a single data entry. In many cases this was not possible and many unidentifiable fragments certainly derive from other bones fragments in the sample.

### 4.8.2 Preservation and Provenance

Evaluation, excavation and watching brief investigations resulted in the hand collection of a bone assemblage comprising 3847 fragments and weighing 36 kilogrammes.

Fragmentation was very high in some deposits. This is primarily a factor of the condition of the bone. The bones were deposited in calcareous chalky soils that are prone to leaching and most bones show severe surface erosion and solution and the complete loss of the organic component of the bone. This has made the bone fragments both brittle and sometimes extremely thin, leading to the inevitable breakage during excavation and subsequent processing. An indication of the extent of fragmentation is illustrated by a comparison of the number of fragments noted during processing, with that recorded following species identification and rejoining of fragments. A total of 5984 bone fragments were recorded during processing, this number was reduced to 2490 once fragments were rejoined (i.e. skeletons and partial skeletons recorded as a single entry).

This level of fragmentation has impacted to a degree on how much of the material has been identified. Several fragments that if whole could have been taken to species will have been unidentifiable due to the level of fragmentation. However the poor preservation of much of the assemblage indicates that many bones may not have survived in the soil for recovery. The preservation of the assemblage has therefore been analysed (Table 36).

Phase	1	2E	2	%1/2	3E	3	%3	4	%4	Total
0		53	6	20	137	62	69	31	11	289
2					1					1
3			5		12	1		1		19
4	7	1	1	8	29	78	91	1	1	117
5		28	2	8	61	183	64	109	28	383
6	2	130	31	14	301	568	77	93	8	1125
7		11	7	6	135	112	90	10	4	275
10		35	3	27	37	26	44	41	29	142
11		6	7	14	44	17	66	19	20	93



12		4	3		15	17		1		40
Total	9	268	65		772	1064		306		2484

**Table 36: Number of animal bone fragments in each Phase allocated to each preservation condition, and the percentage of the total in each phase in condition 1/2, 3 and 4.**

**Preservation codes:** 1= tooth enamel only surviving; 2= bone very degraded, very heavily surface pitted and thinning, little dentine survival on teeth; 2E= as above but with severe and continuous surface solution and pitting; 3= bone lost all organic component, extensive surface pitting and erosion and very brittle; 3E= as above but entire bone surface covered in pitting and root solution channels; 4= bone surviving with some organic component and/or intact uneroded surfaces; 5= bone in excellent condition, organic component intact, no erosion

The bulk of the excavated animal bone sample is poorly preserved with over 87% being classified as lacking any organic component and its surfaces showing extensive pitting and corrosion. Nearly 14% of the assemblage is so poorly preserved that identification was prejudiced and some animal bone must have been lost from the deposits. Although it might be expected that bone buried for the longest period will have undergone the most severe corrosion in the ground the data (Table 36) does not support this although it should be remembered that the burial conditions were not uniform along the whole route (Table 37).

preservation	Area 1	Area 2	Area 3	Area 4	Area 5
1	9			2	
2E	234	8	13		
2	40	12	9		2
3E	231	280	254	1	
3	211	106	740	5	
4	97	24	80	101	

**Table 37: Preservation by area. Number of animal bone fragments in each area for each preservation category** (see Table 36 for preservation codes)

Areas 3 and 4 had much better preservation of bone while Areas 1 and 2, particularly Area 1, had the poorest preservation conditions (Table 37). Area 5 produced very little bone but this was probably due to a lack of features rather than the burial environment.

The poor preservation of the assemblages will have biased the assemblage in two main areas. Bones of juvenile animals, such as young pigs and lambs, may have been lost entirely from the assemblage. This is likely to bias the analysis of the age at death of the animals represented in the samples and some assessment of the extent of this loss will be needed by comparison of the epiphyseal data and the surviving teeth. This will also bias the relative frequency of the species if one species was routinely slaughtered when juvenile. This might well have impacted on the pig frequency, a species typically slaughtered in its first and second years. Secondly bone fragments with a large surface area to volume ratio, or a lower bone density, will have been more heavily affected by solution in the soil. This means that elements such as vertebrae, pelvis bones, scapula, skull fragments and the bones of many smaller animals may have been more heavily impacted by the burial environment than long bones of cattle, horse or adult pig and teeth. This may



have produced a significant bias in favour of particular bones and species and a detailed analysis of the fragmentation, bone and bone part representation will need to be undertaken before the economic or husbandry interpretation of the assemblage can be considered. Poor preservation has also limited the number of bones upon which measurements could be taken.

The bone assemblage by phase is presented in Table 38. The bulk of the excavated sample has been assigned to the late Iron Age/Roman phase, with smaller samples from the early/middle Iron Age and the Roman period. The other phases are represented by relatively small samples. Nearly 12% of the sample derives from contexts as yet unassigned to phase.

Phase	Fragment numbers
0- undated	284
2- Neolithic	1
3- early Bronze Age	19
4- late Bronze Age/early Iron Age	117
5- early/middle Iron Age	383
6- late Iron Age/ early Roman	1128
7- Roman	275
10- Medieval	142
11- post-medieval	92
12- modern	40

**Table 38: Frequency of animal bone fragments from each phase (excluding skeletons)**

#### 4.8.3 Species Representation

The assemblages can be briefly summarised by the fragment numbers of each species. Given the poor preservation this is not a recommended method of quantification but a more detailed study is not appropriate for this assessment. The excavated fragments are summarised in Table 39 by taxa and phase.

The species identified in the assemblage include horse, aurochs, cattle, sheep/goat, pig, dog, fox, red deer, roe deer, at least four bird taxa and frog or toad. No goat bones were identified in the assemblage although many of the ovicaprid bones were clearly identifiable to sheep and we can assume that the majority of the bones classified as sheep/goat are sheep. The aurochs have been identified on size. There is no dispute over the horn core and skull fragment from 3144 but the other bones in this context identified to aurochs have been assigned on the basis of size. It is possible that other fragments in this context, and perhaps others, derive from aurochs. In a late Bronze Age/early Iron Age context this represents one of the most recent finds of aurochs in the archaeological record in this country. No attempt was made during this assessment to identify the bird bones, and at least four species are present and should be identifiable by reference to an appropriate collection.

The fragment data does show a significant pattern. In the late Bronze Age/early Iron Age phase the small sample shows the presence of aurochs, all in context 3144, and a dominance of pig bones. Red deer is present in Phases



2, 3 and 4. In Phase 5, early/middle Iron Age, cattle and sheep increase relative to pig, with cattle dominating. Red deer continue to occur although some of the fragments are antler. By the late Iron Age/early Roman period identified sheep/goat bones dominate the sample, but in the Roman period, Phase 7, cattle have become the most abundant bone fragments. These data suggest quite marked changes in the animal husbandry and also the environment during the 1<sup>st</sup> millenniums BC and AD but a more detailed analysis is needed to confirm this pattern.

Complete or partial skeletons, or articulated bones were recovered from seven contexts. These included the cervical vertebrae and a rib from a horse in 17741 (undated); a complete frog or toad in 17409 (undated); partial and complete dog skeletons in undated contexts 17596 and 2586, the latter probably complete, and Phase 6 context 3054; sheep in undated context 17596 and Phase 11 17544; and an immature red deer in Phase 6 context 17554.

Phase	0	2	3	4	5	6	7	10	11	12
Horse	18		1		4	32	11	6	2	4
Horse, p. skeleton	1									
Aurochsen				2						
Aurochs?				1						
Cattle	27			7	69	87	48	8	9	2
Cattle, p. skeleton						1				
Cattle size	125		7	28	75	250	100	17	33	24
Sheep/goat	9		1	2	41	133	17	23	6	3
Sheep/goat, p.skeleton	1								1	
Sheep size	28			9	48	118	28	53	7	3
Pig	27		1	27	59	30	6	11	7	2
Dog					1	3	1			
Dog, p.skeleton	2					1				
Fox					1		1			
Red deer	3	1	1	3	4	1				
Red deer, p. skeleton						1				
Roe deer	1				2					
Bird-not yet id.					1	6		2		
Frog/toad skeleton	1									
Small animal	1					1				
Unidentified	45		8	38	77	463	60	21	27	2
Oyster							3	1	1	

**Table 39: Number of animal bone fragments by phase (and excavated shell)**

The recorded data is summarised by landscape group within phase (Table 40). The most significant landscape groups are:

Undated	226
Phase 4	300
Phase 5	102, 301, 402
Phase 6	100.03, 207, 303
Phase 7	302.01
Phase 10	114



Landscape group 300 has the aurochs bones, two red deer humeri and a dominance of pig bones. Pigs still dominate in landscape group 102, but have been overtaken by sheep and cattle in groups 301 and 402. In groups 100.03, 207 and 303 sheep bones predominate. These groups appear to be reflecting the general pattern of the data presumably because they are making the most significant contribution to the numbers. The fragmentation data for the assemblage needs to be considered before these patterns are interpreted. The poor preservation is unlikely to be responsible for these patterns since one would expect this to favour the more robust bones of cattle than the smaller pig and sheep bones.



Phase	Lands grp	EQU	AUR	AUR?	BOS	CSZ	OVCA	SSZ	SUS	CAN	CER	CLS	FOX	UNIB	FRTO	SMA	UNI	OYS
2	200										1							
3	100	1				6	1										5	
3	201					1			1		1						3	
4	101					7												
4	202				1	1	1	1			1							
4	300		2	1	6	20	1	7	27		2						38	
4	500							1										
5	102	1			20	40	1	17	49		4		1	1			44	
5	203											1						
5	204				9	1		9	5			1					2	
5	301	3			16	22	11	2	2	1							15	
5	402				24	12	29	20	3								16	
6	100.01	3			3	4	3	2									5	
6	100.02				3													
6	100.03	9			20	37	20	20		1						1	112	
6	100.06				1													
6	104					1												
6	105				2	7		2		1							10	
6	106				1	11			1		2+						1	
6	205	1			3	2		8										
6	206				1*		3		1									
6	207				9	21	16	25	5								18	
6	209				4	6	2	5									6	
6	210					1	1											
6	302	1			2	3	4		1								1	
6	303	18			39	156	84	56	22	2*				6			310	
6	501					1												
7	107	2			3	5	2											
7	109				7	1												
7	207.01	1				3	3	5									8	
7	213				4	3	1	4										
7	214				13	16	1	2	4								18	
7	302.01	6			17	52	8	13	2	1			1				22	
7	304	1			1	1	1	2										
7	305	1			3	19	1	2									12	3
10	112				1													



Phase	Lands grp	EQU	AUR	AUR?	BOS	CSZ	OVCA	SSZ	SUS	CAN	CER	CLS	FOX	UNIB	FRTO	SMA	UNI	OYS
10	113					2		14									1	
10	114	6			7	15	23	39	11					2			20	1
11	117				1			1									7	
11	121						1*											
11	123				2	19		3	5								18	1
11	215	1				1												
11	216					2												
11	307							1									1	
11	308				2	2											1	
11	310	1			4	9	6	1	2									
11	407							1										
12	147	4			1	8	2		1								1	
12	151				1	15	1	1									1	
12	244								1									
12	248					1		2										
0					3	7	6*		2	1*								
0	124					4												
0	127								1									
0	128					1											3	
0	137	10*				41		1	1								3	
0	140																16	
0	146																1	
0	225				1			3										
0	226				21	33	2	23	22		2	1			1*		11	
0	230									1*								
0	234	1			1	2	2		1							1	1	
0	236	3				6											1	
0	240					23					1							
0	319	2			1	8		1									9	
0	416	3																

**Table 40: Animal bone fragments by phase and landscape assessment**

\* - includes individual skeletons or partial skeletons





## 4.9 Environmental Samples

J Rackham

### 4.9.1 Methodology

This report details the results of the assessment of the soil samples collected from all four phases of archaeological work associated with the bypass. The samples were processed by two different organisations using somewhat different methods. Albion Archaeology processed 152 of the samples and the Environmental Archaeology Consultancy (EAC) processed 85.

At Albion Archaeology, each sample was processed by bulk water flotation and the flots collected onto 500µm mesh sieves. Residues were collected onto a 1mm mesh. Residues above 5.6mm were sorted by eye for the retrieval of small finds and charred material which did not float. Retrieved artefacts were submitted to the relevant in-house specialists for integration with the hand-excavated assemblages. The retrieved animal bone, shell, charred plant material and seeds were submitted for assessment to EAC. In addition, the dried flots and the 1mm and 2mm residues were submitted to Environmental Archaeology Consultancy (EAC) for checking, re-floating and assessment. Due to a much greater time element than was anticipated, only the residues from the evaluation (BAL860) were fully checked by EAC, the fine residues (<5.6mm) from BAL953 were not been completed in time for the assessment.

The following methods were used to process the samples submitted to the EAC for washing and sorting. The sample volume and weight was measured prior to processing. The samples were washed in a 'Siraf' tank (Williams 1973) using a flotation sieve with a 0.5mm mesh and an internal wet sieve of 1mm mesh for the residue. Both residue and flot were dried and the residues subsequently re-floated to ensure the efficient recovery of charred material. The dry volume of the flots was measured and the volume and weight of the residue recorded. A total of 1450 litres of soil was processed in this way.

The residue of each sample was sorted by eye, and environmental and archaeological finds picked out, noted on the assessment sheet and bagged independently. A magnet was run through each residue in order to recover magnetised material such as hammerscale and prill and an estimate was made of the number of flakes or spheroids of hammerscale recovered. The residue was then discarded. The flot of each sample was studied using up to x30 magnification and the presence of environmental finds (i.e. snails, charcoal, carbonised seeds, bones etc) was noted and their abundance and species diversity recorded on the assessment sheet. The flots were then bagged and along with the finds from the sorted residue, constitute the material archive of the samples.

It was noted that in the samples from the chalky soil, the second flot was often considerably richer in charcoal and snails. Hence the quantity of charcoal and snails retrieved from the samples from the full excavations (BAL953) may currently be under-represented.



#### 4.9.2 Quantification and Provenance

A total of 237 soil samples were collected from four of the areas of evaluation and excavation; 120 samples from Area 1, 43 from Area 2, 37 from Area 3 and 34 from Area 4. No samples were taken from Area 5. Samples were taken from deposits spanning seven phases (see table 41). A number of the samples remain unphased at this stage. The frequency of samples by phase is summarised in Table 41.

Phase	Phase date	Area 1	Area 2	Area 3	Area 4	Area 5	Total
Phase 3	EBA	7	3				10
Phase 4	LBA/EIA	18	7	2	2		29
Phase 5	EIA-MIA	1	1		30		32
Phase 6	LIA-ERB	57	8	17			82
Phase 7	RB	1	14	13			28
Phase 10	MED	8					8
Phase 11	PMED	17		2			19
unphased		11	11	5	2		29
<i>total</i>		120	44	39	34	0	237

**Table 41: Frequency of soil samples from each area by phase**

The samples derive from a range of deposits including ditch, pit, rubbish pit, quarry pit, gully, posthole and grave fills, colluvial layers, palaeochannel deposits, natural layers and tree throws, although the majority derive from pit, ditch and grave fills.

#### 4.9.3 Range, variety and condition

All the samples except those in Area 4 were taken from chalky soils and the residues are large and composed of small chalk and chalk crumb. In Area 4 the soils are clayey and chalk is absent and the deposits are partially decalcified and snail shells are rare. In the chalky soils of the rest of the site the well drained soils have led to partial decalcification particularly noted in the poor condition of much of the animal bone, the severely degraded condition of the human bone in some of the inhumation burials and the evidence for solution of the snail shells. These burial conditions have certainly had an impact on what has survived. There is no evidence for any waterlogged preservation anywhere along the route. Most of the samples do however contain uncharred weed seeds, particularly *Chenopodium* sp (goosefoots and orache), *Sambucus* sp. (elder), *Galium* sp. (cleavers), *Fumaria* sp. (fumitory) and *Rumex* sp. (docks). These are all intrusive and a large number of plant rootlets in many samples are further testimony to a level of disturbance of the buried deposits. Many samples included small quantities of coal in the flots.

Archaeological debris recovered from the sample residues includes pottery, firecracked flint and stones, flint flakes, brick/tile, hammerscale, fired earth, marine shell, bird eggshell, human bone, and animal bone (Table 42). A few very small pieces of what may be highly degraded amber were present in grave fill 10113. Low densities of hammerscale are present in many of the samples checked, particularly from Phase 6 onwards. One Phase 5 pit, 17049, includes a relatively large group, as does a Phase 6 ditch, 4803, but none of these samples have produced sufficient to indicate anything more than iron smithing in the vicinity of the sampled sites. The Phase 3 deposits, pit 17157,



with hammerscale may represent contamination from later deposits. Not all the residues from the site have been checked for hammerscale but if this work is completed it may be possible from the density of scale to recognise areas and phases where a concentration reflects contemporary metalworking activity in the vicinity.

Economically important animal bone and marine shell are represented by bones of sheep, pig, cattle and dog, chicken and small bird bones, eel vertebrae and shells of oyster, mussel and periwinkle. Their density and frequency in the samples is so low that these remains afford little more than presence data. The eel vertebra in one Phase 4 sample, pit 4305, is an interesting record. Three partial skeletons are present in samples; a piglet in Phase 5 pit 17049 and a chicken in unphased pit fill 2814; and a juvenile sheep/goat in 17545 (Phase 11), originally recorded as a dog grave. A fragment of antler is present in a Phase 3 fill of pit 17157.

The wild vertebrate fauna includes wood mouse, field vole, bank vole and frog/toad, but does not occur in sufficient numbers to be very informative.

The richest elements of the environmental data have been derived from the flots. The most abundant remains are snail shells, with charred cereal, weed seed and charcoal remains also present. The flots have been scanned and the abundance of the different categories of finds noted (Table 43). The whole of all but the largest flots has been scanned. For samples with a flot in excess of 75ml a sub-sample was scanned and the density of finds noted and extrapolated from this figure.

The charcoal rich assemblages are concentrated in Area 4 and the cremation and grave fill samples. Many of the ditch samples have produced little or no charcoal suggesting that these may be fairly remote from settlement. In fact only a limited number of the charcoal rich samples include fragments of sufficient size to permit identification to species and wood type (twig, roundwood, branch, trunk). Interestingly all the charcoal appears to derive from branch wood or larger and no small roundwood or twigs were noted in any samples.

The charred seed assemblages are extremely poor. Charred cereal density is extremely low with rarely more than two or three unidentifiable fragments of grain present in a sample. Only twelve out of the 237 samples have produced more than ten charred grain fragments and the highest concentrations are in three of the Phase 5 pits in landscape group 402.00. One other sample, a Phase 10 pit fill, 9204, produced the richest assemblage with over a hundred charred cereal grains, a little chaff and several weeds seeds. Unfortunately these very low densities significantly reduce the potential of the charred plant assemblages and none are likely to make a significant contribution to understanding the site archaeology, although their specific identification would indicate the cereals that were available during the different phases of occupation. Charred cereal remains generally occur at much higher densities than this on rural late Iron Age and Roman sites and it may be that much of the



archaeological activity along the bypass route is some distance from the focus of settlement. Wheat, barley, possible oats and rye and possible pea/bean have been preliminarily identified during this assessment but all material will be checked by an archaeobotanist during the analysis phase of the project. The only other food plants regularly recognised are fragments of the charred shell of hazelnuts (Table 43). Weed and chaff assemblages are very restricted.

Due to the calcareous soils the snails in the samples from Areas 1, 2 and 3 are very abundant. Tens of thousands of snails have been recovered in the flots and during this assessment these have been scanned and all taxa noted during this scan recorded. No counts have been made, and one or two of the rare taxa may have been overlooked. For the purposes of presentation the general characteristics of the snail assemblage in each sample has been indicated rather than the whole species list (Table 43). Assemblages have been classified as 'open country', 'open country/mixed', 'woodland/mixed' and 'woodland'. These broadly cover all the assemblages although minor variations in species abundance and individual taxa occur. By far the most numerous fauna is the open country suite. This is remarkably consistent across most periods and Areas 1-3. It is characterised by a dominance of shells of *Pupilla muscorum*, *Vallonia excentrica*, *Vallonia costata*, *Helicella* sp., *Trichia hispida* and *Cecilioides acicula*, although the latter are likely to be present through burrowing. Other taxa associated with this group are *Helicella itala*, *Punctum pygmaeum* and *Truncatellina cylindrica*. Interestingly *Vertigo pygmaea*, another open country species, is largely absent from the faunas. Frequently associated with this fauna are numerous shells of *Pomatia elegans*. This species burrows shallowly into loose earth in moist and shady environments, and hence is associated with scrub habitats or a clearance phase of activity (Evans 1972), but here it is found with the open country suite and suggests disturbed ground. *Pupilla muscorum*, one of the most numerous shells in these assemblages, also favours bare earth habitats, and between them these species perhaps suggest areas of exposed ground created by stock or human activity on the chalk.

In some samples this assemblage includes a few more shells of taxa more typical of woodland or shaded habitats. In combination these two groups account for the bulk of all the samples that have been studied. This suggests a generally open landscape across Areas 1, 2 and 3 for much of the history of the study area.

A few samples have produced an essentially woodland or shaded habitat faunal suite, or with occasionally a few shells of open country taxa. These woodland suites are concentrated in the Phase 4 samples of Areas 2 and 3 and suggest a distinctly different environment at this time. This would appear to tie in with a dominance of pig bones in the hand excavated assemblages from Phase 4. A suite of species including *Discus rotundatus*, *Aegopinella nitidula*, *Nesovitrea hammonis*, *Aegopinella pura*, *Oxychilus alliarus*, *Oxychilus cellarius*, Clausilidae, *Ena montana* and *Carychium tridentatum* reflects this 'woodland' habitat.



## 4.10 Soil micromorphology

*R Macphail*

### 4.10.1 Methodology

The southern portion of Area 2 and the northern portion of Area 3 were the subject of a site visit (20<sup>th</sup> February 2004), during which the soils were examined and sampled. These two areas of the site are located at the junction of two soil associations, Upton 1 soil association (Upton soil series: grey rendzinas) and Swaffam Prior soil association, at Baldock a soil mosaic (Jarvis *et al* 1983, 1984).

### 4.10.2 Provenance and range

The fills of boundary ditch AL303 (Phase 6) comprised greyish brown to brown (10YR5/2-5/3) silty clay loams that are often stony with chalk brash (gravel and small stone). These are probably derived from a grey rendzina (Upton soil series) soil cover and imply that such shallow soils were extant during late prehistory/Romano-British period. Currently such grey rendzinas are associated with an arable landuse rather than with old grassland or woodland (c.f. humic rendzina) (Jarvis *et al* 1983, 1984). It is, therefore, likely that the soil cover used to construct the hypothesised bank, and which in-filled the ditch, was derived from shallow soils that probably had an arable history.

A natural shallow dry valley fill (AL313) and a late Iron Age/early Roman track way (AL302 Phase 6) occur in the mapped area of the Swaffam Prior soil association on chalk and chalky drift (Jarvis *et al* 1983, 1984). The soils influencing the track way were probably brown rendzinas (Newmarket and Rudham soil series), hence the light yellowish brown (10YR6/4) silty clay fills (derived from the brown subsoil of the brown rendzina). The ditches either side of the track way have fills that suggest earlier in-wash of chalk gravel from the trackway, or backfill, and later slow (almost stone-free) silting.

The southern portion of Area 2 lies within the cover of the Swaffam Prior soil association, and is influenced by a shallow dry valley within a likely earlier (Pleistocene) palaeochannel (AL224). The soils here are a likely mosaic of typical brown calcareous earths (Soham soil series) and typical argillic brown earths (Moulton soil series), the exact differentiation of which will be a by-product of the suggested future laboratory analysis (see below). Five features associated with the late Iron Age/early Roman road (AL207) were examined. The shallow pale brown fills to the east of road bed had a series of semi-discontinuous thin chalk gravel layers. These have been interpreted as gravel (colluvial) fans or fluvial gravel packages (AL232 and 233), and are likely to date to the natural pre-site environment (Allen 1988, 1994, 1995; Catt 1986, 1990; Farres *et al* 1992). The buried soil (AL233), the road make-up (AL207), the roadside ditch fills (AL207.01) and colluvial ploughsoil (AL234) adjacent and thought to be contemporaneous with the road, were sampled by a combination of Kubiena boxes (for soil micromorphology) and bulk samples.

The samples from the buried soil and road make-up should assist in identifying the nature of the late Iron Age/early Roman soil (grassland, arable or woodland?) and whether there was any trafficking before the road



construction or after the ground raising. The samples from the roadside ditch fills will assist in confirming that the ditch is not a natural channel and clarify the nature of its fills in relationship to the construction and use of the road. The samples from the contemporaneous ploughsoil can be compared with the pre-road and ground raising soils and also assist in characterising land use and environment (erosion/colluviation rates, arable practices, manuring, etc.).



A Ph	A L	Sample	context	Feature type	vol.	wt. kg.	residue vol. in ml	Pot \$	flint \$	Brick/tile wt g	Fe object	magnetic wt.	ham'r scale no.	fired earth wt.	marine shell wt.	egg-shell wt.	bone wt g.	comment
3	100	1	1103	Cremation	4	5	2500	72/13	20/2*			<1	1				2	Calcined human? Bone
3	100	2	1103	Cremation	2	3	1250	36/15				<1					948	Calcined human? Bone
3	100	3	1104	Cremation	1	2	900	62/8	12/<1*			<1					21	Calcined human? Bone; stones (19g)
3	100	4	1106	Cremation	1	2	900	116/17				<1	1				6	Calcined human? bone
3	100	34	1405	fill ditch 1404	20													
3	100	46	1485	fill ditch 1486	20													
3	100	61	1570	fill pit 1571	20													
3	201	701	17153	Fill of pit 17157	60	92	9000	37987	24/81*	3		7	12				3	Cracked pebble, large stone, pig tooth
3	201	702	17154	Fill of pit 17157	82	117	12000	60/27	272/173*			11	5				24	Pig, antler; firecracked stone
3	201	703	17153	Fill of pit 17157	12	20	1500	38020	121/44*			1	3				5	Pig teeth, some burnt stone
4	101	728	Sk 7552	Head area from grave 17550	0.5	0.835	175										<1	Unburnt eroded human bone?
4	101	729	Sk 7552	Abdomen area from grave 17550	0.8	1.2	250										4	Unburnt eroded human bone?
4	101	730	Sk 7552	r. hand area of grave 17550	0.2	185	50										<1	Unburnt eroded human bone?
4	101	731	Sk 7552	l.hand area of grave 17550	0.4	0.415	40										1	Unburnt eroded human bone?



A Ph	A L	Sample	context	Feature type	vol.	wt. kg.	residue vol. in ml	Pot \$	flint \$	Brick/tile wt g	Fe object	magnetic wt.	ham'r'scale no.	fired earth wt.	marine shell wt.	egg-shell wt.	bone wt g.	comment
4	101	732	Sk 7552	r.foot area of grave 17550	0.5	0.5	100										3	Unburnt eroded human bone?
4	101	733	Sk 7552	l.foot area of grave 17550	0.2	0.255	45										2	Unburnt eroded human bone?
4	101	738	17612	Fill of ditch 17614	40	53	21500		7/1?			<1			<1			Mussel shell
4	101	739	17613	Fill of ditch 17614	32	40	18500	45/9				<1						
4	101	740	17613	Fill of ditch 17614	8	10	4500	56/38				<1						
4	101	741	17633	Fill of pit 17634	32	41	22000											
4	101	742	17646	Fill of pit 17648	5	6	2600											
4	101	743	17644	Fill of pit 17648	1.9	2.14	950											
4	101	744	17645	Fill of pit 17648	1.5	1.6	800											
4	101	745	17647	Fill of pit 17648	1.7	2	1100											
4	101	746	17647	Fill of pit 17648	1.8	2.1	1300											
4	101	747	17649	Fill of ditch 17651	1.6	1.96	1000											
4	101	748	17650	Fill of ditch 17651	1.7	2	1200					<1						
4	101	749	17650	Fill of ditch 17651	1.95	2.3	1300											
4	202	101	4306	Pit fill, cut 4305	10			?	?			1					<1	Field vole, wood mouse, eel
4	202	427	2801	fill pit 2590	40													
4	202	428	2802	fill pit 2590	40													
4	202	429	2806	fill pit 2590	15													





A Ph	A L	Sample	context	Feature type	vol.	wt. kg.	residue vol. in ml	Pot \$	flint \$	Brick/tile wt g	Fe object	magnetic wt.	ham'r'scale no.	fired earth wt.	marine shell wt.	egg-shell wt.	bone wt g.	comment
4	202	430	2807	fill pit 2590	5													
4	202	431	2808	fill pit 2590	25												13	Frog, vole, csz-lmv
4	202	432	2810	fill pit 2590	25													
4	300	508	3144	fill pit 3143	5												4	Pig li; petrous
4	300	509	3145	fill pit 3143	5												4	5 x indet bone; pig lpm2; ssz lmv
4	400	609	422	hearth 420	10													
4	401	619	737	fill pit 738	20													
5	102	750	17764	Fill of pit 17765	53	52.5	8000	8:16	546/267*			<1		1			164	Bone point; pig, cattle, small bird
5	204	705	17045	Fill of pit 17049	70	91	11250	12:19	670/1565	<1		2	25		<1	<1	55	Glassx2 (mod?), piglet bones, sheep, vole, mussel
5	402	8	2003	Fill cut 2002	10			?	?								4	Indet calcined bone
5	402	9	2005	Fill cut 2004	10			?	?			6	£				1	Indet burnt bone
5	402	601	316	fill pit 315	20												2	8 indet burnt bone fragments
5	402	602	320	fill pit 319	20												42	Bos-ph2; s/g tib,rib,uln,skl
5	402	603	323	fill pit 319	10												2	Indet burnt bone fragment, poss s/g temporal
5	402	604	77	Pit fill	2.5	3	375	44/62	18/81#				£					
5	402	605	78	Pit fill	9	11.5	1700	12:8	30/115#			3	£					3 x cracked pebbles
5	402	606	411	finds deposit pit 413	0													
5	402	607	416	fill pit 415	60												35	Bos-hum,s/g max-i10,j7; ssz-rib,lbf+ 7 burth frags
5	402	608	417	fill pit 415	20												38	S/g skl, rib, mtc



A Ph	A L	Sample	context	Feature type	vol.	wt. kg.	residue vol. in ml	Pot \$	flint \$	Brick/tile wt g	Fe object	magnetic wt.	ham'r scale no.	fired earth wt.	marine shell wt.	egg-shell wt.	bone wt g.	comment
5	402	611	543	fill pit 542	10												4	Indet bone-6 burnt-5 unburnt
5	402	612	677	fill pit 674	20													
5	402	613	748	hearth 747	0													
5	402	614	749	hearth 747	0													
5	402	615	750	hearth 747	0													
5	402	616	751	hearth 747	0													
5	402	617	752	hearth 747	5													
5	402	620	776	cremation deposit grave 775	9													
5	402	621	802	fill pit 804	8													
5	402	622	809	fill pit 812	10												28	5x burnt bone; ssz -lbf; bos um2-15
5	402	623	811	fill pit 812	10												8	Ssz-rib; ssz-fem;+ 11 indet bone frags
5	402	624	886	fill ph 879	2													
5	402	625	887	fill ph 879	2													
5	402	626	888	fill ph 879	10												1	2 indet burnt bone fragments
5	402	627	909	fill pit 910	20												8	Sheep/goat tibia-burnt
5	402	628	885	fill ph 879	2													
5	402	629	965	fill ph 964	8												20	?cremated bone-69 pieces-?animal?
5	402	630	744	fill pit 743	10												1	3 indet burnt bone fragments
5	402	631	872	fill pit 871	10												2	2 indet burnt bone; ssz-lbf
5	402	632	990	fill pit 984	10												1	4 indet bone frags-sszcdv
6	100.01	42	1411	fill ditch 1414	20													
6	100.01	43	1480	fill ditch 1482	20													



A Ph	A L	Sample	context	Feature type	vol.	wt. kg.	residue vol. in ml	Pot \$	flint \$	Brick/tile wt g	Fe object	magnetic wt.	ham'r scale no.	fired earth wt.	marine shell wt.	egg-shell wt.	bone wt g.	comment
6	100.01	44	1481	fill ditch 1482	20													
6	100.01	45	1483	fill ditch 1484	20													
6	100.01	47	1487	fill ditch 1488	20											<1		Cf chicken eggshell
6	100.01	60	1569	fill pit 1571	20													
6	100.02	13	1282	Cremation deposit grave 1284	78	82	26000	36/215	244/1724#?		1	1	12		<1		73	Calcined human? bone, few very eroded unburnt bone, mussel shell
6	100.02	14	1283	Cremation deposit grave 1284	123	123	10500	2:4	67/812*			?	1				3	Calcined human? bone
6	100.02	15	1254	Cremation-spit 1 grave 1270	24	29	7200	32/172	127/433*			<1					64	Calcined human? Bone, 2 pieces eroded unburnt bone, vole
6	100.02	16	1255	Cremation deposit grave 1270	10	11	1800	7:25	59/207#			<1					14	Burnt bone, cattle lm3
6	100.02	17	1256	Cremation deposit grave 1258	10.5	13	1500	9:20	40/51#			<1	2				140	Calcined human? Bone, and 2 frag. Unburnt
6	100.02	18	1257	Cremation deposit grave 1258	17	21	2000	8:4	58/65#			1	1				156	Calcined human and cattle mand., eel
6	100.02	19	1259	Cremation – spit 1 grave 1261	1.25	2	300					<1						
6	100.02	20	1260	Cremation – spit 2 grave 1261	1.5	2	700					<1					<1	Indet burnt bone fragments



A Ph	A L	Sample	context	Feature type	vol.	wt. kg.	residue vol. in ml	Pot \$	flint \$	Brick/tile wt g	Fe object	magnetic wt.	ham'r scale no.	fired earth wt.	marine shell wt.	egg-shell wt.	bone wt g.	comment
6	100.02	21	1250	Cremation spit grave 1253	52	60	18000	27/95	157/1370!#	<1?		<1	4	<1	<1		152	Calcined human? Bone and few frag eroded unburnt, vole, small fish, mussel, oyster
6	100.02	22	1251	Cremation spit grave 1253	37	40	10000	12:40	72/749*								159	Calcined human? Bone
6	100.02	23	1252	Cremation spit grave 1253	30	32	8500	4:6	68/633#			<1					68	Calcined human bone, wood mouse
6	100.02	24	1252	Cremation spit grave 1253	5	6	2000		10/204#?			<1					<1	rodent
6	100.02	25	1276	Cremation deposit grave 1277	3	3	600	1/<1	28/3#?			?					8	Calcined human bone, field vole
6	100.02	26	1290	Posthole fill 1289	2.5	3.5	800		11/4*			<1						
6	100.02	27	1291	Posthole fill 1289	9	9	2250	1:3	1/<1			<1	1		<1		12	Calcined human? bone, mussel shell
6	100.02	28	1293	Cremation deposit grave 1292	2	2	350	1:20	14/36*			<1					<1	Tiny indet calcined bone frag
6	100.02	35	1416	cremation deposit grave 1415	12												8	Indet and csz-lbf-v eroded
6	100.02	36	1418	cremation deposit grave 1417	100												17	Pig molar,ssz-lbf;csz-lbf-eroded
6	100.02	37	1435	cremation deposit grave 1436	220												5	4 x indet bone; s/g um2-7



A Ph	A L	Sample	context	Feature type	vol.	wt. kg.	residue vol. in ml	Pot \$	flint \$	Brick/tile wt g	Fe object	magnetic wt.	ham'r scale no.	fired earth wt.	marine shell wt.	egg-shell wt.	bone wt g.	comment
6	100.02	38	1437	cremation deposit grave 1438	30												5	Pig-ph1, indet bone and tooth-very eroded
6	100.02	39	1439	cremation deposit grave 1440	4													
6	100.02	40	1456	cremation deposit grave 1455	16												5	? human skull frags
6	100.02	41	1457	cremation deposit grave 1455	8												3	Indet bone- 3 burnt-4 unburnt
6	100.02	48	1493	cremation deposit grave 1495	3													
6	100.02	49	1493	cremation deposit grave 1495	7													
6	100.02	50	1492	fill grave 1495	8													
6	100.02	51	1497	cremation deposit grave 1499	8													
6	100.02	52	1497	cremation deposit grave 1499	5													
6	100.02	53	1498	finds deposit grave 1499	3													
6	100.02	54	1500	cremation deposit grave 1503	1													
6	100.02	55	1500	cremation deposit grave 1503	2													



A Ph	A L	Sample	context	Feature type	vol.	wt. kg.	residue vol. in ml	Pot \$	flint \$	Brick/tile wt g	Fe object	magnetic wt.	ham'r'scale no.	fired earth wt.	marine shell wt.	egg-shell wt.	bone wt g.	comment
6	100.02	56	1502	Fill grave 1503	4													
6	100.02	57	1535	cremation deposit grave 1534	10												4	Indet eroded bone
6	100.02	58	1535	cremation deposit grave 1534	5													
6	100.02	59	1536	cremation deposit 1537	5													
6	100.02	110	9416	cremation deposit grave 9415	2			?	1+?			<1						
6	100.02	111	9419	cremation deposit grave 9415	2			?	?									
6	100.02	112	9420	cremation deposit grave 9415	2			?	?									
6	100.02	113	9421	cremation deposit grave 9415	2			?	?									
6	100.03	29	1340	fill ditch 1346	40												<1	Indet bone frag
6	100.03	103	8003	Ditch fill, cut 8009	10			?	?			<1	7		6		<1	Oyster, indet burnt and unburnt bone
6	100.06	5	1161	Cremation	14	19	2000	1:1	14/1*			<1					8	Calcined human? And eroded unburnt bone
6	100.06	6	1161	Cremation	28	32	4000	3:4	18/115#			<1	2				38	Calcined human? Bone; unburnt sheep humerus, field vole



A Ph	A L	Sample	context	Feature type	vol.	wt. kg.	residue vol. in ml	Pot \$	flint \$	Brick/tile wt g	Fe object	magnetic wt.	ham'r scale no.	fired earth wt.	marine shell wt.	egg-shell wt.	bone wt g.	comment
6	100.06	7	1162	Cremation	33	40	5000		5:39			<1					17	Pebble
6	100.06	8	1163	Cremation	34	41	5500	1/<1	8:7			<1	4			<1	3	Pebbles, bird eggshell
6	100.06	9	1166	Inhumation	73	87	13500		12/<1			<1	1		<1		74	Eroded unburnt human bone, mussel shell
6	100.06	109	9311	Cremation deposit grave 9312	80			?	?			<1	3		<1		<1	Oyster, mouse
6	104	734	17691	Fill of pit 17689	9	11.5	2000		1/<1			<1			<1			Mussel shell
6	104	735	17691	Fill of pit 17689	9	10	2000		3:2			<1	2					Glassx1 (post-med?)
6	104	736	17691	Fill of pit 17689	10	11	3750		3/<1			<1	1			<1	2	
6	104	737	17691	Fill of pit 17689	10	13	3000		10:5			<1	4	<1				Coal-<1g; burnt flint - <1g
6	206	102	4804	Ditch fill, cut 4803	10			?	?			2	45				<1	Small bird, shrew
6	207	411	2628	make-up layer	25										1		1	1 xSsz-lbf, oyster
6	207	412	2647	make-up layer	18										1		1	1 xSsz-lbf, frog/toad, oyster
6	207	413	2693	layer	25												2	4 Indet bone frags - ssz lbf
6	207	414	2694	layer	25												1	2 indet burnt bone fragments
6	207	418	2919	fill ditch 2915	20													
6	207	419	2919	fill ditch 2915	25												1	Indet bone
6	209	50	10019	Quarry pit fill, cut 10026	0			?	?			1	10		<1		1	Oyster, sheep, indet burnt and unburnt bone



A Ph	A L	Sample	context	Feature type	vol.	wt. kg.	residue vol. in ml	Pot \$	flint \$	Brick/tile wt g	Fe object	magnetic wt.	ham'r scale no.	fired earth wt.	marine shell wt.	egg-shell wt.	bone wt g.	comment
6	302	3	4127	Ditch fill, cut 4128	5			?	?			<1				<1	<1	Indet calcined bone, cf chicken eggshell
6	302	5	4124	Ditch fill, cut 4125	5			?	?								<1	Indet burnt bone
6	302	7	4111	Ditch fill, cut 4112	5			?	?								<1	Indet tiny burnt bone fragment
6	302	507	3116	fill ditch 3114	20													
6	302	512	3223	fill ditch 3220	20													
6	302	523	3208	fill ditch 3206	20												1	Indet cattle size
6	302	525	3186	fill ditch 3197	20													
6	302	527	3186	fill ditch 3197	20													
6	302	529	3188	fill ditch 3187	20													
6	302	530	3189	fill ditch 3187	20													
6	303	500	3065	Ditch fill	20	21	6200		37/188*			<1					<1	Eroded unburnt and burnt bone, rodent
6	303	501	3058	Ditch fill	16	18	12000		2/39*				2				<1	
6	303	505	3098	Ditch fill	18	20.5	12000		12:75			<1					<1	Frog/toad skeleton
6	303	515	3054	fill ditch 3053	5													
6	303	516	3055	fill ditch 3053	5													
6	303	517	3056	fill ditch 3053	5												1	2x indet bone frags
6	303	518	3056	fill ditch 3053	5												65	Pig man (j6k3)





A Ph	A L	Sample	context	Feature type	vol.	wt. kg.	residue vol. in ml	Pot \$	flint \$	Brick/tile wt g	Fe object	magnetic wt.	ham'r scale no.	fired earth wt.	marine shell wt.	egg-shell wt.	bone wt g.	comment
7	111	52	10113	Grave fill, cut 10115	0			?	?			1	12		3			Periwinkle, degraded amber?
7	207.01	407	2675	fill ditch 20017	20													
7	207.01	408	2677	fill ditch 20017	20													
7	207.01	409	2679	fill ditch 20017	25													
7	207.01	417	2916	fill ditch 2915	25													
7	207.01	421	2582	fill ditch 2902	25										1		<1	Indet bone, mussel, oyster
7	207.01	425	2644	fill ditch 20010	25													
7	207.01	426	20009	fill ditch 20010	10													
7	207.01	434	2833	erosional deposit	5													
7	207.01	435	2679	fill ditch 20017	12.5													
7	214	401	2561	fill pit 2560	10												55	Pig-fem, fragmented man j9k5
7	214	402	2565	fill pit 2564	20												1	2 indet bone frags
7	214	403	2567	fill pit 2566	10													
7	214	404	2600	fill pit 2599	15												99	Bos-mtc, mtt; pig-man (female), hum
7	214	420	2561	fill pit 2560	20													
7	302.01	4	4117	Ditch fill, cut 4118	5			?	?									
7	302.01	506	3080	fill ditch 3077	20													
7	302.01	510	3125	fill ditch 3123	20													



A Ph	A L	Sample	context	Feature type	vol.	wt. kg.	residue vol. in ml	Pot \$	flint \$	Brick/tile wt g	Fe object	magnetic wt.	ham'r scale no.	fired earth wt.	marine shell wt.	egg-shell wt.	bone wt g.	comment
7	302.01	511	3148	fill ditch 3147	20										4			Oyster
7	302.01	519	3212	fill ditch 3206	20													
7	302.01	520	3211	fill ditch 3206	20												<1	Indet bone frag
7	302.01	521	3211	fill ditch 3206	20												2	Indet eroded csz
7	302.01	522	3210	fill ditch 3206	20												1	1x indet bone frag; s/g li
7	302.01	524	3182	fill ditch 3181	20													
7	302.01	526	3184	fill ditch 3181	20													
7	302.01	528	3185	fill ditch 3181	20													
7	305	6	3305	Ditch fill, cut 3003	10			?	?			<1					<1	Mouse
10	113	30	1378	fill pit 1302	20													
10	114	106	8913	Grave fill, cut 8912	140			?	?			1	9*		<1		<1	Human bone, Oyster, mussel, Bank vole
10	114	107	8911	Grave fill, cut 8910	23			?	?			<1	2					Human bone
10	114	108	9204	Pit fill, cut 9200	20			?	?			<1					4	Sheep max. molar 3
10	115	723	17376	Fill of posthole 17378	26	29	5500	2:3	29:2			<1	8					
10	115	724	17466	Fill of 17468	25	28	6500		9:1			<1	2					
10	115	725	17392	Fill of posthole 17394	25	25	5000		21/18			<1						



A Ph	A L	Sample	context	Feature type	vol.	wt. kg.	residue vol. in ml	Pot \$	flint \$	Brick/tile wt g	Fe object	magnetic wt.	ham'r scale no.	fired earth wt.	marine shell wt.	egg-shell wt.	bone wt g.	comment
10	115	726	17395	Fill of posthole 17398	21	25	6000		7/<1?			<1	1					
11	116	11	1222	Control	9	11	4750					<1	2					
11	121	727	17544	From sheep grave 17546	11	12.5	3500		6/<1			<1					26	Coal-<1g
11	123	707	17272	Fill of pit 17264	20	27	5750					1	1				3	Pig tooth, burnt and cracked flint
11	123	708	17283	Fill of post-pit 17279	10	13	1500	1:3	22:2			<1	6			<1	1	
11	123	709	17300	Fill of pit 17299	3	4	700		2/-			<1						
11	123	710	17301	Fill of pit 17299	8	8	1500		2/<1			<1	1					
11	123	711	17248	Fill of post-pit 17246	10	12	1500		37/5	<1		1	9			<1	7	Coal-<1g, burnt & cracked flint
11	123	712	17251	Fill of pit 17246	10	14	2000	1/<1	74/196?	1		1	5		<1	<1	<1	Clay pipe stem, mussel
11	123	713	17298	Fill of pit 17295 (0-10cm)	0.8	0.97	90					<1	1					
11	123	714	17297	Fill of pit 17295 (10-20cm)	1	1.77	200					<1					<1	
11	123	715	17296	Fill of pit 17295 (20-30cm)	1.1	1.55	150		1/<1			nc						
11	123	716	17296	Fill of pit 17295 (30-40cm)	1	1.19	50					<1	1					
11	123	717	17296	Fill of pit 17295 (40-50cm)	1.1	1.5	175					<1	1					



A Ph	A L	Sample	context	Feature type	vol.	wt. kg.	residue vol. in ml	Pot \$	flint \$	Brick/tile wt g	Fe object	magnetic wt.	ham'r scale no.	fired earth wt.	marine shell wt.	egg-shell wt.	bone wt g.	comment
11	123	718	17319	Fill of pit 17318	20	23	6000	1:1	8:1			<1						
11	123	719	17307	Fill of pit 17294	7	9	2250		34/34			<1	5					
11	123	720	17311/2	Mixed contents from fill of pit 17303	10	11	800		4/<1			<1	3			<1	<1	Lead shot
11	123	721	17315	Fill of pit 17304	20	23	4500		121/70?			<1	4			<1		Coal-<1g
11	308	503	3015	Quarry pit fill	17	17	4200		92/252*			<1						
11	308	504	3016	fill quarry pit 3013	20													
0	100.04	105	8016	cremation deposit grave 8017	40			?	?			<1	1					Cremated human bone
0	100.05	33	1401	fill grave 1403	13													
0	102.07	104	8014	Cremation deposit grave 8015	42			?	?			<1	1					Human bone
0	124	10	1231	Control	9	11	1000	3:4	-/218*			<1				<1	1	Sheep tooth enamel, bird eggshell
0	124	12	1233	Control	9	9	2250											
0	128	31	1394	fill pit 1395	10													
0	128	32	1396	fill pit 1397	4													
0	140	704	17232/17234	Mixed from features 17231 & 17233	16	19	2000		25/9*			<1	12				45	Pig tooth
0	140	706	17254	cremation deposit grave 17253	19	25	3250	2:1	12/<1?			2	40				163	Cremated human bone



A Ph	A L	Sample	context	Feature type	vol.	wt. kg.	residue vol. in ml	Pot \$	flint \$	Brick/tile wt g	Fe object	magnetic wt.	ham'r scale no.	fired earth wt.	marine shell wt.	egg-shell wt.	bone wt g.	comment
0	140	722	17234	Cremation deposit grave 17233	7	9	1500		11/<1			<1	11			<1	95	
0	144	51	10057	Ditch fill, cut 10057	0			?	?			1	3					
0	223	410	2697	natural	25													
0	223	415	2745	layer	20													
0	224	423	2824	palaeo-channel	0													
0	230	400	2587	fill animal grave 2588	10												9	Dog -phal, fragments skull
0	234	406	2674	colluvial	20													
0	234	416	2504	layer	25													
0	234	422	2821	colluvial	25													
0	234	424	2820	colluvial	15													
0	235	405	2815	fill pit 2814	5												29	Partial chicken skeleton
0	241	100	4507	Pit fill, cut 4508	10			?	?			1	6				71	Piglet and rabbit skeletons
0	313	1	4201	colluvial	10			\$				<1					2	Indet bone
0	313	2	4202	Anthropogenic layer	10							1	*				<1	Bank vole, eel
0	313	513	3282	palaeo-channel	40												2	4 x indet bone frags
0	313	514	3283	palaeo-channel	20													
0	316	502	3070	Tree throw	9	9	2000	1:<1	18/59*			<1	1	<1				Glass x1
0	410	610	452	hearth 451	0													
0	414	618	778	hearth 777	20													

\*- flint not worked; # flint burnt or heated; \$ - no/wt; ! - worked flint; £ - heated stones

**Table 42: Archaeological finds from samples**



phase	AL no	sample	context		vol.	wt. kg.	flot vol	char-coal \$	charred grain *	charred chaff *	charred seed *	snails £	
3.00	100.00	1	1103	Cremation	4	5	2		1			2/2	Open country
3.00	100.00	2	1103	Cremation	2	3	9	-/1	1			4/2	Open country
3.00	100.00	3	1104	Cremation	1	2	4	1/2				3/2	Open country
3.00	100.00	4	1106	Cremation	1	2	2	1/1	1		1	2/2	Open country
3.00	100.00	34	1405	Fill ditch 1404	20		50	1/2	1			4/2	Open country
3.00	100.00	46	1485	Fill ditch 1486	20		15	1/2	1			4/2	Open country
3.00	100.00	61	1570	Fill pit 1571	20		30	1/2				4/2	Open country
3.00	201.00	701	17153	Fill of pit 17157	60	92	17	2/4	1		1	5/2	Barley?, hazelnut, pig, open country
3.00	201.00	703	17153	Fill of pit 17157	12	20	9	2/3	1			3/2	Hazelnut, pig, open country
3.00	201.00	702	17154	Fill of pit 17157	82	117	40	4/5	1		1	5/2	Hazelnut, hawthorn pip?, pig, antler, open country
4.00	101.00	738	17612	Fill of ditch 17614	40	53	15	1/2	1			5/3	Mussel, woodland
4.00	101.00	739	17613	Fill of ditch 17614	32	40	5	1/2	1			3/2	Open country/mixed
4.00	101.00	740	17613	Fill of ditch 17614	8	10	2	-/3				3/2	Open country
4.00	101.00	741	17633	Fill of pit 17634	32	41	2	-/1				2/2	Open country
4.00	101.00	743	17644	Fill of pit 17648	1.9	2.14	1	-/1				2/2	Open country
4.00	101.00	744	17645	Fill of pit 17648	1.5	1.6	<1					1/2	Open country
4.00	101.00	742	17646	Fill of pit 17648	5	6	<1	-/1	1			2/2	Wheat, open country
4.00	101.00	745	17647	Fill of pit 17648	1.7	2	<1					1/1	
4.00	101.00	746	17647	Fill of pit 17648	1.8	2.1	-						
4.00	101.00	747	17649	Fill of ditch 17651	1.6	1.96	1	-/1				2/2	Open country
4.00	101.00	748	17650	Fill of ditch 17651	1.7	2	<1					2/2	Open country
4.00	101.00	749	17650	Fill of ditch 17651	1.95	2.3	<1					1/1	
4.00	101.00	728	Sk 7552	Head area from grave 17550	0.5	0.83 5	<1						Eroded human? bone
4.00	101.00	729	Sk 7552	Abdomen area from grave 17550	0.8	1.2	4					1/1	Eroded human bone
4.00	101.00	730	Sk 7552	r. hand area of grave 17550	0.2	0185	<1						Eroded human? bone
4.00	101.00	731	Sk 7552	l.hand area of grave 17550	0.4	0.41 5	<1						Eroded human? bone
4.00	101.00	732	Sk 7552	r.foot area of grave 17550	0.5	0.5	3					1/1	Eroded human? bone
4.00	101.00	733	Sk 7552	l.foot area of grave 17550	0.2	0.25 5	1					1/1	Eroded human? bone
4.00	202.00	101	4306	Pit fill, cut 4305	10		120	1/2				5/3	Mixed
4.00	202.00	427	2801	Fill pit 2590	40		36	1/2				5/3	Woodland/mixed
4.00	202.00	428	2802	Fill pit 2590	40		125	1/2	1			5/3	Woodland/mixed
4.00	202.00	429	2806	Fill pit 2590	15		2	1/-				3/3	Woodland
4.00	202.00	430	2807	Fill pit 2590	5								
4.00	202.00	431	2808	Fill pit 2590	25		30					4/3	Woodland
4.00	202.00	432	2810	Fill pit 2590	25		6					3/3	Woodland



phase	AL no	sample	context		vol.	wt. kg.	flot vol	char-coal \$	charred grain *	charred chaff *	charred seed *	snails £	
4.00	300.00	508	3144	Fill pit 3143	5		25	1/2	1		1	5/3	Wheat, hazelnut, woodland/mixed
4.00	300.00	509	3145	Fill pit 3143	5		40	2/2	1		1	5/3	Wheat?, hazelnut, woodland
4.00	400.00	609	422	Layer in Hearth 420	10		65	5/5			?		
4.00	401.00	619	737	Fill pit 738	20		2	1/3	1		1		
5.00	102.00	750	17764	Fill of pit 17765	53	52.5	140	5/5			2	5/3	Hazelnut, pig, cattle, small bird, burnt bone, woodland
5.00	204.00	705	17045	Fill of pit 17049	70	91	30	3/3	1		2	5/2	Wheat/barley?, hazelnut, pig, sheep/goat, vole, mussel, chicken(?) eggshell, open country
5.00	402.00	8	2003	Fill cut 2002	10		125	5/5	1		?		
5.00	402.00	9	2005	Fill cut 2004	10		160	5/5	1	1	?	1/1	Barley?
5.00	402.00	604	77	Pit fill	2.5	3	2	2/3		1		1/2	Open country
5.00	402.00	605	78	Pit fill	9	11.5	1	1/2			1	2/2	Open country
5.00	402.00	601	316	Fill pit 315	20		30	5/5	2		1	2/2	Barley, pulse?, open country
5.00	402.00	602	320	Fill pit 319	20		65	5/5	1		?	1/1	
5.00	402.00	603	323	Fill pit 319	10		4	1/2	1		?		
5.00	402.00	606	411	Fill pit 413	0								
5.00	402.00	607	416	Fill rubbish pit 415	60		60	5/5	3		2	1/1	Barley, wheat
5.00	402.00	608	417	Fill rubbish pit 415	20		10	5/5	1		1	1/1	
5.00	402.00	611	543	Fill pit 542	10		1	1/2			?		
5.00	402.00	612	677	Fill pit 674	20		15	4/5	3	2	3		Barley
5.00	402.00	630	744	Fill pit 743	10		3	1/3			1	1/1	
5.00	402.00	613	748	Fill Hearth 747	0		1	1/1	1				Barley
5.00	402.00	614	749	Fill hearth 747	0		1	1/2	1		1		
5.00	402.00	615	750	Fill hearth 747	0		1	1/1			1		
5.00	402.00	616	751	Fill hearth 747	0		1						
5.00	402.00	617	752	Fill hearth 747	5		1	1/2	1		?		Barley
5.00	402.00	620	776	Fill grave 775	9		50	5/5			£		
5.00	402.00	621	802	Fill pit 804	8		15	4/5	1		2		Barley
5.00	402.00	622	809	Fill pit 812	10		12	3/5	1			1/1	Wheat
5.00	402.00	623	811	Fill pit 812	10		24	5/5	1				Barley, rodent skelly
5.00	402.00	631	872	Fill pit 871	10		5	2/5			2	1/1	
5.00	402.00	628	885	Fill structure cut 879	2		1	1/2					
5.00	402.00	624	886	Fill structure cut 879	2		1	1/2					
5.00	402.00	625	887	Fill structure cut 879	2		<1						
5.00	402.00	626	888	Fill structure cut 879	10		150	5/5			2		Poss charred wood working evidence?
5.00	402.00	627	909	Fill rubbish pit 910	20		2	1/5			2		
5.00	402.00	629	965	Fill structure cut 964	8		20	5/5			1		
5.00	402.00	632	990	Fill rubbish pit 984	10		34	5/5	1		1		
6.00	100.01	42	1411	Fill ditch 1414	20		50	1/2	1			5/2	Open country
6.00	100.01	43	1480	Fill ditch 1482	20		38	1/2	1			5/2	Barley?, open country
6.00	100.01	44	1481	Fill ditch 1482	20		15	2/2	1			5/2	Wheat, open country
6.00	100.01	45	1483	Fill ditch 1484	20		60	1/3	1			4/2	Barley, open country



phase	AL no	sample	context		vol.	wt. kg.	flot vol	char-coal \$	charred grain *	charred chaff *	charred seed *	snails £	
6.00	100.01	47	1487	Fill ditch 1488	20		25	1/2	1			5/2	Open country
6.00	100.01	60	1569	Fill pit 1571	20		50	1/3	1			4/2	Wheat, barley, open country
6.00	100.02	21	1250	Cremation spit	52	60	110	5/5				5/3	Open country
6.00	100.02	22	1251	Cremation spit	37	40	240	5/5	1			5/2	Wheat?, open country
6.00	100.02	23	1252	Cremation spit	30	32	110	5/5	1			5/3	Open country
6.00	100.02	24	1252	Cremation spit	5	6	7	1/3				4/3	Open country
6.00	100.02	15	1254	Cremation-spit 1	24	29	100	5/5	1			5/2	Wheat?, barley?, open country
6.00	100.02	17	1256	Cremation	10.5	13	290	5/5			1	5/3	Grass? Seed. Open country
6.00	100.02	18	1257	Cremation	17	21	320	5/5	2			5/2	Barley, oat/grass, open country
6.00	100.02	19	1259	Cremation – spit 1	1.25	2	75	5/5				4/2	Open country
6.00	100.02	20	1260	Cremation – spit 2	1.5	2	50	5/5	1			4/2	Wheat, open country
6.00	100.02	25	1276	Cremation	3	3	15	4/5	1			4/2	Barley?, open country
6.00	100.02	13	1282	Cremation	78	82	200	5/5	1			5/3	Open country
6.00	100.02	14	1283	Cremation	123	123	360	5/5	2		1	5/3	Barley, pea/pulse, open country
6.00	100.02	26	1290	Posthole fill	2.5	3.5	5	2/3				4/2	Open country
6.00	100.02	27	1291	Cremation	9	9	120	5/5				4/2	Open country
6.00	100.02	28	1293	Cremation spit 1	2	2	7	2/3				4/2	Open country
6.00	100.02	16	1255	Cremation spit	10	11	25	3/5			1	5/2	Open country
6.00	100.02	110	9416	Grave fill, cut 9415	2		2	1/3				3/2	Open country
6.00	100.02	111	9419	Grave fill, cut 9415	2		9	3/4				4/2	Open country
6.00	100.02	112	9420	Grave fill, cut 9415	2		100	5/5				3/2	Open country
6.00	100.02	113	9421	Grave fill, cut 9415	2		7	3/3				3/2	open country
6.00	100.02	35	1416	Fill grave 1415	12		60	3/4	1		1	5/2	Wheat, hazelnut, open country
6.00	100.02	36	1418	Fill grave 1417	100		1000	5/5	1			5/2	Open country
6.00	100.02	37	1435	Fill grave 1436	220		600	5/5	2			5/2	Wheat, barley? open country
6.00	100.02	38	1437	Fill grave 1438	30		70	3/5	1			5/2	Wheat, oat/rye?, open country
6.00	100.02	39	1439	Fill grave 1440	4		10	3/4				3/2	Open country
6.00	100.02	40	1456	Fill grave 1455	16		15	1/2	1			4/2	Wheat?, open country
6.00	100.02	41	1457	Fill grave 1455	8		5	1/1	1			3/2	Open country
6.00	100.02	50	1492	Fill grave 1495	8		4	1/1				3/2	Open country
6.00	100.02	48	1493	Fill grave 1495	3		1	1/1	1			2/2	Open country
6.00	100.02	49	1493	Fill grave 1495	7		3	1/2				3/2	Open country
6.00	100.02	51	1497	Fill grave 1499	8		4	1/2	1		1	3/2	Wheat, oat?, open country
6.00	100.02	52	1497	Fill grave 1499	5		1	1/1				2/2	Open country
6.00	100.02	53	1498	Fill grave 1499	3		2	1/1				3/2	Open country
6.00	100.02	54	1500	Fill grave 1503	1		1	1/1	1			2/2	Wheat, barley?, open country
6.00	100.02	55	1500	Fill grave 1503	2		1					2/1	Open country
6.00	100.02	56	1502	Fill grave 1503	4		5	1/1	1			3/2	Open country
6.00	100.02	57	1535	Fill grave 1534	10		16	2/4			1	5/3	Open country
6.00	100.02	58	1535	Fill grave 1534	5		60	5/5				5/2	Open country
6.00	100.02	59	1536	Fill grave 1537	5		110	5/5				5/2	Open country
6.00	100.03	103	8003	Ditch fill, cut 8009	10		20	1/3	1			5/3	Open country





phase	AL no	sample	context		vol.	wt. kg.	flot vol	char-coal \$	charred grain *	charred chaff *	charred seed *	snails £	
6.00	100.03	29	1340	Fill ditch 1346	40		80	1/2	1			5/2	Open country
6.00	100.06	5	1161	Cremation	14	19	15	2/4	1		1	5/3	Open country
6.00	100.06	6	1161	Cremation	28	32	32	4/5	1			5/2	Wheat, open country
6.00	100.06	7	1162	Cremation	33	40	24	4/5	1			5/3	Open country
6.00	100.06	8	1163	Cremation	34	41	15	2/3	1		1	5/3	Barley?, hazelnut, open country
6.00	100.06	9	1166	Inhumation	73	87	25	3/3	2			5/2	Wheat, barley?, open country
6.00	100.06	109	9311	Grave fill, cut 9012	80		170	5/5	1		1	5/3	Wheat, open country
6.00	104.00	734	17691	Fill of pit 17689	9	11.5	8	2/3	1			5/3	Wheat?, mixed
6.00	104.00	735	17691	Fill of pit 17689	9	10	12	2/3	1		1	5/3	Wheat, barley?, hazelnut, open country/mixed
6.00	104.00	736	17691	Fill of pit 17689	10	11	20	2/3	1			5/3	Barley?, wheat?, burnt bone, open country/mixed
6.00	104.00	737	17691	Fill of pit 17689	10	13	25	2/3	1		1	5/3	Wheat, hazelnut, woodland/mixed
6.00	206.00	102	4804	Ditch fill, cut 4803	10		18	-/2	1			5/3	Mixed, shrew
6.00	207.00	411	2628	Make up layer	25		30	2/4	2		1	5/2	Barley, wheat, hazelnut, open country
6.00	207.00	412	2647	Make up layer	18		11	2/4	2			5/2	Barley, wheat?, open country
6.00	207.00	413	2693	Layer	25		15	2/5	2			5/2	Barley, wheat?, open country
6.00	207.00	414	2694	Layer	25		18	2/2	1		1	5/3	Barley, wheat?, open country
6.00	207.00	418	2919	Fill ditch 2915	20		4	1/2				3/2	Open country
6.00	207.00	419	2919	Fill ditch 2915	25		5	1/2	1			3/2	Wheat?, open country
6.00	209.00	50	10019	Quarry pit fill, cut 10026	0		45	2/3	2	1	1	5/2	Wheat, barley, hazelnut, pulse, open country
6.00	302.00	7	4111	Ditch fill, cut 4112	5		2					4/2	Open country
6.00	302.00	5	4124	Ditch fill, cut 4125	5		1					3/2	Open country
6.00	302.00	3	4127	Ditch fill, cut 4128	5		6	1/1				4/2	Open country
6.00	302.00	507	3116	Fill ditch 3116	20		30	1/2	1			5/2	Wheat, open country
6.00	302.00	525	3186	Fill ditch 3197	20		1					2/2	Open country, <i>Lymnaea truncatula</i>
6.00	302.00	527	3186	Fill ditch 3197	20		<1					1/1	
6.00	302.00	529	3188	Fill ditch 3187	20		<1					1/2	
6.00	302.00	530	3189	Fill ditch 3187	20		3					2/2	Open country
6.00	302.00	523	3208	Fill ditch 3206	20		2				1	3/2	Open country
6.00	302.00	512	3223	Fill ditch 3220	20		50		1			4/2	Open country
6.00	303.00	501	3058	Ditch fill	16	18	9					4/2	Open country
6.00	303.00	500	3065	Ditch fill	20	21	30	1/2	1			5/2	Barley, open country
6.00	303.00	505	3098	Ditch fill	18	20.5	18		1			5/2	Grass seed?, open country
6.00	303.00	515	3054	Fill ditch 3053	5		8	1/2	1		1	4/2	Pea/bean?, open country
6.00	303.00	516	3055	Fill ditch 3053	5		7	-/2	1		1	4/2	Hazelnut, open country
6.00	303.00	517	3056	Fill ditch 3053	5		4					4/2	Open country
6.00	303.00	518	3056	Fill ditch 3053	5		5					4/2	Open country
7.00	111.00	52	10113	Grave fill, cut 10115	0		200	1/3	1			5/3	Wheat?, open country
7.00	207.01	426	20009	Fill ditch 20010	10		8	1/1	1			5/2	Open country
7.00	207.01	421	2582	Fill ditch 2902	25		2	-/2				3/2	Open country
7.00	207.01	425	2644	Fill ditch 20010	25		14	1/1	1			5/2	Open country
7.00	207.01	407	2675	Fill ditch 20017	20		8	1/2	1			4/2	Open country
7.00	207.01	408	2677	Fill ditch 20017	20		9	1/2	1		1	4/2	Open country



phase	AL no	sample	context		vol.	wt. kg.	flot vol	char-coal \$	charred grain *	charred chaff *	charred seed *	snails £	
7.00	207.01	409	2679	Fill ditch 20017	25		6	1/2			1	4/2	Open country
7.00	207.01	434	2833	Erosional deposit	5		1	1/1				2/2	Open country
7.00	207.01	417	2916	Fill ditch 2915	25		9	1/2				5/2	Open country
7.00	214.00	401	2561	Fill rubbish pit 2560	10		20	1/3	1		1	4/2	Hazelnut, open country/mixed
7.00	214.00	420	2561	Fill rubbish pit 2560	20		2	-1				3/2	Open country
7.00	214.00	402	2565	Fill rubbish pit 2564	20		25	1/2	1			5/2	Barley?, wheat?, open country/mixed
7.00	214.00	403	2567	Fill rubbish pit 2566	10		20	1/2				4/2	Open country
7.00	214.00	404	2600	Fill pit 2599	15		20	1/2	1			4/2	Open country
7.00	302.01	4	4117	Ditch fill, cut 4118	5		6	1/1				3/2	Open country
7.00	302.01	506	3080	Fill ditch 3077	20		75					5/2	Open country
7.00	302.01	510	3125	Fill ditch 3123	20		30		1			5/2	Wheat?, open country
7.00	302.01	511	3148	Fill ditch 3147	20		25		1			5/2	Wheat, open country
7.00	302.01	524	3182	Fill ditch 3181	20		1					2/2	Open country
7.00	302.01	526	3184	Fill ditch 3181	20		3					3/2	Open country, <i>L. truncatula</i>
7.00	302.01	528	3185	Fill ditch 3181	20		1					2/2	Open country, <i>L. truncatula</i>
7.00	302.01	522	3210	Fill ditch 3206	20		5					4/2	Open country
7.00	302.01	520	3211	Fill ditch 3206	20		10				1	4/2	Pulse?, open country
7.00	302.01	521	3211	Fill ditch 3201	20		8			1		5/2	Open country
7.00	302.01	519	3212	Fill ditch 3206	20		10		1			5/2	Open country
7.00	303.00	435	2679	Fill ditch 20017	12.5								
7.00	305.00	6	3305	Ditch fill, cut 3003	10		6	1/1				4/2	Open country
10	113.00	30	1378	Fill pit 1302	20		60					5/3	Woodland
10	114.00	107	8911	Grave fill, cut 8910	23		60	1/3	1			5/2	Wheat, rye?, barley?, open country, unburnt human bone
10	114.00	106	8913	Grave fill, cut 8912	140		300	2/3	1		1	5/2	Wheat, rye?, open country, unburnt human bone
10	114.00	108	9204	Pit fill, cut 9200	20		75	5/5	4	1	2	5/2	Barley, wheat, oat?, pea?, open country
10	115.00	723	17376	Fill of posthole 17378	26	29	20	2/3	1			5/3	Wheat, open country
10	115.00	725	17392	Fill of posthole 17394	25	25	30	3/4	1			5/3	Open country
10	115.00	726	17395	Fill of posthole 17398	21	25	10	2/3				5/2	Open country
10	115.00	724	17466	Fill of 17468	25	28	1	1/1				3/3	Open country/mixed
11	116.00	11	1222	Control	9	11	10	1/2	1		1	5/2	Wheat, barley, open country
11	121.00	727	17545	From sheep grave 17546	11	12.5	8	1/2	1			3/2	Wheat, open country
11	123.00	711	17248	Fill of post-pit 17246	10	12	20	3/4	1		1	5/3	Wheat?, periwinkle, chicken (?) eggshell, mixed
11	123.00	712	17251	Fill of pit 17246	10	14	20	2/3				5/3	Mussel, chicken (?) eggshell, mixed
11	123.00	707	17272	Fill of pit 17264	20	27	100	5/5	1		1	3/2	Wheat, pig, ?burnt peat?, open country
11	123.00	708	17283	Fill of post-pit 17279	10	13	7	1/2	1			4/3	Chicken (?) eggshell, open country
11	123.00	713	17295	Fill of pit 17295 (0-10cm)	0.8	0.97	1	1/1	1			3/2	Barley?, open country
11	123.00	714	17295	Fill of pit 17295 (10-20cm)	1	1.77	2	-1				2/2	Open country



phase	AL no	sample	context		vol.	wt. kg.	flot vol	char-coal \$	charred grain *	charred chaff *	charred seed *	snails £	
11	123.00	715	17295	Fill of pit 17295 (20-30cm)	1.1	1.55	1	-/1				2/2	Open country
11	123.00	716	17295	Fill of pit 17295 (30-40cm)	1	1.19	2	-/1				2/2	Open country
11	123.00	717	17295	Fill of pit 17295 (40-50cm)	1.1	1.5	2	1/2			1	2/2	Pea/bean?, open country
11	123.00	709	17300	Fill of pit 17299	3	4	4	2/3				4/3	Mixed
11	123.00	710	17301	Fill of pit 17299	8	8	10	2/2				4/3	Mixed
11	123.00	719	17307	Fill of pit 17294	7	9	5	1/2	1			3/2	Open country
11	123.00	720	17311/2	Mixed contents fill pit 17303	10	11	5	1/2	1		1	5/2	Galium, chicken (?) eggshell, open country
11	123.00	721	17315	Fill of pit 17304	20	23	10	1/3				5/3	Chicken (?) eggshell, open country/mixed
11	123.00	718	17319	Fill of pit 17318	20	23	30	3/5				5/3	Open country
11	308.00	503	3015	Quarry pit fill	17	17	8	1/1				5/3	Open country/mixed
11	308.00	504	3016	Fill quarry pit 3013	20		30	1/2	1			5/3	Barley, woodland/mixed
0	100.04	104	8014	Grave fill, cut 8015	42		100	5/5	1		1	4/2	Open country, cremated human bone
0	100.04	105	8016	Grave fill, cut 8017	40		240	5/5				3/2	Open country, cremated human bone
0	100.05	33	1401	Fill grave 1403	13		45	-/2	1			4/2	Wheat?, open country
0	124.00	10	1231	Control	9	11	4	1/2	1			4/2	Barley, wheat, open country
0	124.00	12	1233	Control	9	9	1	-/1	1			2/2	Wheat?, open country
0	128.00	31	1394	Fill pit 1395	10		35		1			4/2	Open country
0	128.00	32	1396	Fill pit 1397	4		10	1/1	1			3/2	Open country
0	140.00	704	17232/17234	Mixed content from features 17231 & 17233	16	19	9	1/2	1		1	4/2	Wheat, hazelnut, pig, open country
0	140.00	722	17234	Cremation 17233	7	9	3	1/2				4/2	Chicken (?) eggshell, open country
0	140.00	706	17254	Cremation 17253	19	25	120	5/5	1		1	4/2	Crem human bone, chicken(?) eggshell, open country
0	144.00	51	10057	Ditch fill, cut 10057	0		25	1/2	1			5/2	Barley?, oat?, open country
0	223.00	410	2697	Natural layer	25		4	1/3				3/2	open country
0	223.00	415	2745	Natural layer	20		1	1/1	1			2/2	Open country
0	224.00	423	2824	Fill palaeochannel 20023	0		11	1/4	1			5/2	Open country
0	230.00	400	2587	Fill grave 2588	10		40	2/4	1		1	4/2	Oats, grass?, open country/mixed
0	234.00	416	2504	Colluvial deposit	25		6	-/2	1			3/2	Oat?, open country
0	234.00	406	2674	Colluvial deposit	20		10	-/3				4/2	Open country
0	234.00	424	2820	Colluvial layer	15		5	1/3	1		1	4/2	Wheat, open country
0	234.00	422	2821	Colluvial layer	25		10	1/2	1			4/2	Open country
0	235.00	405	2815	Fill pit 2814	5								
0	236.00	433	2848	Fill of palisade 2847			1					2/2	Open country
0	241.00	100	4507	Pit fill, cut 4508	10		10					1/1	
0	313.00	513	3282	Fill palaeochannel 3281	40		70	-/2	1			5/3	Barley, open country
0	313.00	514	3283	Fill palaeochannel 3281	20		9	1/2	1			5/2	Open country
0	313.00	1	4201	Colluvial			8	1/2	1			4/2	Open country



phase	AL no	sample	context		vol.	wt. kg.	flot vol	char-coal \$	charred grain *	charred chaff *	charred seed *	snails £	
0	313.00	2	4202	Anthropogenic layer	10		23	1/2				5/3	Open country
0	316.00	502	3070	Tree throw	9	9	5	1/2	1			4/3	Barley?, open country/mixed
0	410.00	610	452	Fill Hearth 451	0		2	1/2	1		1		Hazelnut
0	414.00	618	778	Fill hearth 777	20		8	5/5			2		

\*frequency 1=1-10; 2=11-50; 3=51-150; 4=151-250; 5=>250; £ = abundance/diversity diversity 1=1-3; 2=4-10; 3=11-25 taxa; \$ frequency of fragments charcoal >2mm /<2mm

**Table 43: Environmental finds from sample flots**



## 5. ANALYTICAL POTENTIAL OF THE DATA

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### 5.1 Introduction

In this section the potential of each data set to address the project objectives is reviewed. This information is summarised in Table 45.

### 5.2 Contextual Data

**Aim 1: Earlier prehistoric activity on the Weston Hills** No Mesolithic, Neolithic or early Bronze Age features were located within the area covered by field artefact collection and test pitting (Area 4). Therefore, the contextual data has no potential to correlate artefact densities with potential occupation.

**Aim 2.1: Late Neolithic to earlier Bronze Age settlement activity** The fills of AL200 and AL201 yielded potentially structured deposits (see pottery, flint and animal bone assessments) and further study of the composition and deposition pattern within these pits has moderate potential to establish the nature, date and form of these features. No further pits or other features dated to the Neolithic or early Bronze Age were identified in proximity of these two landscapes, and therefore the data has no potential to address issues of prehistoric settlement types.

**Aim 2.2: The barrow complex** This original aim of the excavation included a detailed exploration of the extent, form and construction sequence of the barrow cemetery (AL100). The excavation revealed the barrows to be denuded, plough truncation having removed traces of *in situ* mound material. Closely dateable material in the primary deposits was not present and only one barrow contained a possible primary burial. Although further study of the composition and sequence of the barrow ditch fills will be undertaken and comparative research into other barrow complexes carried out, the overall potential to address this aim is considered low to moderate.

**Aim 3.1: Late Bronze Age to middle Iron Age settlement activity** The contextual data has moderate potential to address issues of settlement density and geographical location in the period spanning the transitional late Bronze Age/early Iron Age to the middle Iron Age. Although only 12.97% of the contexts assigned to landscapes were phased to this period, the features, particularly those situated in Area 4, displayed little sign of intrusive activity or truncation. In addition a range of activity types were identified including possible ritual deposition (the pit containing the aurochs AL300), a burial monument (square barrow AL101) and settlement (AL400-402).

**Aim 3.2: Shift in burial practices late Bronze Age to Iron Age** A range of burial practices were encountered including 'monumental' burial (square barrow AL101), isolated cremations (AL402), and in the later Iron Age a decapitation burial (AL100.06). In addition dispersed human remains were recovered from a pit (AL203). The contextual data has some potential for dating some of the burials through examination of comparative material, in particular the inhumation within a square barrow and the decapitation rite.



Radiocarbon dating has some potential to confirm the provisional phasing, although this potential has to be considered moderate given the condition of some of the skeletal remains.

***Aim 3.3 Continuation of the pit alignment in Area 2:*** Although tree-throw holes were encountered in Area 2 during excavation, no evidence for a pit alignment was revealed. Hence the contextual evidence has addressed this specific aim, and there is no potential for further research.

***Aim 3.4 Confirmation of the presence of Iron Age dykes in Areas 1 and 2:*** Of the two possible dykes identified from aerial photographs, AL215 proved to be post-medieval drainage ditches, whereas the short parallel ditches in Area 1 (AL 107) produced quantities of Roman ceramics. These are no longer thought to be ‘dykes’ and a search for parallels within the later Iron Age / Roman period will be sought (see new research aim below).

***Aim 4.1: Late Iron Age and Roman landscape and settlement*** Deposits of the late Iron Age and Roman periods are well represented, comprising 30.66% of the contexts assigned to landscapes, and consist in the main of boundaries, roads and burials, with limited evidence for settlement structures. The nature of the investigations, a slice through the landscape, limits the overall potential of the data as the extent and inter-relationships of the identified boundary features could not be fully investigated. The investigations did however allow the opportunity to confirm or refute the dating of untested cropmark evidence assigned to this period, and suggests areas of possible future investigation. The presence of two roads originating in the late Iron Age may contribute to a better understanding of the process of development of Baldock from the late Iron Age settlement/oppidum to a Roman small town. The date and function of the majority of contextual evidence encountered will be able to be defined, and the evidence will assist in building a picture of this slice of rural landscape. There is moderate potential for establishing the relationship between this rural landscape and the late Iron Age and Roman settlement at Baldock.

***Aim 4.2: Roman burial practices*** Although the quantity of burials assigned to the Roman period is limited (up to 13), a range of practices are present, including urned (3) and un-urned (possibly 8) cremations (AL100.02) and a single decapitated inhumation (AL100.06), all centred within the barrow complex, and a later, isolated inhumation burial (AL111). There is low to moderate potential to examine changing burial practices between the earlier and later Roman periods, and to add to the data on rural instances of burials and their treatment within the landscape. Comparison of these burial practices with published data for the small town of Baldock and the wider region may assist in determining if there were differing practices between more ‘urban’ areas and rural areas. Radiocarbon dating of a selection of the cremations and the decapitated inhumation could confirm the provisional dating.

***Aim 5.1: The Hospital of St Mary Magdalene*** Only limited investigation of the medieval hospital (AL114) was undertaken during the full excavation, the majority of the site being preserved *in situ*. Excavation evidence, although



limited, will allow correlation with documentary sources to establish the identification of the hospital and aid interpretation of documents relating to the hospital.

***Aim 5.2: Medieval and post-medieval trackways*** Further excavation delimited the surviving extent of these two trackways. Their proximity and similarities in alignment suggest that the more easterly trackway, rather than representing an earlier field division, may have been a realignment of the same trackway. Further documentary study will not, therefore, contribute to identifying earlier field boundaries.

***Aim 5.3: Medieval barn and post-medieval fenceline*** The contextual data has moderate potential to confirm the provisional dating of the barn (AL115) by researching parallels for morphology and construction techniques. Examination of historic map data to support or refute the suggested late date of the fence alignment (AL123) has low potential.

***Aim 6.1: The Baldock hinterland*** The contextual data has moderate to high potential to assist in defining archaeological deposits/structures, thereby elucidating their form and function, and spatial and temporal relationships. This work will assist in forming a better understanding of the nature of changing land use patterns over time and has moderate potential to contribute to clarifying the relationship between the town of Baldock and the surrounding rural settlement.

***Aim 6.2: Changing burial practices Bronze Age through Roman*** The excavations uncovered a range of burial practices provisionally dated from the Bronze Age to Roman periods. These included four inhumations and some 16 cremations. Both urned and un-urned cremations were found, the majority in the locale of the barrow complex (AL100.02) while others were deposited in isolated pits (e.g. AL140; AL402 – AG410.02). The inhumations exhibited differing treatment in deposition, single examples of crouched, decapitated and extended skeletons being recorded. The presence of disarticulated human remains in early to middle Iron Age pit AL203 may also indicate yet another deposition practice. Treatment within the greater landscape also varied, a crouched inhumation within a square barrow (AL101), a decapitated burial, with a cremation immediately overlying it, associated with the barrow complex (AL100.06) and a probable later Roman isolated burial (AL111). The contextual data has moderate to high potential to address this research aim, by providing a framework in which to study the contributing data sets and through comparison to other published examples in the region. A strategy of radiocarbon dating may assist in confirming the provisional phasing and also in providing dates for the currently unphased burials (AL 100.04, AL140 and AL100.05).

***New Research Aim - short double linears*** Three short double linear features were identified and tentatively interpreted as a form of boundary marker. While these share some similarities, occurring in pairs, all containing Roman pottery in their fills, and at least two situated adjacent and at right angles to



roads (Area 2: AL213, Area 3: AL304), there are some differences. AL107 is longer, wider and deeper than the other two, up to 12m in length, 4m wide and over 1m in depth, as compared to lengths of between 3.5 to 8m, width of 0.7m and 1m, and depths of 0.1m and 0.2m. AL107 is not directly associated with a roadway, although it is conceivable that it may have had a relationship to the Icknield Way. Palmer (1994, 7) noted that the RCHME sketch mapping of Hertfordshire identified 46 pairs of ditches in the north of the county, and these were initially suggested as sites of pillow mounds, but attention was also drawn to the fact that many of them are located in close proximity to round barrows (Fenner 1992; 1993). More detailed comparisons of the three Baldock features, and a search for published parallels, could assist in determining whether these actually form a class of related features and could possibly assist in defining their function.

### 5.3 Pottery

***Aim 2.1: Late Neolithic to earlier Bronze Age settlement activity*** The pottery has low potential to address this aim. The recovery of a single sherd of Peterborough ware from pit AL200 has confirmed the dating of the feature to the late Neolithic period. No pottery of similar date derived from other features. Similarly, a small quantity (49g) of collared urn recovered from pit AL201 has defined the chronology for this feature. However, in both cases, the assemblages are too fragmentary to allow further information to be gleaned.

***Aim 2.2: The barrow complex*** The pottery has low potential to address this aim. A small quantity (276g) of pottery derived from funerary complex AL100, including 211g of a rim from an inverted urn found in a heavily truncated cremation burial (AG106.02). Although remains of a collared urn were identified, most sherds derived from sieved residues of environmental samples and are consequently highly fragmentary. It may be possible at the analysis stage to further identify this material.

***Aim 3.1: Late Bronze Age to middle Iron Age settlement activity*** The pottery has moderate-high potential to address this aim. Excavation recovered a sizeable pottery assemblage spanning the late Bronze Age to middle Iron Age periods, including a wide range of fabric types and forms, which can be usefully compared with contemporary sites in the region. This may assist in the clarification and/or refinement of the dating for Iron Age types. Examination of functional evidence may suggest the nature of activity undertaken during these periods and any spatial variation noted may indicate chronological or functional differences between areas of settlement.

***Aim 4.1: Late Iron Age and Roman landscape and settlement*** The pottery has moderate-high potential to address this aim. Excavation recovered a sizeable late Iron Age and Roman pottery assemblage, including a wide range of fabric types and forms, which can be usefully compared with the late Iron Age settlement and Roman small town of Baldock and other contemporary sites in the region. Examination of the assemblage may assist in clarifying the nature of late Iron Age/early Roman transition and the subsequent





development of the site into the Roman period. Study of functional evidence may indicate the nature of activity undertaken during these periods and any spatial variation noted may indicate chronological or functional differences between areas of the site. The presence or absence of particular pottery types may be an indicator of status and social/economic development and will help to place the study area in a local and regional context.

***Aim 5.1: The Hospital of St Mary Magdalene*** The pottery has low-moderate potential to address this aim. A small pottery assemblage (51 sherds, weighing 1.7kg), datable to the early medieval period, was recovered from enclosure ditch AL114 and its internal features. This may assist in refining chronology, particularly in combination with documentary research, and may indicate the nature of activity occurring.

***Aim 5.3: Medieval barn and post-medieval fenceline*** The pottery has low potential to address this aim. Examination of the small pottery assemblages recovered from barn AL115 (2g), fence line AL123 (66g) and quarry pits AL407 (9g) may assist in confirming the suggested date for these features, although the material is highly fragmentary and includes a high proportion of residual material.

***Aim 6.1: The Baldock hinterland*** The pottery has moderate-high potential to address this aim. Excavation recovered a sizeable pottery assemblage with a wide date range, spanning the late Neolithic to the post-medieval periods. The pottery has some potential through the relative proportions of differing pottery types for demonstrating ceramic continuity or hiatus between chronological periods. Study of functional evidence may indicate the nature of activity undertaken during these periods and any spatial variation noted may indicate chronological development or functional differences between areas of the site. The presence or absence of particular pottery types may be an indicator of status and social/economic development and will help to place each chronological period in a local and regional context.

***Aim 6.2: Changing burial practices Bronze Age through Roman*** The pottery has low potential to address this aim. Pottery was recovered from twenty-two burials (twenty cremations and two inhumations). The majority of the assemblage derived from the sieved residues of environmental samples and is highly fragmentary (average sherd weight 5g). Although the pottery has been provisionally dated, re-examination of the material during analysis may allow closer dating to be assigned to unidentified fragments.

#### **5.4 Ceramic Building Material**

***Aim 4.1: Late Iron Age and Roman landscape and settlement*** The small assemblage of Roman tile has low potential to assist in dating features, and to some degree, determining the nature and form of activity. Although no evidence for substantial structures was encountered during excavation, the presence of roof tile suggests the presence of a sizeable building in the vicinity.



***Aim 5.1: The Hospital of St Mary Magdalene*** A small assemblage of brick and tile, weighing 1.1kg was recovered from enclosure ditch AL114. This may assist in establishing chronology, particularly in combination with documentary research, although it is unlikely that dating can be further refined beyond a broad range.

***Aim 5.3: Medieval barn and post-medieval fenceline*** Examination of the small roof tile assemblages recovered from fence line AL123 (117g) and quarry pits AL407 (213g) may assist in confirming the suggested date for these features, although the material cannot be closely dated. The absence of ceramic building material from barn AL115 is obviously problematic.

***Aim 6.1: The Baldock hinterland*** The brick and tile assemblage has moderate potential to assist in dating features, although the intrusive nature of much of the assemblage is problematic. As all the ceramic building material is redeposited, it cannot be directly associated with the use of the features from which it was recovered, although, for the post-Roman periods, is able to broadly suggest the form and nature of activity.

## 5.5 ***Flint***

***Aim 1: Earlier prehistoric activity on the Weston Hills*** An objective of the excavation strategy was to fully sample the plough soil zone to retrieve as comprehensive an assemblage of Mesolithic, Neolithic and Bronze Age surface artefacts as possible, in hopes of identifying areas or concentrations where *in situ* features may lie.

The field walking exercise yielded a total of 15 struck flints comprising one crude scraper and 14 pieces of flake debitage. Subsequent test pitting in the area of the Weston Hills (Area 4) yielded 167 pieces of struck flint. The presence of eight blades, including utilised blades, within this assemblage may hint at possible Mesolithic/early Neolithic activity, but this evidence is far outweighed by the presence of multiple platform cores (10), and flakes (138) more suggestive of a date in the later Neolithic/early Bronze Age. However, no *in situ* features dating to the later Neolithic/early Bronze Age were located during excavations in Area 4. Therefore, the field walking and test pit assemblages have no potential to address this aim.

***Aim 2.1: Late Neolithic to earlier Bronze Age settlement activity*** The assemblage of struck flint typologically dated to the later Neolithic/early Bronze Age is better represented than earlier periods, although the majority of this appears to be residual within later contexts. The exception to this is the Phase 3 assemblage from L201, AG521.01. This assemblage, found in association with remains of at least one collared urn, deserves further study. The presence of burnt flakes from a polished flint axe, a damaged oblique arrowhead and other tools and debitage suggests a structured deposit. Edmonds (1995, 133) suggests that deliberate deposition during gatherings or meetings may have helped to cement ties between members of different communities. Episodes of burial or destruction may even have been undertaken when a particular bond or relationship was brought to an end.



***Aim 3.1: Late Bronze Age to middle Iron Age settlement activity*** The flint assemblage from the Phase 5 pit (L102 AG541.01), 154 pieces in total, should be examined more closely for the extent of secondary damage, in light of the suggestion of continuing flint usage into the Iron Age (Young and Humphrey 1999). This has low potential to contribute to the aim of expanding knowledge of early to middle Iron Age settlement activity in Hertfordshire.

## **5.6 Registered and non-ceramic bulk artefacts**

***Aim 3.1: Late Bronze Age to middle Iron Age settlement activity*** Although no artefacts were found within deposits of late Bronze Age/early Iron Age (Phase 4) and the assemblage from deposits of early to middle Iron Age (Phase 5) is limited in quantity, there exists moderate potential, when combined with the evidence from other data sets, to contribute to expanding the knowledge of early to middle Iron Age settlement in the area. The recovered artefacts indicate some activity was on-going in Area 4, L402 and the nature of the objects, in particular the loom weight, suggest that this was domestic in nature. The production of woollen fabrics was a widely practised home-based craft, probably carried out on a part-time basis within each household (Cunliffe 1991, 444). Further domestic activity may be suggested by the presence of a weaving tool within a pit fill (L102) located in the extreme north of the investigated area. Although the potential to determine the extent of settlement in this area is limited, due to its somewhat isolated position, Gwilt (1997, 162) has postulated that worked bone and antler were deliberately selected for deposition at boundary locations, the choice of worked skeletal material symbolising ‘nature tamed’ whilst the location emphasising the boundary between culture and nature. The function of the pin beater may also have played a part in its selection, adding further emphasis to the concept of subduing or taming naturally occurring resources.

***Aim 4.1: Late Iron Age and Roman landscape and settlement*** The assemblage of artefacts from the late Iron Age to early Roman has moderate potential to assist in identifying features belonging to this period and to a lesser extent, in determining the nature of that activity. The assemblage suggests two main areas of activity in Phase 6, the construction and use of the road way (L207) sometime around the mid-1<sup>st</sup> century AD and to the south, a small concentration of items in boundary ditch L305, suggestive of occupation in the vicinity.

The assemblage of seven Iron Age coins, four of which derived from deposits of Phase 6, will enable comparison with the corpus of late Iron Age coin finds from previous excavations in the ‘oppidum’, thereby contributing to understanding the transition between ‘oppidum’ and small town

The Phase 7 assemblage from L207.01 indicates that this roadway continued in use until at least the late 4<sup>th</sup> century AD. From the coin evidence it also appears that the adjacent roadway to the south, L302.01, continued in use at the same time. The recovery of a half *siliqua* of Flavius Victor (387-388) suggests a *terminus ante quem* for the in-filling of enclosure ditch L108.



The assemblage of 52 Roman coins will enable a coin loss profile to be compiled. This profile will be compared with that from excavations within Baldock, and has moderate potential to assist in contributing to the understanding the relationship between the small town and outlying area. Comparison to profiles from other type sites, and also sites within the larger region, has moderate potential to contribute to understanding the regional pattern of coin-loss.

The remaining assemblages from Roman phased deposits are not particularly informative. Only inter-cutting pit group L214, with its awl, stylus and brooch coil, might hint at domestic occupation. The finds from the other Phase 7 deposits are not closely datable and nor are they diagnostic of any particular activity.

**Aim 4.2: Roman burial practices** The finds accompanying Burial L111 suggest a later Roman date for this inhumation. Although the finds assisted in establishing a suggested date for the burial, thereby providing additional data, the overall potential to contribute further to establish whether there is a differing pattern between urban and rural areas is limited.

**Aim 6.1: The Baldock hinterland** The provisional dating of the artefact assemblage indicates it has potential to suggest a date for the formation of the disuse fills of features spanning the early to middle Iron Age to the medieval periods. The range of artefacts in individual assemblages, combined with the evidence from other data sets, also has potential to suggest areas of ‘domestic’ occupation. However, the presence of intrusive objects in some of the assemblages suggests that overall there is moderate potential to address this aim.

**Aim 6.2: Changing burial practices Bronze Age through Roman** The fills of eight burials, comprising five cremations and three inhumations, yielded finds. With the exception of the Phase 7 inhumation L111, none of the assemblage is particularly diagnostic, nor is it closely datable. The presence of clear colourless glass fragments in six of the eight burials, along with the buckshot in L114, indicates a degree of intrusive activity. The size of this material does however suggest that the intrusive material may have been introduced through worm action. Generally this assemblage has low potential to further assist in dating the burials.

Phase	AL no	AG no	Feature	Context Type	Narrow Term	Material	Date range	Number
6.00	100.02	102.04	1270	CD	vessel fragments?	Glass		2
6.00	100.02	102.04	1270	CD	vessel fragment?	Glass		1
6.00	100.02	102.04	1284	CD	sheet fragment	Iron		1
6.00	100.02	102.04	1284	CD	strip fragment	Iron		1
6.00	100.02	102.04	1284	CD	burnt chalk?	Stone		1
6.00	100.02	102.04	1284	CD	glass fragment	Glass		3
6.00	100.02	102.04	1436	CD	small awl(?)	Iron		1
6.00	100.06	101.02	9312	CD	glass fragment	Glass		1



6.00	100.06	101.02	9312	CD	nail?	Iron		1
7.00	111.00	706.01	10115	F	Small globular bead	Glass	3rd +	1
7.00	111.00	706.01	10115	F	small segmented bead	Glass	Roman	1
7.00	111.00	706.01	10115	F	bead	Glass	3rd +	1
7.00	111.00	706.01	10115	F	small globular bead	Glass	3rd +	1
7.00	111.00	706.01	10115	F	sheet fragment	Copper alloy		1
7.00	111.00	706.01	10115	F	window fragment?	Glass	modern?	1
10.00	114.00	605.01	8912	F	buck shot pellet	Lead	modern?	1
10.00	114.00	605.01	8912	F	vessel fragment?	Glass	l med-pmed	1
.00	100.04	102.07	8017	CD	fragment of glass	Glass		1
.00	100.05	105.02	1403	F	perforated cockle shell	Shell		1

**Table 44: Non-ceramic artefacts in burials**

## 5.7 Human Bone

**J McKinley**

***Aims 2.2: The barrow complex; 3.2: Shift in burial practices Bronze Age to Iron Age; Aim 4.1: Late Iron Age and Roman landscape and settlement, 4.2: Roman burial practices, Aim 6.1: The Baldock hinterland and 6.2:***

***Changing burial practices Bronze Age through Roman*** Further analysis of the human skeletal assemblage has the potential to inform on the individuals represented, and on the formation processes of the cremation-related deposits and the rituals attendant on the mortuary rite. The condition of the bone from some of the deposits will undoubtedly limit the level of attainable detail with respect to the individual, but analysis will provide more detailed demographic data with regard to the number, age and sex of individuals. Following reconstruction, some metric data – including stature estimates and cranial indices – will be recoverable for some of the inhumed bone (Table 35). A study of the pathological lesions will enable assessment of the health and, by inference, potentially the status of individuals; however, the small numbers of individuals exhibiting pathological lesions and poor skeletal recovery will limit the scope of this part of the analysis.

Period-related data from the various sites will be considered as a whole and in relation to other sites within the region to assess similarities and variations in populations and mortuary practice across the region. Comparison of the late Iron Age/early Romano-British assemblage with other contemporaneous material from the wider vicinity e.g. Baldock, St. Albans and Stansted (McKinley 1990; 1991; 1992; in prep.), may shed light on the nature and variations between the communities burying their dead within these cemeteries, on their health and, by inference, social status, and help demonstrate any differences in mortuary practice reflective of local variation, or to the wealth and status of the settlement being served by the cemetery.

It is proposed to obtain a series of radiocarbon dates for two to three of the cremations within the barrow ditches, the undated cremations surrounding the barrows, the isolated cremations and two inhumations (the square barrow burial and the decapitated burial adjacent to Barrow I). This work may assist in confirming the provisional phasing and also in providing dates for the currently unphased burials (AL 100.04, AL140 and AL100.05).



## 5.8 Animal Bone

**J Rackham**

*Aim 2.1: Late Neolithic to earlier Bronze Age settlement activity; Aim 3.1: Late Bronze Age to middle Iron Age settlement activity; Aim 4.1: Late Iron Age and Roman landscape and settlement; Aim 6.1: The Baldock hinterland*

Despite the poor preservation of most of the animal bone assemblage and the problems alluded to in Section 4.8.2, the pattern suggested in the fragment data, one of marked changes in the animal husbandry and also the environment during the 1<sup>st</sup> millenniums BC and AD, is unlikely to have been generated by any of the identified biases. The assemblage therefore does have the potential for making a significant contribution to our understanding of the husbandry of the periods represented and possibly also changes to the local environment. Individual feature groups may also reflect the specifics of the site or pit within which they were deposited. This is particularly the case for the aurochs and the partial skeleton of the young deer in Phase 6, and possibly also other features. The main focus of further work on this assemblage will be targeted at understanding the changes in the species ratios through time and the analysis of individual landscape groups to identify ritual or other behaviours associated with the deposition of the bones.

## 5.9 Environmental Samples

**J Rackham**

*Aim 2.1: Late Neolithic to earlier Bronze Age settlement activity; Aim 2.2: The Barrow complex; Aim 3.1: Late Bronze Age to middle Iron Age settlement activity; Aim 4.1: Late Iron Age and Roman landscape and settlement; Aim 6.1: The Baldock hinterland*

In general the palaeoeconomic potential of these samples is limited. The absence of pot and bone from most of the samples that are not grave or cremation fills suggests relatively low levels of settlement waste entering the deposits. The finds densities are too low, preservation is a limiting factor and presence data is the only outcome for some of the species identified during this assessment.

The charred plant remains have some limited potential and the few larger samples would repay further work, but the results will be primarily the identification of what crop plants are present in different periods, and perhaps some assessment of which cereal species is more important in Phase 6.

The charcoal, although also fairly limited, can be used to address two questions. The first is the fuel being used to fire the pyres for the cremations and the second is whether this fuel assemblage differs from the charcoal rich assemblages of the Phase 5 settlement activity on the Weston Hills (Area 4).

Further work on the extraction of the hammerscale from the remainder of the sample residues may permit us to focus on which areas of the Phase 5-11 period sites have associated smithing activity, although none of the concentrations found so far suggests that this was actually being undertaken within the excavated areas of the site.



Perhaps the most positive result from the assessment is the clear identification from the molluscan evidence of a change in the environment between Phases 4 and 5 and the possibly localised woodland in Areas 2 and 3 in Phase 4, but not along the floor of the valley in Area 1. The patterns of molluscan data indicated above need to be substantiated and illustrated through counted assemblages from the different periods, areas and feature types. These analyses would appear to be complimentary to the results from the hand excavated animal bone assessment and may permit some overall environmental and land-use interpretations.

Some of the charcoal, the cereal grain and the hazelnut shell fragments have potential value for radiocarbon dating. In all cases AMS dating is recommended since this allows the dating of individual items and avoids the possibility of mixing material that derives from different phases, such as re-deposited or residual charcoal.

### **5.10 Soil Micromorphology**

**R Macphail**

**Aim 4.1: Late Iron Age and Roman landscape and settlement; Aim 6.1: The Baldock hinterland** Soil micromorphology (Courty *et al* 1989, 1994) and bulk analysis of soil organic matter (LOI), inorganic and organic phosphate fractions and magnetic susceptibility ( $\chi$ ,  $\chi_{\max}$  and  $\% \chi_{\text{conv}}$ ) should permit the identification of the original soil type, any arable impact, manuring, animal traffic and other anthropogenic impacts on the site locally (Crowther 2003; Crowther and Barker 1995; Englemark and Linderholm 1996; Macphail *et al* 1999). This analysis has moderate to high potential to assist in determining landuse prior to the construction of the Phase 6 roadway (AL207) and also contemporary landuse in the vicinity of the roadway. It may also assist in understanding the construction and use of the roadway. This work will also contribute to forming a better understanding of the nature of changing land use patterns over time. Reference studies on the same parent materials from the Experimental Earthwork at Overton Down and 'Iron Age/Romano-British' Butser Ancient Farm (Crowther *et al* 1996; Macphail *et al* 2004) will be used for comparative work.



Aims	Contextual	Pottery	CBM	Flint	Registered Artefacts	Human Bone	Animal Bone	Environmental samples	Soil micro-morphology
<b>Period Specific</b>									
<b>Aim 1</b> Phases 1&3	None	None	None	None	None	None	None	None	None
<b>Aim 2.1</b> Phases 2&3	Moderate	Low	None	Moderate	None	None	Low-mod	Low-mod	None
<b>Aim 2.2</b> Phase 3	Low-mod	Low	None	None	None	Mod- high	Low	Low	None
<b>Aim 3.1</b> Phases 4&5	Moderate	Mod-high	None	Low	Moderate	None	Moderate	Moderate	None
<b>Aim 3.2</b> Phase 4	Mod-high	None	None	None	None	Moderate	None	None	None
<b>Aim 3.3</b> Phase 4&5	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Aim 3.4</b> Phase 5	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Aim 4.1</b> Phase 6	Moderate	Mod-high	Low	None	Moderate	Low	Moderate	Low-mod	Mod-high
<b>Aim 4.2</b> Phase 7	Low-mod	None	None	None	Low	Moderate	None	None	None
<b>Aim 5.1</b> Phase 10	Moderate	Low-mod	Low	None	None	None	None	None	None
<b>Aim 5.2</b> Phases 10&11	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Aim 5.3</b> Phases 10&11	Moderate	Low	Low	None	None	None	None	None	None
<b>Cross-period</b>									
<b>Aim 6.1</b>	Mod-high	Mod-high	Moderate	Low	Moderate	Low	Moderate	Moderate	Moderate
<b>Aim 6.2</b>	Moderate	Low	None	None	Low	Mod-high	None	None	None
<b>New aims</b>									
<b>Short double linears</b>	Moderate	Moderate	None	None	None	None	Low	None	None

Analytical potential: None; Low; Moderate; High; n/a: original fieldwork objective that cannot be addressed by the recovered data sets.

**Table 45: Fieldwork and new research objectives and analytical potential by data set**





## 6. SUMMARY RESEARCH OBJECTIVES FOR ANALYSIS

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### 6.1 *Introduction*

On the basis of the assessment of the various archaeological data sets generated by the fieldwork a series of updated research objectives are summarised below. The fieldwork aims (see Table 45) can be synthesized into the following five broad research objectives.

### 6.2 *Revised Research Objectives*

**Objective 1** [subsumes Fieldwork Aims 2.1 and 2.2]

How does the excavated evidence for late Neolithic and early Bronze Age, including structured pit deposits (AL200 and AL201), and the barrow complex contribute to our understanding of the ‘ritual landscape’ of northern Hertfordshire?

**Objective 2** [subsumes Fieldwork Aim 3.1]

How does the excavated evidence for late Bronze Age/early Iron Age and middle Iron Age settlement of the Weston Hills contribute to the understanding of earlier Iron Age Hertfordshire?

**Objective 3** [subsumes Fieldwork Aims 4.1, 6.1 and new ‘short double linears’]

How does the excavated evidence from the late Iron Age and early Roman periods correspond to the cropmark evidence and current theories on the Baldock oppidum? Can the evidence contribute to understanding the development of the small town of Baldock and its interaction with the surrounding countryside?

**Objective 4** [subsumes Fieldwork Aims 3.2, 4.2 and 6.2]

How does the range of funerary rites and funerary architecture encountered reflect the changing patterns of social interaction and landscape use in the earlier Bronze Age to the Roman period, and how does this relate to evidence from within the region?

**Objective 5** [subsumes Fieldwork Aims 5.1, 5.2 and 5.3]

Can correlation of documentary sources and excavation evidence verify the identification of the original location of the Hospital of St Mary Magdalene? How does this enclosure relate to the surrounding medieval/early post-medieval landscape?



## 7. UPDATED PROJECT DESIGN

### 7.1 Introduction

Albion operates a fully integrated, computer-based system for analysing archaeological data. All contextual, artefactual and ecofactual information is entered onto an Access database. Plan and section drawings are digitised. The databases and digital drawings are interfaced via a GIS system (Gsys) allowing all chronological, spatial and material groupings (and any combination thereof) to be viewed and manipulated. In addition, all the site photographs are held in a digital format, allowing them to be viewed on screen with database and digital drawings.

The system enables rapid and flexible analysis of the project data sets. It also facilitates the output of a series of text reports, supported by plan and other graphic forms. These will form the basis for the final publication report.

### 7.2 Publication

A publication synopsis has been submitted to East Anglian Archaeology for approval. The editorial board next meets on 20<sup>th</sup> January 2005. The suggested format is set out below (Table 46) with indicative page and figure counts. The contextual evidence for each phase of activity will be presented, followed by an illustrated discussion of the assemblage of artefacts and ecofacts dating to this period.

	<i>Contents</i>	<i>pgs</i>	<i>figs</i>	<i>tbls</i>	<i>photo</i>
	<i>Table of contents</i>	1			
	<i>List of tables, figures and plates</i>	1			
	<i>List of contributors</i>	1			
	<i>Acknowledgements</i>	1			
	<i>Summary</i>	3			
<b>1</b>	<b>Introduction</b>				
	Site location and description	1	2		
	Archaeological background	1			
	The archaeological investigations	2	2		
	Structure and terminology in the report	1			
<b>2</b>	<b>Results of the investigations</b>				
	Neolithic and Early Bronze Age				
	Contextual evidence	5	4		
	Pottery and CBM	1	1		
	Flint	1	2		
	Human Remains	1			
	Animal bones and Environmental	1.5			
	Later Bronze Age to early Iron Age				
	Contextual evidence	4	3		1
	Pottery and CBM	0.5	0.5		
	Flint	0.5	0.5		
	Human Remains	1			
	Animal bones and Environmental	1		1	
	Early to middle Iron Age				



	Contextual evidence	5	4		
	Pottery and CBM	2.5	1		
	Other finds	1	1		
	Human Remains	1		1	
	Animal bones and Environmental	2	1	1	
	Late Iron Age to early Roman				
	Contextual evidence	8	6	1	1
	Pottery and CBM	5	2		
	Other finds	2	2		
	Human Remains	3		2	
	Animal bones and Environmental	2		1	
	Roman				
	Contextual evidence	7	4		
	Pottery and CBM	4	2		
	Other finds	1.5	1		
	Human Remains	1	1		
	Animal bones and Environmental	2	1	1	
	Medieval				
	The Leper Hospital - historical & documentary research	12	3		
	Contextual evidence for the hospital	2	2		
	Other medieval contextual evidence	2	2		
	Pottery and CBM	1	1		
	Other finds	1	2		
	Human Remains	0.5			
	Animal bones and Environmental	1		1	
<b>3</b>	<b>Cross-period discussions &amp; Synthesis</b>	8	2		
<b>4</b>	<b>Appendices</b>				
	Methodologies	10			
	Pottery type series	5			
	<i>Bibliography</i>	10			
	<i>Index</i>	3			
	<b>TOTAL</b>	131	53	9	2

**Table 46: Provisional outline of the publication**

The chronological phased development of the site will provide the basic structure for the site narrative. Within each phase, text will be organised by landscape and group, with artefactual and ecofactual information integrated into the text as appropriate.

The outline (Table 46) of the publication should be considered a guideline and may be altered during the analysis and pre-publication stages if the results warrant it.

### 7.3 **Timetable**

Following the acceptance by the Client and the HCA of the assessment and updated project design, Albion would like to proceed rapidly with the analysis and publication of the results. This would ensure project momentum is maintained.



Detailed method statements, with task numbers and resource levels, are provided in Appendix 1. Table 47 sets out the five key stages within the analysis and publication programme. The time required to reach the first three key stages is indicated and these could serve as appropriate monitoring points, if required. Table 48 presents a proposed schedule.

Completion of	Description of tasks	Time
<b>Key stage 1</b>	Analysis	Up to 7 months
<b>Key stage 2</b>	Report writing for data sets and illustration	Up to 8 months
<b>Key stage 3</b>	Completion of 1 <sup>st</sup> draft	Up to 4 months
<b>Key stage 4</b>	Albion's referring process and submission to <i>East Anglian Archaeology</i>	Up to 2 months
<b>Key stage 5</b>	Publication and archiving	*

**Table 47: Provisional timetable to complete the project**

\*Publication, and therefore deposition of the archive, will be dependent on the length of time taken for the external refereeing process and actual publication of the monograph.

#### **7.4 Archiving**

On publication of the final report the archive of materials (subject to the landowners' permission) and accompanying records will be deposited with North Hertfordshire Museums Resource Centre (Letchworth Museum and Art Gallery), Accession Number BAL860/2004.



Task	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Jan-08
documentary research						■																	
checking data	■																						
cropmark research	■																						
cropmark digitising	■																						
sub-group & group analysis	■	■	■	■	■																		
landscape & phase analysis						■	■																
pottery quantification & type series	■	■																					
cbm quantification & type series			■																				
coin conservation	■																						
non-ceramic narrow term identification	■																						
human remains recording							■																
animal bone recording	■	■						■															
environmental recording	■	■	■						■														
Soil micromorphology prep samples	■	■	■	■																			
<b>Key stage 1</b>								◆															
phasing liaison					★	★	★																
documentary report						■																	
Site narrative								■	■	■													
pottery & cbm publication text								■	■	■													
non-ceramic publication text								■	■														
coin report								■															
human remains report							■																
animal bone report									■														
Environmental report									■														
soil micromorphology analysis & report									■														
radio carbon dating									■	■													
pottery & cbm illustration									■														



Task	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Jan-08	
non-ceramic illustration																								
structural illustrations																								
<b>Key stage 2</b>																								
integration of data sets																								
synthesis/conclusions																								
<b>Key stage 3</b>																								
Albion refereeing & editing																								
<b>Key stage 4</b>																								
submission, external refereeing																								
archive preparation																								
publication																								
accessioning																								
<b>Key stage 5</b>																								

**Table 48: Proposed Analysis Schedule**



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## 9. APPENDIX 1: METHOD STATEMENTS FOR ANALYSIS, PUBLICATION AND ARCHIVING (BY EACH DATA SET)

### 9.1 *Documentary Analysis*

#### **Research of sources and documents (Task 1.1)**

Research of primary sources and documents concerning the leper hospital of St Mary Magdalene will be carried out at Hertford, Hatfield and Kew (PRO). Time has been set aside to survey current work and to translate the various documents.

#### ◆KEY STAGE 1

#### **Documentary Analysis Publication Text (Task 1.2)**

This task will comprise the preparation of the publication report and drafts of accompanying maps. The publication report will present the history of the leper hospital (origin, ownership, move to new location) in the historical context of medieval hospitals; a review of the documentary and topographical evidence pointing to the hospital's suggested location, and correlate the documentary evidence with the excavated evidence. Time has been set aside to liaise with Albion Archaeology staff.

#### ◆KEY STAGE 2

<b>Documentary Analysis</b>			
<b>Task</b>		<b>Staff</b>	<b>Days</b>
<b>1.1</b>	Documentary Research	Ext (BK)	6
◆	<b>KEY STAGE 1</b>		
<b>1.2</b>	Preparation of publication report and maps	Ext (BK)	6
◆	<b>KEY STAGE 2</b>		

**Table 1: Summary of documentary analysis tasks**

### 9.2 *Analysis of the Structural Data*

#### **Research and digitising of cropmark evidence (Tasks 2.1 and 2.2)**

Research on known cropmark evidence in the area immediately surrounding the bypass route will be carried out at the Hertfordshire SMR. Cropmarks considered to be of possible archaeological origin will be identified, digitised, issued with a context feature number and input into the context table in the project database. The incorporation of the cropmark evidence at this stage will enable it to be fully integrated into the analysis of the excavated contextual data.

#### **Checking and integration of digital drawn and contextual data (Task 2.3)**

Albion operates a fully integrated computer-based system of structural analysis using databases (Access) and a mini GIS (Gsys) for interrogation. Basic contextual information has been entered into a database table and has been successfully utilised during the assessment.

The digitised all features drawing produced for the assessment will require checking and correcting to ensure it is linked correctly with the contextual database. Once this is complete, the drawings are fully interrogatable and manipulatable by any database table. In the course of analysis, key section drawings may be selected and scanned so they are easily available during the structural analysis.



Once achieved it is possible to rapidly interrogate data sets within the Gsys programme, for example, the distribution of specific find types or features which are considered to be contemporary can be plotted. This type of interrogation will enhance the analysis of data and is, therefore, likely to assist in the interpretation of the archaeological remains. It also enables basic publication figures to be produced rapidly.

### **Sub-groups and Group Analysis (Task 2.4)**

Construction of the sub-groups and groups will be undertaken utilising stratigraphic, artefactual and spatial information.

The sub-group represents the basic level of grouping within the structural hierarchy, consisting of one or more contexts that are closely related, stratigraphically and interpretively, for example the contexts making up a pit could form sub-groups representing the construction cut, primary and secondary fills. The method of sub-group definition will identify those sub-groups which have limited or no further analytical potential (e.g. sub-groups of geological or modern origin and sub-groups which are undateable). These sub-groups will not be subject to any further analysis.

Sub-groups worthy of further analysis will be assigned to a group. A group will typically consist of sub-groups that are closely related in a processual sense, e.g. the construction and use, the secondary fills or the final disuse fills of a feature. For example, group G535.00 comprises the constructional elements of the square barrow, G535.01 comprises the primary fill in the base of the ditch, G535.02 comprises the secondary fill, etc. In addition, any special deposits that merit individual treatment will be assigned to individual groups.

At group level, material from the various data sets will be integrated. The contextual, ecofactual and artefactual data will be used to write a group text directly into the group database table. The group will be the lowest level of the analytical hierarchy that will appear in the final publication. The group text, with a descriptive and interpretive section, will form the basis for any detail required in the site narrative of the publication text.

### **Landscape and Phase Analysis (Task 2.5)**

The next stage in the structural hierarchy involves the assignment of associated groups to a landscape. There is a predefined series of landscape types including building, enclosure and open area, to which groups are assigned. The landscapes are then assigned to the appropriate phase. A matrix will be produced to define the sequence of land-uses.

The output of this stage of analysis is a textual description of the phases, with appropriate plans and matrices. This will form the framework for the integrated site narrative. Each landscape will be assigned the final level of interpretation known as a phase. The assessment of the data suggests the following phasing units will be appropriate, although it is possible more detailed sub-divisions will be defined.

- Neolithic
- Late Neolithic to early Bronze Age
- Late Bronze Age
- Early-Middle Iron Age
- Late Iron Age to early Roman
- Roman
- Medieval to early post-Medieval

## **◆KEY STAGE 1**

### **Phasing Liaison (Task 2.6)**

Once the provisional final phasing is determined, it will be examined in light of the pottery assemblage. When the final phasing is established liaison will take place to inform the various specialists of the phasing hierarchy, format of their publication text (with a guide number of



words). The project academic advisor will also be consulted at this stage.

### Site narrative (Task 2.7)

This forms the basis of the publication, organised by Phase, with reference to Landscapes and Groups as appropriate, commencing with the earliest Phase. The length of individual sections will be determined by the significance of the evidence. Associated artefactual and ecofactual evidence will be integrated with the site narrative.

### Structural Illustration (Task 2.8)

The digitised site plans will be interrogated *via* the project database to produce mock-up publication illustrations. These will accompany the site narrative, being annotated to identify the features discussed in the text, at an appropriate scale. Distributions of various artefact types and combinations will be produced to determine if any significant depositional patterns can be discerned.

## ◆ KEY STAGE 2

Structural Analysis			
Task		Staff	Days
2.1	Cropmark research and digitising	MAP	12
2.2	Cropmark digitising	PJL	6
2.3	Checking and integration of digital drawn and contextual data	WK	6
		PJL	6
2.4	Sub-group and group analysis	WK	77
		CC	77
		MAP	41
2.5	Landscape and phase analysis	WK	24
		CC	24
		MAP	24
2.4/2.5	Overall management of structural analysis	HBD	18
◆	<b>KEY STAGE 1</b>		
2.6	Phasing liaison (including externals)	MAP	14
2.6	Phasing liaison	HBD	5.5
2.6	Phasing liaison (academic advisor)	SB	2
2.7	Site narrative	MAP	47
		HBD	19
2.8	Structural illustration	PJL	6
		CAM	58
		MAP	9
◆	<b>KEY STAGE 2</b>		

**Table 2: Summary of structural analysis tasks**

## 9.3 Analysis of Ceramic Artefacts

### 9.3.1 Quantification/recording of pottery (Task 3.1) and CBM (Task 3.2)

Pottery and ceramic building material will be laid out in context order. Pottery will be quantified by minimum vessel and sherd count, and weight, and ceramic building material (CBM) by fragment count and weight. Pottery and CBM fabrics have already been identified according to the Bedfordshire Ceramic Types Series, and these will be checked. Correlation with the Baldock Fabric Series (Stead and Rigby 1986) will be made where appropriate. All



attributes such as decoration, evidence of function (sooting, wear marks etc.) and manufacturing techniques (firing characteristics etc.) will be recorded. Any complete or measurable dimensions of CBM fragments will be recorded. All quantified data will be entered onto the relevant table within the site database.

### 9.3.2 Production of technical text for pottery (Task 3.3) and CBM (3.4)

Detailed description of the pottery and CBM recovered, including fabric and form definitions. Selection of pottery vessels or CBM fragments for publication standard illustration will be made at this juncture. The criteria for the selection of illustrated pottery vessels will be as follows:

- all fabrics and forms previously unknown in the county and therefore unpublished
- better examples of those types already published
- vessels from specific features or groups of features
- vessels associated with specific structures
- vessels of intrinsic interest

#### ◆KEY STAGE 1

### 9.3.3 Phasing/publication Liaison (Task 2.6)

See structural analysis section.

### 9.3.4 Pottery publication text (Task 3.5)

A specialist text summarising the pottery assemblage within appropriate chronological periods by fabric type, forms, decoration and attribute. The text will refer to comparative assemblages (published or unpublished). In addition, and where appropriate, the pottery assemblage from elements of the structural hierarchy *i.e.* landscapes and groups will be discussed.

### 9.3.5 CBM publication text (Task 3.6)

A specialist text summarising the CBM assemblage by type/forms.

### 9.3.6 Pottery illustration (Task 3.7)

Illustration of the pottery selected for inclusion in the technical text will be carried out by the Illustrator, in consultation with the artefact analyst.

#### ◆KEY STAGE 2

Ceramic Analysis			
Task		Staff	Days
3.1	Quantification and recording (Pottery)	JW	27
3.2	Quantification and recording (CBM)	JW	4.5
3.3	Pottery technical text (type series)	JW	3
3.4	CBM technical text (type series)	JW	1
◆	<b>KEY STAGE 1</b>		
2.6	Phasing/publication Liaison	JW	1
3.5	Pottery publication text	JW	8
3.6	CBM publication text	JW	2.5
3.7	Pottery illustration	CAM	8
		JW	2.5
◆	<b>KEY STAGE 2</b>		

**Table 3: Summary of ceramic analysis tasks**





## 9.4 Analysis of registered and non-ceramic artefacts

### 9.4.1 Investigative Conservation (Task 4.1)

Three coins require cleaning in order to clarify their identification. This will be carried out at Cardiff University's conservation laboratory, by conservator Phil Parkes.

### 9.4.2 Narrow Term identification (Task 4.2)

Each object will be assigned a narrow term, and where applicable, a date range. This information will be established by an examination of each object, noting;

- form
- method of manufacture
- material and source
- presence of diagnostic features
- condition
- selected parallels from comparable sites
- comparison with ceramic data from the site

Full catalogue descriptions will be entered on to the project database.

The coin assemblage will be analysed by Peter Guest (Cardiff University Archaeology Department). A full list of coins using standard works of reference for identifications will be compiled. Both the Iron Age and Roman coin assemblages will be compared to coin assemblages found elsewhere in and around Baldock in order to up-date the corpus of Iron Age and Roman coins from the town. The remainder of the non-ceramic assemblage will be analysed in-house.

## ◆KEY STAGE 1

### 9.4.3 Phasing/publication liaison (Task 2.6)

See structural analysis section.

### 9.4.4 Non-ceramic publication text (Task 4.3)

Following phasing confirmation, the artefact assemblage will be discussed by chronological periods, with reference to the spatial framework (Landscapes and Groups) of the site. Discussions will include reference to published parallels, object function with reference to activities (e.g. crafts, agriculture), economic status and deposition patterns. Objects for illustration in phase groups will be selected at this juncture. Integration of external specialist report(s) will also be undertaken.

### 9.4.5 Illustration (Task 4.4)

Illustration of the material selected for inclusion in the publication will be carried out by the Illustrator in consultation with the artefact analyst. This task will include mock-ups and paste-ups for the final publication.

## ◆KEY STAGE 2

Other Artefact Analysis			
Task		Staff	Days
4.1	Investigative conservation	Ext (PP)	
4.2	Narrow term ID (internal)	HBD	6
4.2	Narrow term ID (external)	Ext (PG)	3.5
◆	<b>KEY STAGE 1</b>		
2.6	Phasing/publication liaison	HBD	1
4.3	Non-ceramic publication text	HBD	20.5



4.4	Illustration	CAM HBD	22 6
◆	<b>KEY STAGE 2</b>		

**Table 4: Summary of registered and non-ceramic artefact analysis tasks**

## 9.5 Analysis of Human Bone

### 9.5.1 Quantification and recording (Task 5.1)

Analysis of the cremated bone will follow McKinley's standard procedures (McKinley 1994, 5-21; 2004). The age of individuals will be assessed using standard methodologies (Brothwell 1972; Beek 1983; Buikstra and Ubelaker 1994; Scheuer and Black 2000). Sex will be ascertained from the sexually dimorphic traits of the skeleton (Bass 1987; Buikstra and Ubelaker 1994). Where possible a standard suite of measurement will be taken (Brothwell and Zakrzewski 2004) and non-metric traits recorded (Berry and Berry 1967; Finnegan 1978). Indices will be calculated according with Trotter and Gleser (1952; 1958), Brothwell (1972) and Bass (1983).

Pathological lesions are recorded in text and via digital photography; some lesions may warrant photographing for publication purposes.

### 9.5.2 Human bone publication text (Task 5.2)

The identification of suitable samples for radiocarbon dating will form part of the analysis work. If suitable samples are identified, the cremations will be dated following the method described by Lanting *et al* (2001) and the inhumations by collagen extraction. The work will be carried out by Beta Analytic, Florida, USA.

#### ◆KEY STAGE 1

### 9.5.3 Human bone publication text (Task 5.3)

The final publication text will incorporate the results of the analysis.

#### ◆KEY STAGE 2

Human Bone Analysis			
Task		Staff	Days
5.1	Human bone recording	Ext (JMCK)	15
5.2	Extraction of radiocarbon samples	Ext (JMCK)	2
◆	<b>KEY STAGE 1</b>		
5.3	Human bone publication text	Ext (JMCK)	5
◆	<b>KEY STAGE 2</b>		

**Table 5: Summary of human bone analysis tasks**

## 9.6 Analysis of Animal Bone

### 9.6.1 Quantification and recording (Task 6.1)

The tasks required to be carried out on the animal bone assemblage as part of the analysis are:

1. Identification of the unidentified bird bones and checking of the large cattle bones for assignment to aurochs or domestic animals.



2. Detailed analysis of the stratified and dated animal skeletons for information on age, sex and context, and possible reason for burial.
3. Limited further work on some context groups to reconstruct bone fragments not attempted during this assessment.
4. Detailed preservation and fragmentation analysis by area and landscape group to determine the impact of soils on survival and fragmentation.
5. Fragmentation and element analysis of the assemblage. An essential pre-requisite before study of the species ratios and age structure of the sample can be made.
6. Analysis of the post-cranial and dental data on ageing to establish the existence and possible level of bias to the age structure of the sample due to poor preservation.

In addition, radiocarbon dating of the aurochs, one of the most recent finds of aurochs in the archaeological record in this country, is recommended providing identification of a suitable sample.

### ◆KEY STAGE 1

#### 9.6.2 Phasing/publication liaison (Task 2.6)

See structural analysis section.

#### 9.6.3 Animal bone publication text (Task 6.2)

The final report will focus upon understanding the changes in the species ratios through time and the analysis of individual landscape groups to identify ritual or other behaviours associated with the deposition of the bones, taking into account preservation and fragmentation biases.

### ◆KEY STAGE 2

Animal Bone Analysis			
Task		Staff	Days
6.1	Bird and aurochs species identification, preservation, fragmentation and element analysis, dental and post-cranial data, selected reconstruction and analysis of the data	Ext (JR)	6
◆	<b>KEY STAGE 1</b>		
6.2	Publication text	Ext (JR)	2.5
◆	<b>KEY STAGE 2</b>		

**Table 6: Summary of animal bone analysis tasks**

## 9.7 Analysis of the Environmental samples

### 9.7.1 Quantification and recording (Task 7.1-7.5)

The tasks recommended for analysis of the environmental samples are as follows:

- 7.1 Extraction of the hammerscale from the remainder of the sample residues, its counting and distributional and phase analysis to see if it is concentrated in particular landscape groups at particular periods.



7.2 Selection of a series of the richer charcoal assemblages from the cremations, the grave fills, and Area 4 rubbish pits for species identification and identification of wood type, to compare the selection of wood for the pyres versus that for domestic use.

7.3 Archaeobotanical study of the few richer samples and specific identification of the identifiable charred cereal remains in those samples where it has been noted as possibly identifiable.

7.4 Selection of a series of the richer mollusc samples from the different areas and periods to cover the history of the site. Also selection of two or three series where multiple samples are available from pits or ditches. These samples are so rich that they will need to be sub-sampled before identification and quantification. The results will be considered with the results of the animal bone analysis.

7.5 Selection and dispatch of material for radiocarbon dating.

## ◆KEY STAGE 1

### 9.7.2 Phasing/publication liaison (Task 2.6)

See structural analysis section.

### 9.7.3 Environmental samples publication text (Task 7.6)

The final publication text will detail the analysis of selected samples and incorporate the results of the assessment, to create an environmental interpretive account of the site.

## ◆KEY STAGE 2

Environmental Samples Analysis			
Task		Staff	Days
7.1	Hammerscale extraction	Ext (AF)	3.5
	Quantification and distribution	Ext (JC)	0.5
7.2	Selection of charcoal for species and wood type identification	Ext (AF)	0.5
		Ext (RG)	4
7.3	Archaeobotanical study of charred cereal	Ext (AS)	5
7.4	Selection of mollusc samples for identification and quantification	Ext (JR)	14
7.5	Selection of material for possible radiocarbon dating	Ext (RG)	0.5
◆	<b>KEY STAGE 1</b>		
7.6	Environmental publication text	Ext (JR)	3.5
◆	<b>KEY STAGE 2</b>		

**Table 7: Summary of environmental sample analysis tasks**

## 9.8 Soil Micromorphology

### 9.8.1 Analysis (Tasks 8.1-8.2)

To obtain the most information from the preserved soils, a combination of soil micromorphology, magnetic susceptibility, loss-on-ignition and phosphate analysis would provide the most efficient means of studying the deposits. Samples will be impregnated with a crystic resin mixture and undergo 75x50 mm size thin section manufacture. Thin sections will be analysed under plane polarised light (PPL), crossed polarised light (XPL), oblique incident light (OIL) and using fluorescent microscopy (blue light – BL), at magnifications ranging from x1 to x200. Thin sections will be described (and counted) according to standard authorities and reference studies on soil micromorphology applied to archaeology (Bullock *et*



*al.*, 1985; Courty *et al.*, 1989; Macphail and Cruise, 2001; Stoops, 2003). Soil micromorphological interpretations will be based upon the identification of soil microfabric types, included natural and anthropogenic materials, microprobe data and bulk analyses, all of which were combined with the archaeological context information to produce soil microfacies types (SMTs)(Courty, 2001; Macphail and Cruise, 2001).

The bulk samples will be analysed for phosphate (see reviews by Bethel and Máté, 1989; Crowther, 1997; Heron, 2001) and magnetic susceptibility (Clark, 1996; Scollar *et al.*, 1990), both of which are widely used in the investigation of archaeological contexts; and for loss-on-ignition (LOI), which provides an estimate of the organic matter concentration. Analysis will be undertaken on the fine earth fraction (i.e. <2 mm) of the samples. Phosphate-P<sub>i</sub> (inorganic phosphate) and phosphate-P<sub>o</sub> (organic phosphate) will be determined using a two-stage adaptation of the procedure developed by Dick and Tabatabai (1977) in which the phosphate concentration of a sample is measured first without oxidation of organic matter, using HCl as the extractant (P<sub>i</sub>); and then on the residue following alkaline oxidation with NaOBr (P<sub>o</sub>). These will be summed to give total phosphate (phosphate-P), and the ratios phosphate-P<sub>i</sub>:P and phosphate-P<sub>o</sub>:P (expressed as percentages) will be calculated. In addition to  $\chi$  (low frequency mass-specific magnetic susceptibility), determinations will be made of  $\chi_{\max}$  (maximum potential magnetic susceptibility) by subjecting a sample to optimum conditions for susceptibility enhancement in the laboratory.  $\chi_{\text{conv}}$  (fractional conversion), which is expressed as a percentage, is a measure of the extent to which the potential susceptibility has been achieved in the original sample, viz:  $(\chi / \chi_{\max}) \times 100.0$  (Tite, 1972; Scollar *et al.*, 1990). In many respects this is a better indicator of magnetic susceptibility enhancement than raw  $\chi$  data, particularly in cases where soils have widely differing  $\chi_{\max}$  values (Crowther and Barker, 1995; Crowther, 2003). A Bartington MS1 meter will be used for magnetic susceptibility measurements.  $\chi_{\max}$  will be achieved by heating samples at 650°C in reducing, followed by oxidising conditions. The method to be used broadly follows that of Tite and Mullins (1971), except that household flour will be mixed with the soils and lids placed on the crucibles to create the reducing environment (after Graham and Scollar, 1976; Crowther and Barker, 1995). LOI (loss-on-ignition) will be determined by ignition at 375°C for 16 hrs (Ball, 1964).

### 9.8.2 Phasing/publication liaison (Task 2.6)

See structural analysis section.

### 9.8.3 Soil micromorphology publication text (Task 8.3)

The final publication text will detail the analysis of selected samples and interpret the results in the context of the archaeological record.

## ◆ KEY STAGE 2

Soil Micromorphology Analysis			
Task		Staff	Days
8.1	Preparation of thin sections (6)	Ext	
8.1	Preparation of bulk samples (8)	Ext	
8.2	Soil micromorphology analysis and recording	Ext (RM)	2
◆	<b>KEY STAGE 1</b>		
8.3	Soil micromorphology publication text	Ext (RM)	2
◆	<b>KEY STAGE 2</b>		

**Table 8: Summary of soil micromorphology analysis tasks**



## **9.9 Overall Publication, Archiving and Project Management**

### **9.9.1 Editing publication text and integrating specialist reports (Task 9.1)**

The specialist reports will be integrated into the publication and the entire publication will be read and edited to ensure a consistency in approach.

### **9.9.2 Amendments and queries in consultation with specialists (Task 9.2)**

During the production of the synthesis it is likely that a number of questions will arise that the various specialists will need to address.

### **9.9.3 Production of synthesis (Task 9.3)**

A synthetic text will be produced discussing the key elements of the site, probably within the major chronological periods. This will attempt to address the updated research objectives.

#### **◆KEY STAGE 3**

### **9.9.4 Albion refereeing process (Task 9.4)**

Albion has a policy of circulating the first draft of articles intended for publication to the Client, CAO, the project academic advisor and any other interested parties. This task includes time for any required discussion with the referees.

#### **◆KEY STAGE 4**

### **9.9.5 Submission of article and amendments resulting from editors comments to publication text and figures (Task 9.5)**

Amendments to publication text and figures based on comments received from the refereeing process, following submission of the publication article to the editor of *East Anglian Archaeology*.

### **9.9.6 Printing and proof reading (Task 9.6 and 9.7)**

The printing of the article will be arranged by the editor of *East Anglian Archaeology*, but proof reading will be necessary.

### **9.9.7 Archiving and accessioning (Tasks 9.8)**

Upon completion of the report, the written and material archives will be prepared, including microfiching, for accessioning to North Hertfordshire Museums. The cost of transfer includes transport, liaison and museum storage charges.

### **9.9.8 Project management (Task 9.9)**

All project tasks have been identified from Albion's generic task list menu. These have been entered onto the Albion's Time Recording System (TRS) so that expenditure and resources can be tracked throughout the life of the project. The management of the project includes monitoring the task budgets, programming tasks, checking timetables and liaising with all members of the project team.



<b>Overall publication, archiving and project management</b>			
<b>Task</b>	<b>Staff</b>	<b>Days</b>	
◆	<b>KEY STAGE 2</b>		
9.1	Integrating specialist reports and first edit	HBD	12
9.2	Amendments and queries in consultation with specialists during article preparation	MAP HBD	12 3.5
9.3	Production of synthesis	MAP	29
◆	<b>KEY STAGE 3</b>		
9.4	Albion's refereeing process	DS	5
9.4	Albion's refereeing process	HBD	8
9.4	Albion's refereeing process	MAP	6
9.4	Albion's refereeing process (academic advisor)	SB	3.5
9.4	Albion's refereeing process	CAM	5
◆	<b>KEY STAGE 4 Submission to <i>East Anglian Archaeology</i></b>		
9.5	Amendments resulting from editor's comments	HBD CAM	6 2.5
9.6	Printing, indexing, typesetting etc.	Ext	
9.7	Proof reading	HBD	3.5
9.8	Archive preparation (Structural)	WK MAP	12 3.5
9.8	Archive preparation (Artefacts)	JW HBD	2 3.5
9.8	Archive preparation (Environmental)	HLP	2.5
9.8	Archive preparation (Digital)	PJL	1
9.8	Archive preparation (Project management)	HBD	3.5
9.8	Archive preparation (general and liaison)	HLP	3.5
9.8	Archive microfilming	Ext	
9.8	Archive transfer (storage costs)	Ext	
9.8	Archive transfer	WK	1
9.9	Project management (Overall)	HBD	24
9.9	Project management (Albion)	DS	12
◆	<b>KEY STAGE 5</b>		

**Table 9: Overall publication, archiving and management tasks**



## 10. APPENDIX 2: THE PROJECT TEAM

To ensure a consistency of approach the same specialists will be used who have been involved in the assessment stage of the project.

Task	Org.	Title/Organisation	Name
Overall management	Albion	Project Manager (PM)	Holly Duncan
Daily management	Albion	Project Officer (PO)	Mark Phillips
Documentary analysis	EXT	Baldock Local History Soc.	Brendan King
Structural analysis	Albion	Project Supervisor (Sup)	Wes Keir
Structural analysis	Albion	Assistant Supervisor (ASup)	Caroline Clarke
Ceramic analysis	Albion	Artefacts Officer (AO)	Jackie Wells
Artefact analysis	Albion	Artefacts Manager (AM)	Holly Duncan
Coinage analysis	EXT	Cardiff University	Peter Guest
Conservation	EXT	Cardiff University	Phil Parkes
Human Remains	EXT	Wessex Archaeology	Jacqueline McKinley
Environmental samples – selection & extraction	EXT	Environmental Archaeology Consultancy	Alison Foster
Hammerscale	EXT	Environmental Archaeology Consultancy	Jane Cowgill
Archaeobotanical	EXT	Environmental Archaeology Consultancy	Andrea Snelling
Charcoal analysis	EXT	Environmental Archaeology Consultancy	Rowena Gale
Mollusc analysis	EXT	Environmental Archaeology Consultancy	James Rackham
Animal bone	EXT	Environmental Archaeology Consultancy	James Rackham
Soil Micromorphology	EXT	Institute of Archaeology, University College London	Richard Mcphail
Digitisation	Albion	CAD technician	Joan Lightning
Illustration	Albion	Illustrator	Cecily Marshall
Archiving	Albion	Archiving Officer (ARC)	Helen Parslow
In-house Editor	Albion	Operations Manager (OM)	Drew Shotliff
Academic Advisor	EXT	Hertfordshire County Council	Stuart Byrant

**Table 10: The project team**





## 11. APPENDIX 3: SUMMARY OF ALL TASKS

Task No	Description	Staff	Days
1.1	Documentary Research	Ext (BK)	6
2.1	Cropmark research	MAP	12
2.2	Cropmark digitising	PJL	6
2.3	Checking and integration of digital drawn and contextual data	WK	6
		PJL	6
2.4	Subgroup and group analysis	WK	77
		CC	77
		MAP	41
2.5	Landscape and phase analysis	WK	24
		CC	24
		MAP	24
2.4/2.5	Overall management of structural analysis	HBD	18
3.1	Pottery quantification and recording	JW	27
3.2	CBM quantification and recording	JW	4.5
3.3	Pottery technical text	JW	3
3.4	CBM technical text	JW	1
4.1	Investigative conservation	Ext (PP)	
4.2	Narrow term identification	HBD	6
4.2	Non-ceramic identification	Ext (PG)	3.5
5.1	Human Bone recording	Ext (JMCK)	15
5.2	Human Bone extraction of samples for radiocarbon dating	Ext (JMCK)	2
5.2	Radio carbon dating cremations (bio-apatite)	Ext (Beta Anal)	
5.2	Radio carbon dating inhumations - collagen	Ext (Beta Anal)	
6.1	Animal bone quantification and recording	Ext (JR)	6
6.1	Radio carbon dating aurochs	Ext (Beta Anal)	
7.1	Hammerscale extraction, quantification & distribution	Ext (AF)	3.5
		Ext (JC)	0.5
7.2	Charcoal selection and species identification	Ext (AF)	0.5
		Ext (RG)	4
7.3	Charred cereal identification and recording	Ext (AS)	5
7.4	Mollusc selection, identification and quantification	Ext (JR)	14
7.5	Selection of charcoal etc for radiocarbon dating	Ext (RG)	0.5
7.5	Radio carbon dating enviro material	Beta Anal	
8.1	Soil micromorphology –preparation of thin sections and bulk samples	Ext (RM)	
8.2	Soil micromorphology analysis	Ext (RM)	2
	<b>Keystage 1: Completion of analysis</b>		
2.6	Phasing/publication liaison: Albion	MAP	1
		JW	1
		HBD	1
2.6	Phasing/publication liaison: with external specialists	MAP	13
		HBD	4.5
2.6	Phasing/publication liaison – academic advisor	Ext (SB)	2
1.2	Documentary report	Ext (BK)	6
2.7	Site narrative	MAP	47
2.7	Assistance with site narrative	HBD	19
3.5	Pottery publication text	JW	8
3.6	CBM publication text	JW	2.5
4.3	Non-ceramic publication text	HBD	20.5
5.3	Human bone publication text	Ext (JMCK)	5

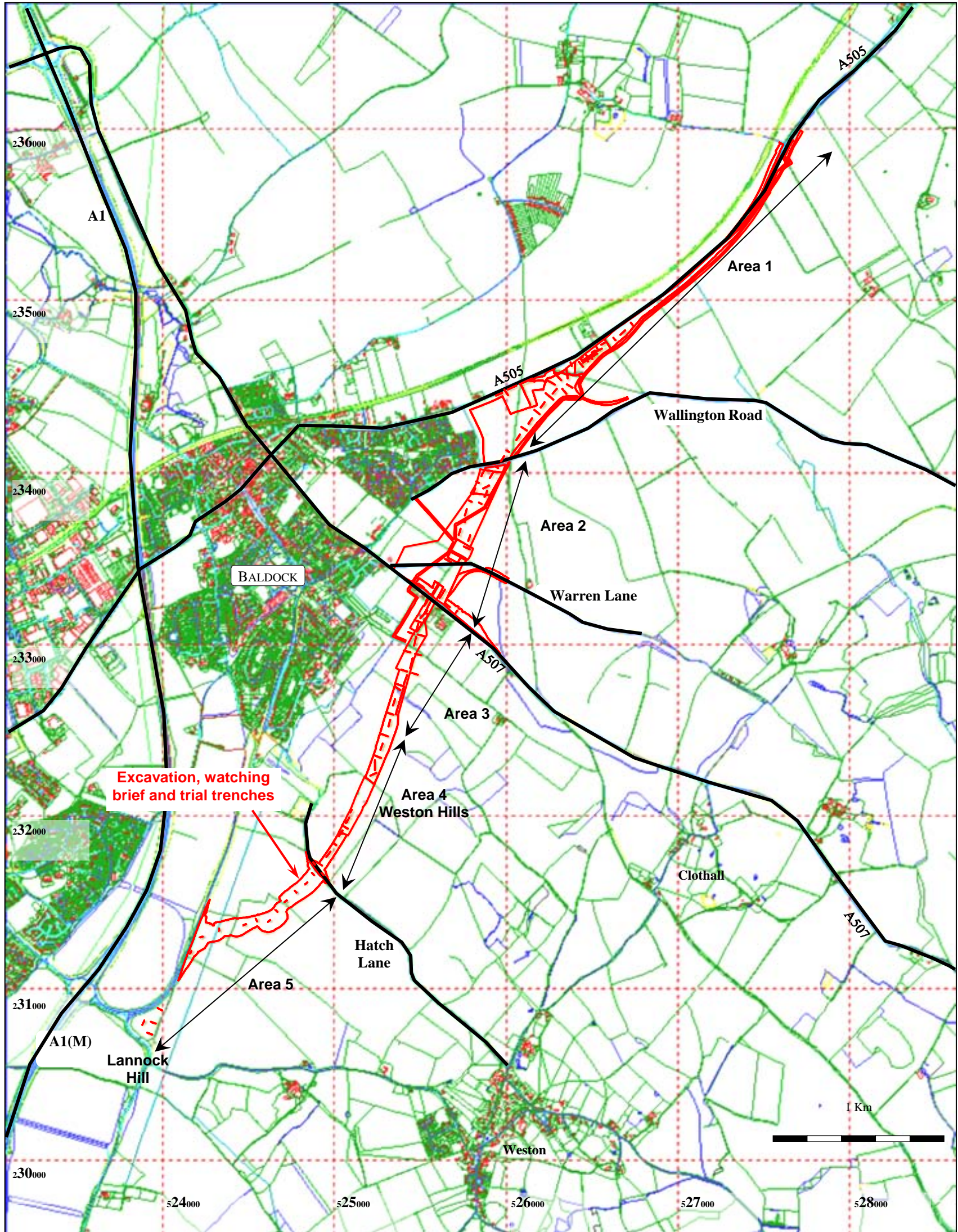
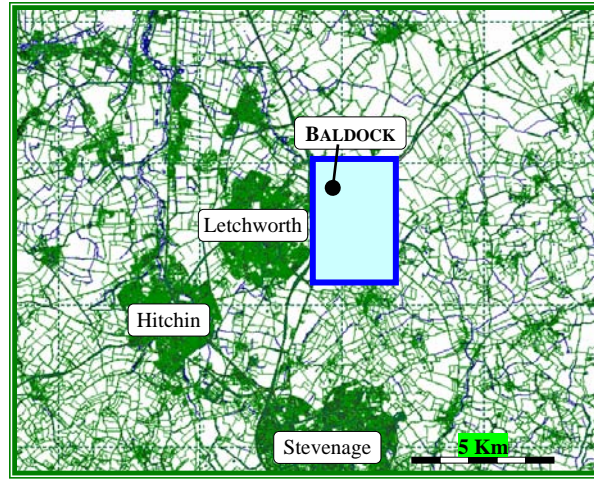
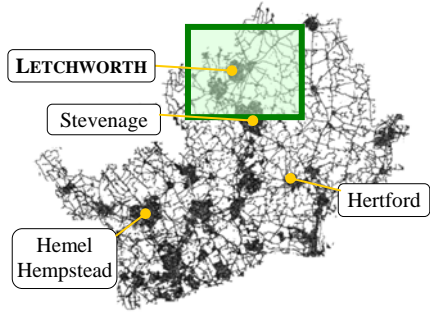


Task No	Description	Staff	Days
6.2	Animal bone publication text	Ext (JR)	2.5
7.6	Environmental publication text	Ext (JR)	3.5
8.3	Soil micromorphology publication	Ext (RM)	2
3.7	Pottery illustration	CAM	8
		JW	2.5
4.4	Non-ceramic illustration	CAM	22
		HBD	6
2.8	Structural illustration	PJL	6
		CAM	58
		MAP	9
<b>Keystage 2: completion of all specialist text</b>			
9.1	Integrating specialist reports and first edit of publication text	HBD	12
9.2	Amendments and queries in consultation with specialists	MAP	12
		HBD	3.5
9.3	Production of synthesis	MAP	29
<b>Keystage 3: Completion of 1st Draft</b>			
9.4	Albion's refereeing process	DS	5
9.4	Albion's refereeing process – academic advisor	SB	3.5
9.4	Albion's refereeing process	HBD	8
9.4	Albion's refereeing process	MAP	6
9.4	Albion's refereeing process	CAM	5
<b>Keystage 4: Submission to East Anglian Archaeology</b>			
9.5	Amendments resulting from editor's comments to publication text and figures	HBD	6
		CAM	2.5
9.6	Printing, indexing, type setting, etc.	external	
9.7	Proof reading	HBD	3.5
9.8	Archive preparation (Structural)	WK	12
		MAP	3.5
9.8	Archive preparation (Artefacts)	JW	2
		HBD	3.5
9.8	Archive preparation (Environmental)	HLP	2.5
9.8	Archive preparation (Digital)	PJL	1
9.8	Archive preparation (Project management)	HBD	3.5
9.8	Archive preparation (general and liaison)	HLP	3.5
9.8	Archive microfilming	Ext (Micromedia)	
9.8	Archive transfer (storage costs)	Ext	
9.8	Archive transfer to museum	WK	1
9.9	Project management: overall	HBD	24
9.9	Project management: Albion	DS	12
<b>Keystage 5: end of project</b>			

**Table 11: Summary of all tasks**



## FIGURES



**Figure 1: Location of Study Area**

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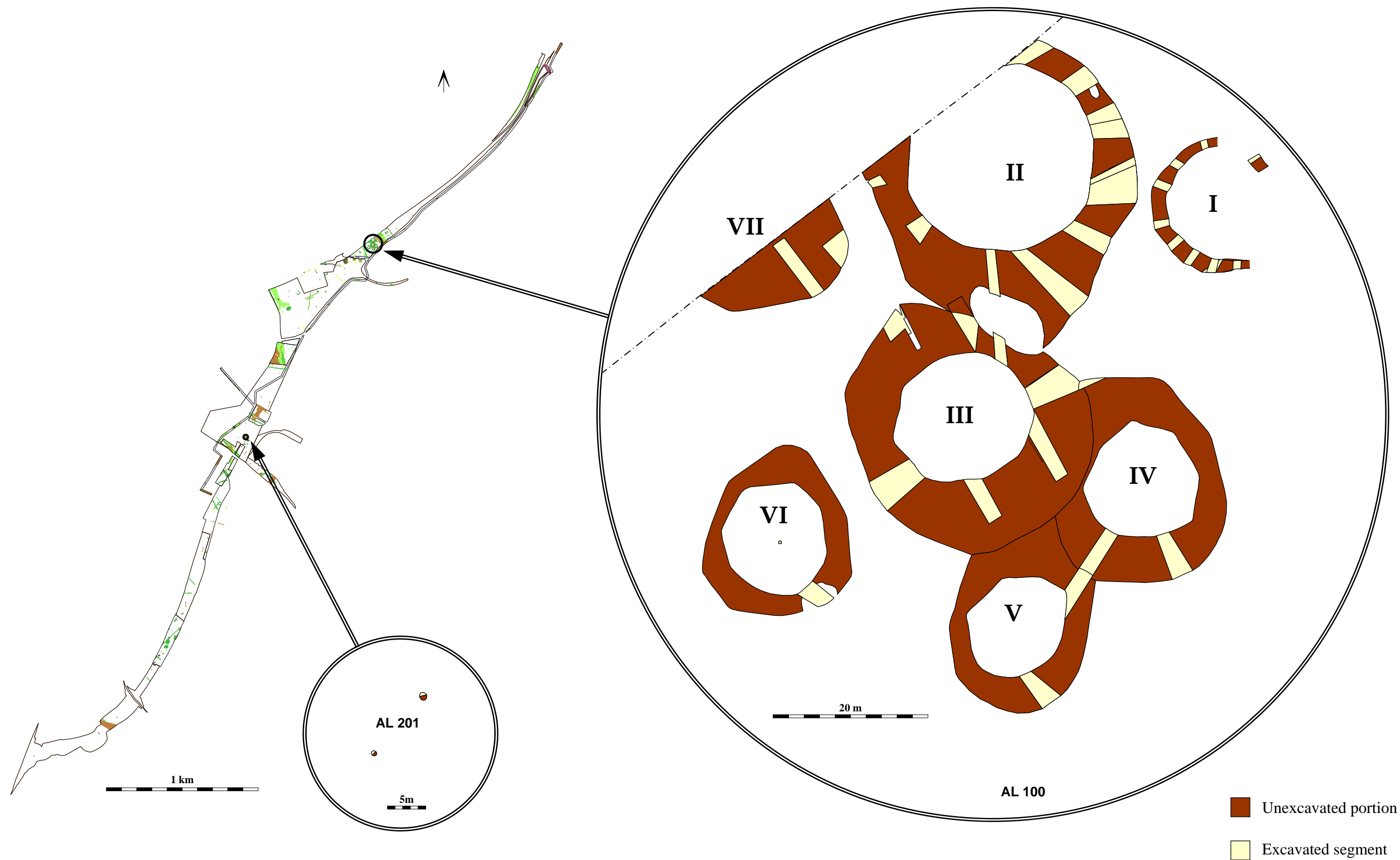


Figure 2: Phase 3

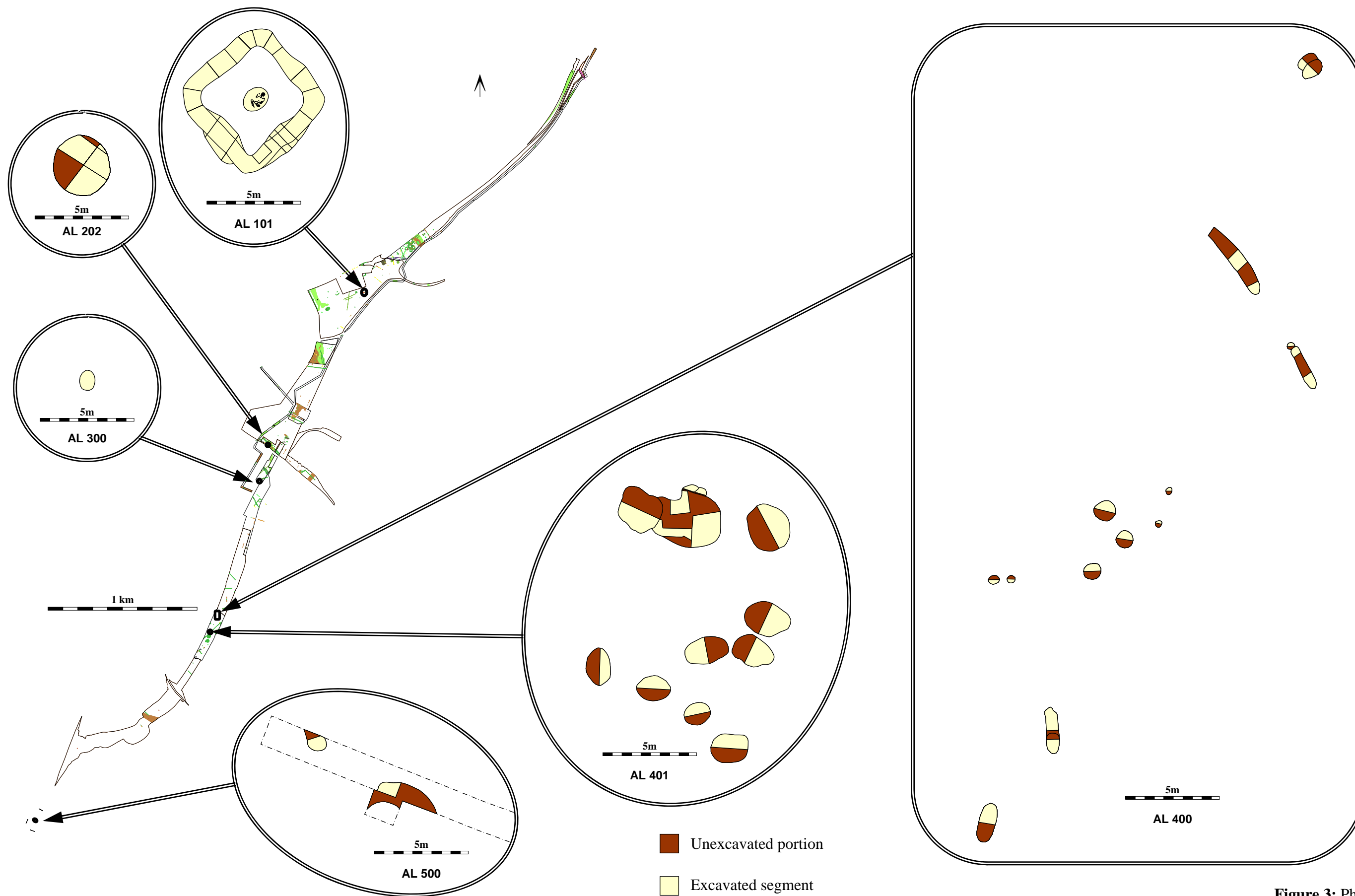
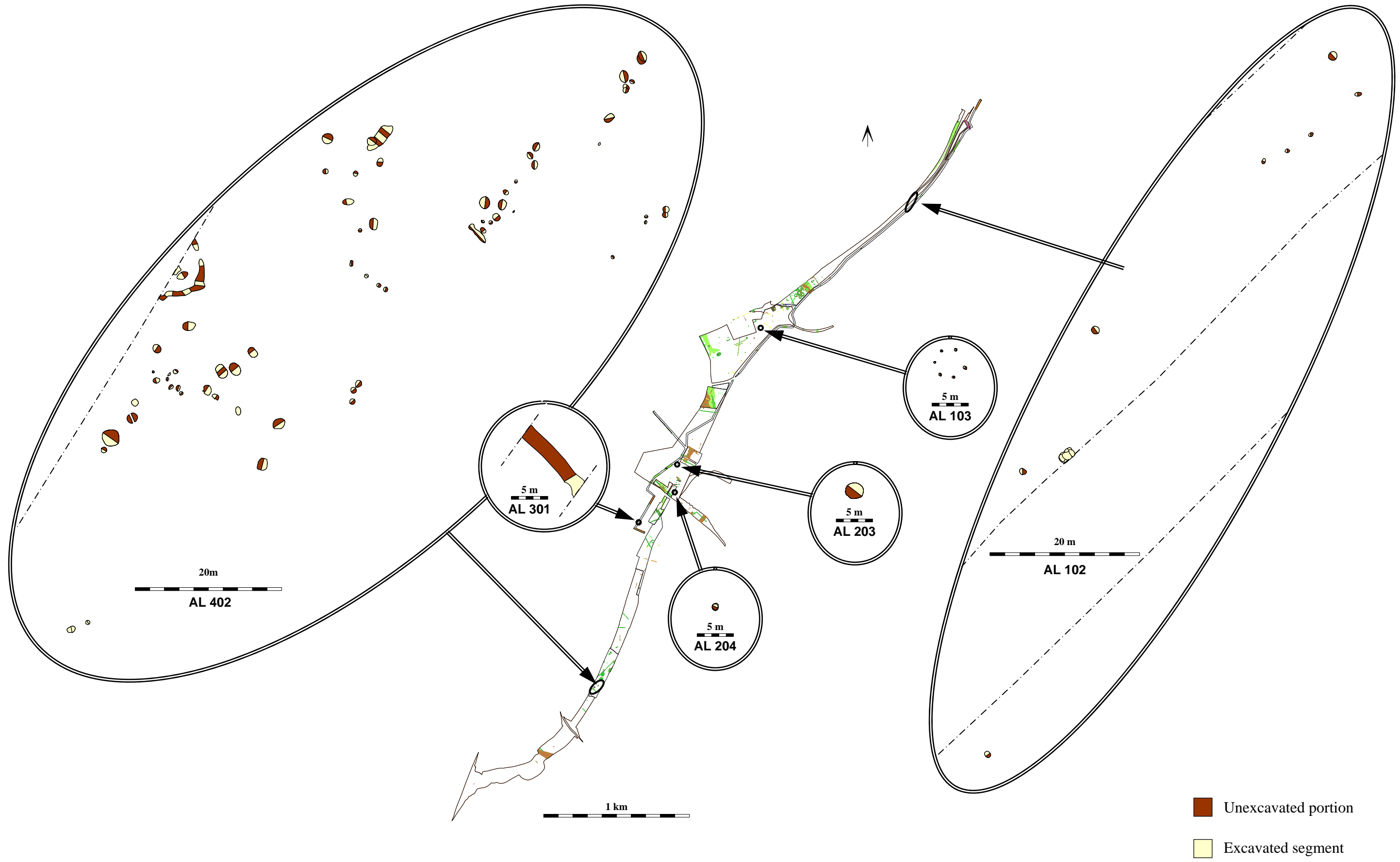
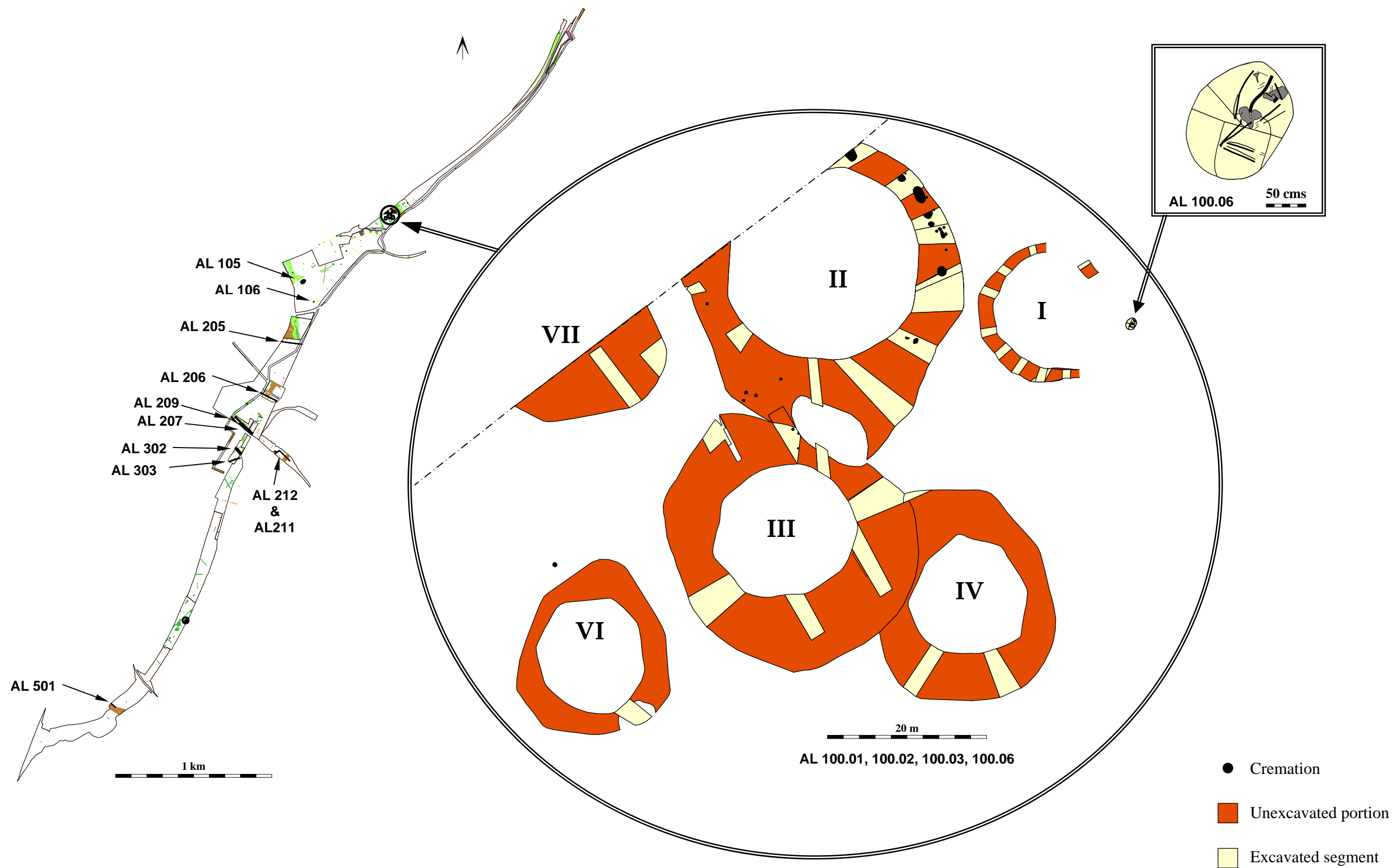


Figure 3: Phase 4

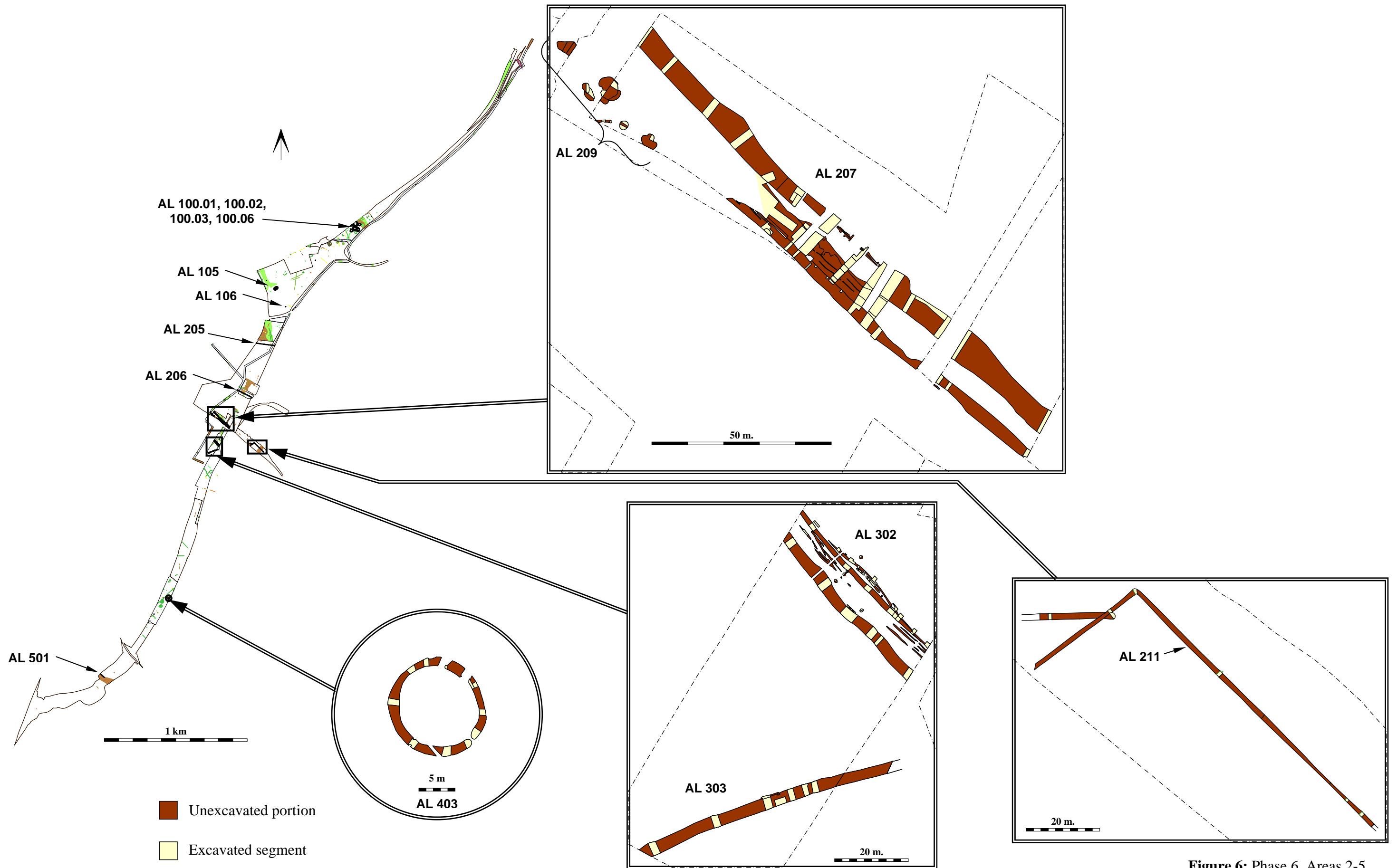


**Figure 4:** Phase 5



**Figure 5:** Phase 6, Area 1  
(Cremation cemetery and barrow ditch fills)





**Figure 6:** Phase 6, Areas 2-5  
(Roads, ditches and 'round house')

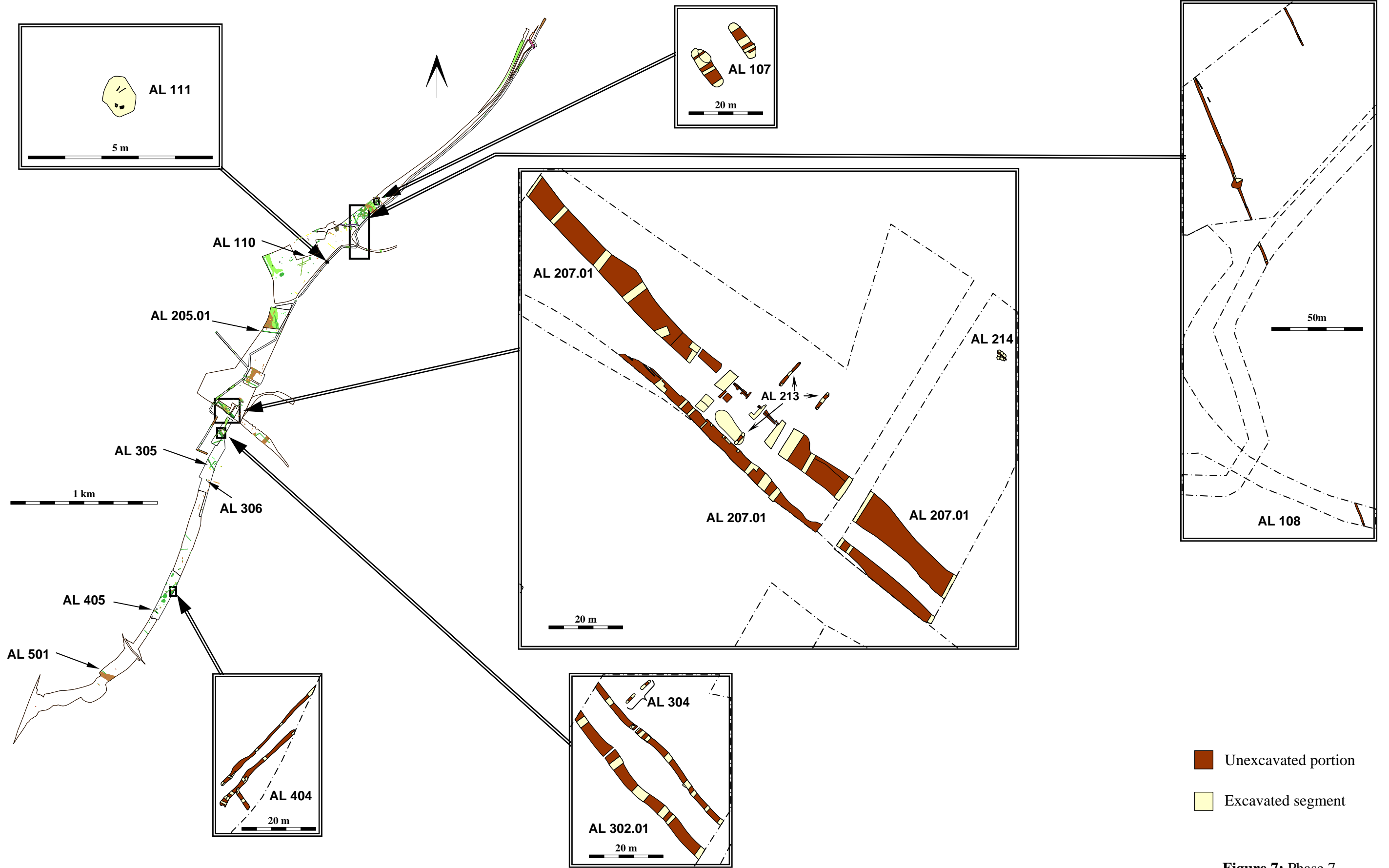


Figure 7: Phase 7

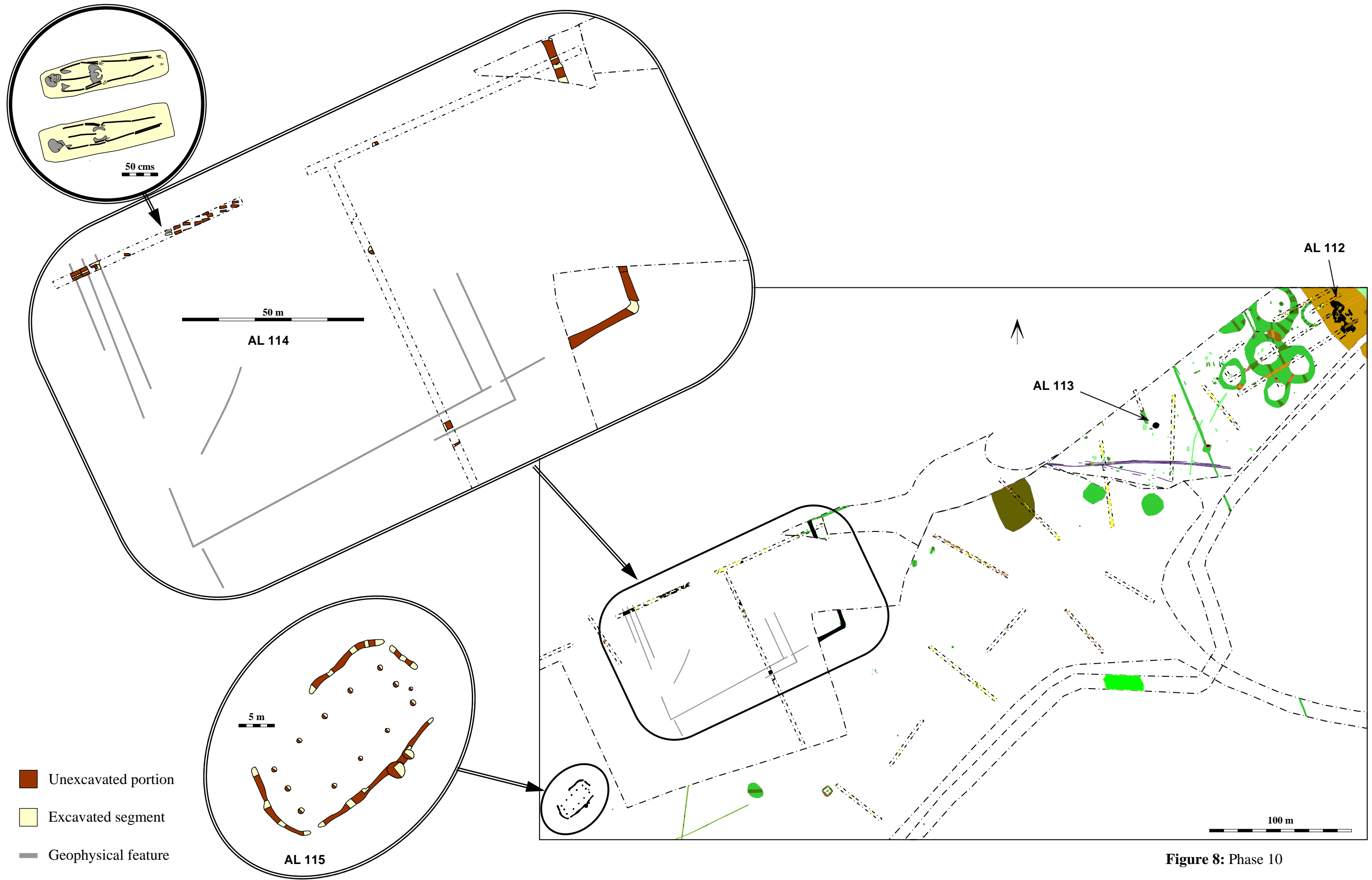


Figure 8: Phase 10

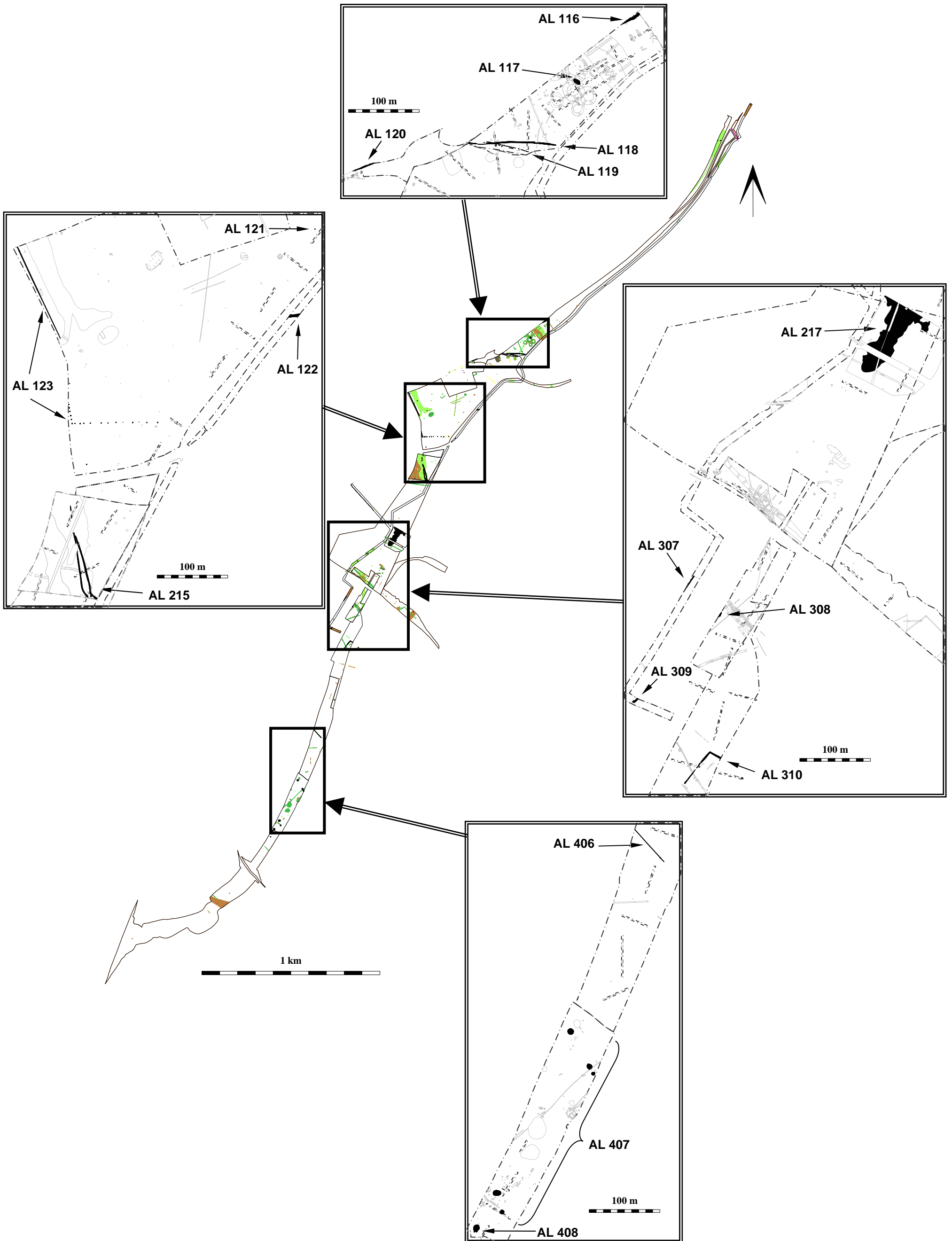


Figure 9 Phase 11

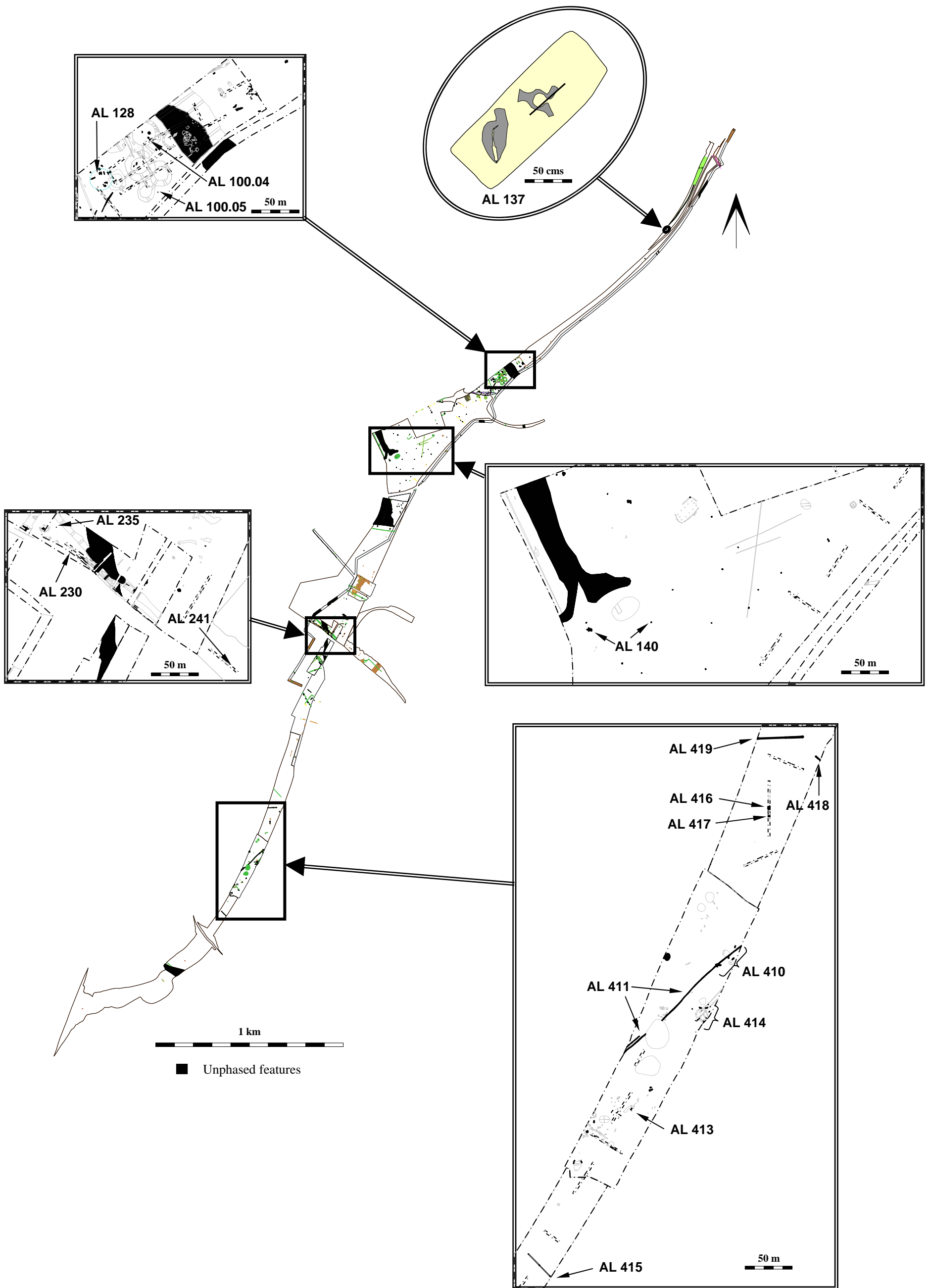


Figure10: Unphased