BUTTERFIELD INNOVATION CENTRE LUTON

SUMMARY REPORT AND ASSESSMENT OF POTENTIAL

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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 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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The project was managed by Mike Luke (Project Manager) assisted by Tracy Preece (Project Officer). Dan Hounsell undertook the day to day responsibility for the excavation. The onsite investigation and recording was undertaken by Wes Keir, Adam Lee, Caroline Pudney, Tim Sandiford and Pete Sprenger. The latter undertook the record checking and much of the contextual data entry.

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Keywords

Throughout this document the following terms or abbreviations are used:

CAO County Archaeological Officer of Bedfordshire County Council

Client East of England Development Agency

CPM Client's consultant

IFA Institute of Field Archaeologists

LPA Local planning authority: Luton Borough Council

LPA Archaeological Advisor CAO

Procedures Manual Document: Albion's Fieldwork Procedures Manual (2001)

Structure of the report

After the introductory Section 1, this report presents a summary of results (Section 2). In Section 3 the various types of evidence (data) are discussed individually. An assessment of the data is presented in Section 4, with the potential discussed in Section 5.

Appendix 1 at the back of the document presents detailed contextual descriptions.





Non-Technical Summary

Luton Borough Council has granted planning permission for the construction of an innovation centre at Butterfield Green, Luton. The development area is c. 3.1ha in extent but the archaeological investigations reported on here were 0.85ha in extent and centred on (NGR) TL 1101/2484). The development is set within a landscape that is rich in evidence of prehistoric and Roman occupation. Therefore, a condition was attached to the planning permission requiring a programme of archaeological works to be implemented prior to any development.

This report presents a summary of the open area excavation and provides an assessment of the potential for archaeological evidence to address national and regional research agenda. The archaeological investigations were carried out by Albion Archaeology in June and July 2005. All work was carried out in accordance with CPM's Specification and Albion Archaeology's Method Statement. Fieldwork was monitored by Bedfordshire County Council's County Archaeological Officer, acting as archaeological advisor to Luton Borough Council.

A small range of archaeological features and artefacts were recovered. These have tentatively been assigned to the following chronological periods, although it must be stressed that the dating evidence is poor.

- Neolithic and early Bronze Age: activity of this period is hinted at by the presence of two flint flakes, residual finds within a later waterpit.
- Late Bronze Age/early Iron Age: the northern group of features has tentatively been assigned to this period. Evidence includes a boundary comprising three ditch lengths, two adjacent waterpits and a few small pits. A single sherd of pottery of this period was recovered.
- Late Iron Age/early Roman: the southern group of features has tentatively been assigned to this period. Evidence comprises a single boundary ditch, two adjacent waterpits and a small number of small pits. Five sherds of pottery of this period were recovered.
- *Medieval:* Two sherds of pottery of this period were recovered from a pit in the northern part of the investigation area. However, their small size means they cannot be used as firm dating evidence for this feature.

The small number of features and tiny quantity of domestic debris recovered suggests that the evidence in all periods represents activity on the periphery of settlements located outside the development area.

Based on the small number and nature of features, artefacts and ecofacts, it is concluded that further analysis would not make any contribution to national and regional research priorities. Therefore, no further work is recommended. The project archive, comprising both finds and records, will be deposited with Luton Museum.





1. INTRODUCTION

1.1 Planning background

Luton Borough Council has granted planning permission for the construction of an innovation centre at Butterfield Green, Luton.

A condition of the planning permission required the investigation and recording of archaeological remains on the site in advance of development. This was in line with Planning Policy Guidance Note 16 *Archaeology and Planning* and in accordance with Local Plan Policy E5.

1.2 Site location (Figure 1)

The development area (3.1ha in extent) is located on the north-eastern outskirts of Luton adjacent to the A505 (Hitchin Road). The investigations reported on here were located over the eastern part (0.85ha in extent) of the development area, centred on NGR TL1101/2484.

With the exception of a former garage to the south, the land had previously been under arable cultivation.

1.3 Landform, geology and soils

Topographically, the site lies within a wider landscape of gently rolling chalk downs. The land surface slopes down gradually from north to south, at a height of c. 165mOD. Within the Butterfield area as a whole, the underlying geology is characterised by clay-with-flints with some areas of sand and gravel.

1.4 Archaeological background

The site is set within a landscape that is rich in evidence of prehistoric and Roman occupation. Two ancient trackways are known in the general vicinity: the Icknield Way and the Edeway. A number of ritual and funerary monuments of the earlier prehistoric periods are known within the wider landscape. Fieldwalking has also located a flint scatter of broadly Neolithic/Bronze Age date, and a scatter of Roman pottery and ceramic building material within the boundaries of the overall Butterfield Green development area.

1.5 Nature of the archaeological investigations

1.5.1 Evaluation

In the early part of 2005 the site was subject to an evaluation which aimed to identify, locate and determine the nature of any archaeological remains within the study area. The work comprised 100% geophysical survey and ten trial trenches (Foundations Archaeology 2005). Three trenches (6, 7 and 9) contained archaeological features, none of which produced any dateable artefacts.



- Trench 6- single large pit
- Trench 7- one ditch, one ditch/pit and one pit.
- Trench 9- one ditch

In addition, a Lower Palaeolithic handaxe was found within the subsoil of Trench 8.

1.5.2 Mitigation

The evaluation demonstrated that archaeological remains were present and therefore a mitigation strategy was required. Following discussions between CPM and Luton Borough Council's archaeological advisor, it was agreed that open area excavation, focused on that part of the development containing archaeological remains, would be undertaken to discharge the planning condition pertaining to archaeology.

1.5.2.1 Open area excavation

A specification was produced by CPM and agreed by the CAO. It detailed the requirements of open area excavation (CPM 2005). This aimed to record the extent, condition, nature, character, quality and date of any archaeological remains encountered.

The specific aims of the excavation were to:

- Record any evidence of past settlement or other land use;
- Recover artefactual evidence to date any evidence of past settlement that may be identified; and
- Sample and analyse environmental remains to create a better understanding of past land use.

For more detailed information see Section 4 of the specification.

1.5.2.2 Implementation

Albion Archaeology was commissioned to undertake the investigations on 16th June 2005 (verbally) and 23rd June 2005 (written) and produced a Method Statement on 21st June (Albion 2005). Earthmoving under archaeological monitoring commenced on 27th June and was completed on 8th July. Hand excavation and recording was undertaken concurrent with earthmoving and was completed on the 29th July. The investigations were monitored by CPM and the CAO on two occasions (12th July and 25th July).



2. SUMMARY OF RESULTS

2.1 Introduction

A total of 129 contexts (units of archaeological recording) were identified during the investigations (see Appendix 1 for detailed descriptions). These represent components of individual features, for example a ditch "cut" and its "fills".

The relatively small quantity and abraded nature of datable artefacts does not permit any of the features to be accurately dated. Therefore, it seems appropriate to describe the evidence recovered by feature type, referring to the dating evidence where appropriate.

2.2 Feature types (Figure 2)

The features can be divided into four main types (Table 1).

Feature type	Activity Type	No of features	No of assigned contexts
Large pits	Waterpits	4	11
Small pits	Pitting	14	43
Ditches	Field boundaries	6	69
Tree throws	Tree clearance	2	2

Table 1: Summary of features

2.2.1 Ditches

A total of six ditched boundaries were investigated. These were concentrated in the north-eastern and southern parts of the excavation area.

NW-SE ditch [1052] was observed for *c*. 34m extending from the northern limit of the excavation and curving slightly at its south-eastern end before terminating. It had a symmetrical V-shaped profile with a rounded base, but towards the south its north-eastern side was slightly more convex (Figure 3: section 4). The southern part of the ditch contained primary infilling. This comprised a mid brown silty clay with frequent small to medium stones and mainly occurred on the north-eastern side of the ditch. The main ditch fill comprised a mid grey brown silty clay. A "control" ecofactual sample 7 was taken from this fill in segment [1107] but this contained only sparse charcoal. No finds were recovered from these fills.

Immediately to the south of the terminal of ditch [1052], two different ditches started: [1067] and [1069]. The former appeared to partially truncate the fill of [1052]. Further south, ditches [1087] and [1089] appeared to continue the same alignment as ditch [1067]. These ditches were separated by two gaps in the vicinity of waterpit [1109]. The gaps were between 1.5m and 3m wide. Ditch [1067] was aligned on a more N-S alignment and was visible for 24m. It was of varying depth, being deepest to the north and was infilled with a



brownish grey silty clay that produced no artefacts. Ditch [1089] was 9.2m long, c. 0.6m wide and up to 0.28m deep with a concave profile and flattish base. Ditch [1087] was at least 20m long as it continued beyond the limit of the excavation area. It was 0.45m wide and no more than 0.12m deep with a similar profile to ditch [1089].

Situated c. 2.5m to the east of ditch [1067] was a parallel ditch [1069]. It was heavily truncated by ploughing and was observed for c. 24m before curving off to the SE and terminating. Its size and depth were varied and ranged between 0.35m wide and 0.08m deep at the northern and southern parts with the middle part being 0.9m wide and 0.23m deep. It was infilled with a grey brown silty clay and 46g fragments of fired clay were recovered from the unexcavated fill (1070).

NE-SW ditch [1127] was located in the southern part of the excavation. It appeared to terminate to the NE, while to the SW it continued beyond the limit of the excavation. It varied in width from *c*. 0.5-1.2m, but it retained a concave profile and a flattish base (Figure 3: section 1). It was filled by an orange brown silty clay and two of its segments produced finds. Segment [1007] produced two small sherds of late Iron Age pottery and 8g of fired clay. Segment [1113] produced three small sherds of Roman pottery. Although small, the presence of five sherds of late Iron Age/Roman pottery within two segments may suggest that this ditch was functioning during this period. A "control" ecofactual sample 4 was taken from the ditch fill of this segment, but this contained only sparse charcoal.

2.2.2 Large pits

Four large pits were investigated; three are interpreted as waterpits on the basis of their diameters and depths. Spatially, the pits are located in pairs towards the south and north of the excavation area.

To the south of the excavation area, waterpits [1009] and [1019] were located between c. 2 and 3m to the north of possible late Iron Age/Roman ditch [1127]. They were c. 6.5m apart.

Sub-oval pit [1009] was 7m in diameter, with convex sides. It was initially hand excavated to a depth of 1.2m, but its maximum depth as revealed by machining was 3.7m. Its main infilling deposit (1010) comprised a dark grey brown silty clay, which produced three small sherds of late Iron Age pottery, 31g of flint flakes and 7g of fired clay. At a depth of c. 2.2m, a dump of greyblack ashy material (1112) was encountered approximately 0.5m in extent. This produced 112g of fired clay and was sampled for carbonised plant remains (ecofactual sample 2).

The eastern pit [1019] of this pair was sub-circular, c. 7m in diameter and only 0.5m deep. Its southern side was parallel with ditch [1127], suggesting the two may be contemporary. Generally the pit was steep sided, but its eastern side was gentler which was probably deliberate to provide access (Figure 3: section 2). Its lower fill (1020) was a pale brown stony silt deposit and its



upper fill (1021) was a dark grey-brown silty clay. A "control" ecofactual sample 5 was taken from this fill, but it produced only sparse charcoal. No finds were recovered from these deposits.

The other pair of waterpits [1109] and [1120] were located c. 80m to the north and were c. 12m apart. Pit [1109] was situated adjacent to the gaps in ditch [1067/1089/1087], suggesting it may be contemporary.

Pit [1109] had an irregular sub-circular shape with a diameter of 9.5m and depth of 1.55m. The sides were steep, with the northern side having a more convex profile. The base was flat. The lower fill (1110) was only present on the northern side and comprised a pale grey-brown silty stony clay. The upper fill (1111) was a mid grey brown silty stony clay. This contained a single sherd of late Bronze Age/early Iron Age pottery and an abraded fragment from a flat roof tile of possible late medieval origin. These are presumed to be residual or intrusive (respectively). In addition, three fragments of fired clay (19g) were recovered. A "control" ecofactual sample 3 was taken from the upper fill, but this contained only sparse charcoal.

The western pit [1120] in this pair was sub-circular and was c. 8m in diameter. Although of a similar diameter to the other waterpits, it was only c. 0.5m deep. Its fill (1121) was a mid brown silty clay that produced no artefacts.

2.2.3 Small pits

Approximately fourteen small pits were found across the excavation area and are discussed according to their spatial locations.

Pit [1115] was located c. 9m west of ditch [1052], close to the northern limit of the excavation area. It was sub-oval in plan with a diameter of 2.2m. It was 1.2m deep. It had convex, near vertical sides, but was undercut to the west (Figure 3: section 3). Its lowest fill (1116) was a dark grey brown silty clay with a bluish tinge, and was concentrated towards the east side. Above this was fill (1117) a dark grey brown silty clay. Fill (1118) was a mottled orange brown sandy clay and was similar to the natural and is therefore presumed to have derived from the sides of the pit. Fill (1119) was a dark grey blue brown silty clay and was concentrated on the western side. A "control" ecofactual sample 3 was taken from this fill. It contained only sparse charcoal. The upper fill (1126) comprised a grey brown silty clay, which produced two small sherds of medieval pottery (6g).

Pit [1057] was situated 1.4m to the north of waterpit [1109] and was adjacent to the gap between ditches [1067] and [1089]. It was sub-oval in plan, 3.3m long, 1.35m wide and 0.48m deep, with moderately steep and convex sides and a flat base. Its primary fill (1058) comprised a yellow brown clay silt. Overlying this was (1059), a dark brown charcoal rich fill, which appeared to have been dumped in from the northern side. It produced no finds, but was sampled for carbonised plant remains (ecofactual sample 1). The top fill (1060), was almost identical to (1058), except for being slightly more friable.



Four pits [1013, 1034, 1036, 1101], were located to the east of ditch [1069], all within 25m of each other. They were all sub-oval in plan, very similar in size and profile and all under 0.3m deep. Their infilling deposits comprised a mid grey brown silty clay, which produced no finds.

In the southern half of the excavation area, four pits were situated to the north of ditch [1127], all within 27m of each other. Three of the pits were sub-oval in plan while the other was circular. The sub-oval pits [1005], [1017] and [1091] were between 1.2m and 2m long, c. 0.7m wide and under 0.22m deep, with concave profiles and either flat or concave bases. The circular pit [1003] was c. 0.6m in diameter and 0.17m deep with an asymmetrical concave profile. They were all filled with similar grey brown silty clay, which produced no finds.

To the south of boundary ditch [1127] were four further pits. Two of the pits [1024] and [1026] were intercutting. They were sub-oval in plan, of similar dimensions with steep sided concave profiles and concave bases. Elongated pit [1129] was at least 2.5m long but had been truncated to the SW. It was 0.8m wide and 0.12m deep with a concave profile and slightly uneven base. Sub-circular pit [1032] was located in the bottom corner of the excavation area. It was 1.4m in diameter and 0.2m deep with a concave profile and base. These pits were filled with a similar mid brown silty clay, which produced no finds.

2.3 Summary

A number of different features were identified. These comprised ditches, waterpits and smaller pits. Unfortunately, only a small number of these had stratigraphical relationships with other features and/or datable artefacts. However, the shared alignments and spatial distribution of the features suggests that they may be contemporary.

Features can be broadly divided into two spatial groups within which they may be contemporary:

- 1. **Southern group** comprising ditch [1127], along with waterpits [1009] and [1019], and small pits [1003], [1005], [1017], [1024], [1026], [1032], [1091] and [1129].
- 2. **Northern group-** comprising ditches [1052], [1067], [1069], [1087] and [1089], waterpits [1109] and [1120] along with smaller pits [1013], [1034], [1036], [1057], [1101] and [1115]



3. DATA QUANTIFICATION

3.1 Introduction

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

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

Artefactual data comprise human-made objects recovered during the open area excavation. These have been divided for ease of discussion into **pottery** and **other artefacts**.

Ecofactual data comprise natural materials found within excavated deposits. These may be able to contribute on the nature of past human activity and its environmental setting and would include any relevant information obtained from the **animal** assemblage and **ecofactual samples** (which may for example contain charred plant remains).

In the following sections contextual data is discussed first, as this has provided the framework for the 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.



3.2 Structural data

3.2.1 Quantity of records

Table 2 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	
Contexts	129
Plan Sheets	16
Sections	51
Photographs	55

Table 2: Quantity of site structural records

3.2.2 Context types

Table 3 presents the different feature types that were identified during the excavation and the subsequent number of contexts that were assigned to them.

	Large Pits	Small pits	Tree throws	Ditches
Features	4	14	2	6
Contexts	11	43	2	69

Note. natural/modern features and layers, along with topsoil contexts not included

Table 3: Contexts by feature type

3.2.3 Methodological approach to assessing contexts

The structural data was rapidly assessed in order to establish whether it would provide a coherent chronological framework based on 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?

However, there were insufficient stratigraphical relationships and datable artefacts to provide a secure chronological framework.

3.2.4 Survival and condition of features

The survival of archaeological features is dependent on the nature and intensity of previous land use. Larger features such as ditches and pits often survive well, but it is the smaller features such as postholes and small pits that are often the most vulnerable to truncation. Within the investigation area there are both large and small features surviving. Therefore, truncation is not considered to be extensive. The absence of features like postholes is more likely to be due to the nature of the past human activity on the site rather than truncation as a result of agriculture.



3.3 Artefacts

3.3.1 Introduction

The excavation produced an artefact assemblage comprising pottery, fired clay, roof tile and worked flint (Table 4). The material was scanned to ascertain its nature, condition and, where possible, date range.

Feature	Type	Context	Spot date*	Pottery	Other finds
1007	Ditch	1008	Late Iron Age	2:7	Fired clay (8g)
1009	Waterpit	1010	Late Iron Age	3:8	Fired clay (7g), worked flint (31g)
1009	Waterpit	1112	=		Fired clay (112g)
1069	Ditch	1070	-		Fired clay (46g)
1109	Pit	1111	?Late medieval	1:14	Fired clay (19g), roof tile (29g)
1113	Ditch	1114	Roman	3:9	
1115	Pit	1126	Medieval	2:6	
			Total	11:44	

^{* -} spot date based on date of latest artefact in context

sherd / frag count : weight in g

Table 4: Artefact Summary

3.3.2 Pottery

Eleven pottery sherds, weighing 44g, were recovered. They were examined by context and quantified using minimum sherd count and weight. Sherds are small (average weight 4g) and exhibit variable degrees of abrasion. Six fabric types were identified using common names and type codes in accordance with the Bedfordshire Ceramic Type Series, held by Albion Archaeology. Fabrics are listed below (Table 5) in chronological order.

Fabric type	Common name	Context/Sherd No.
Late Bronze Age/early Iron Age		
Type F01B	Fine flint	(1111):1
Late Iron Age		
Type F06B	Coarse grog	(1008):2
Type F09	Grog and sand	(1010):3
Roman Type R06C	Fine greyware	(1114):3
Medieval		
Type C01	Sand	(1126):1
Type C	Non-specific medieval	(1126):1

Table 5: Pottery type series

The earliest pottery is an undiagnostic flint tempered sherd (14g) characteristic of the late Bronze Age/early Iron Age period. It was recovered from pit [1109] which also contained a piece of probable late medieval roof tile. It is uncertain if the former is residual and/or if the latter is intrusive.

Five undiagnostic grog and grog/sand tempered late Iron Age sherds (15g) were recovered from ditch [1007] and waterpit [1009]. All are very small and



abraded, as are three undiagnostic sherds of Roman greyware (9g), recovered from ditch [1113].

The upper fill of pit [1115] yielded two undiagnostic sand tempered sherds (6g) broadly datable to the medieval period.

3.3.3 Other finds

Twenty-four amorphous sand tempered fired clay fragments (192g) were recovered from ditches [1107] and [1069], waterpit [1009] and pit [1109]. The latter also contained a highly abraded piece of sand tempered flat roof tile (29g), of possible late medieval date.

Two flint waste flakes (31g) were recovered from waterpit [1009]. They are fashioned from poor quality raw material and are likely to be residual.



3.4 Ecofactual

The ecofactual evidence comprises only ecofactual samples. No animal bone was recovered during the excavation. This is likely to be due to extremely poor preservation conditions.

3.4.1 Samples

3.4.1.1 Sampling strategy

A total of seven samples were taken for a variety of reasons. Initially, deposits that visibly looked to contain charred plant remains were sampled. However, as only two deposits qualified on the basis of this criterion, five additional samples were taken as "controls" from the range of different feature types.

3.4.1.2 Processing methods

The samples were floated onto a 0.5mm mesh. The residues were sieved down to 0.3mm. Both residue and flots were dried with the residues subsequently re-floated to ensure recovery of charred material. The residue was sorted and any environmental finds were recorded. The flots were scanned and the presence of any charcoal, charred seeds, snails and bones were recorded.

3.4.2 Charred plant remains

3.4.2.1 Results

The samples produced low levels of charcoal, but no charred seed or chaff (Table 6). All the "control" samples produced only a sparse quantity of charcoal.

Sample	Context	Feature number	Feature Type	Volume (litre)	Charcoal
1	1059	1057	Pit	10	Occasional
2	1112	1009	Waterpit	10	Occasional
3	1111	1109	Waterpit	10	Sparse
4	1008	1007	Ditch	10	Sparse
5	1021	1019	Waterpit	10	Sparse
6	1119	1115	Pit	10	Sparse
7	1108	1107	Ditch	10	Sparse

Table 6: Ecofact samples taken





4. ASSESSMENT OF DATA

4.1 Introduction

The previous sections have outlined a provisional summary of the results of the investigations (Section 2) and provided a basic quantification/discussion of the various data sets (Section 3).

4.2 Nature of the archaeological evidence

This document has described the range of dispersed archaeological features, including tree-throw holes, ditches, waterpits and small pits, that have been located. The features can be divided into two distinct spatial groups. In addition, a small artefactual assemblage has been recovered, including pottery, fired clay and worked flint. The ecofactual evidence is poor, with no animal bone present within hand excavated deposits or samples. The latter contained only sparse quantities of charcoal. It is, therefore, presumed that the evidence represents activity on the periphery of a settlement, or settlements, perhaps located in the adjacent unexcavated land.

4.3 Dating evidence

Unfortunately, only a small number of the features had stratigraphical relationships with other features and/or contained datable artefacts. Even where present and datable, artefacts were few in number and usually showed signs of abrasion, thus casting doubt on their reliability for dating the features. In addition, a number of the larger features, for example waterpit [1109], contained both late Bronze Age/early Iron Age and later material, casting even further doubt on the reliability of the dating evidence.

However, the shared alignments and spatial distribution of the features could be used to tentatively suggest those that are contemporary.

4.4 Tentative chronological summary

The evidence can be tentatively assigned to four chronological periods on the basis of the artefacts recovered and spatial location.

4.4.1 Neolithic/early Bronze Age

Two flint flakes were recovered from waterpit [1009]. While these are believed to be residual, they do indicate that some activity was undertaken during this period.

This fits the national and regional pattern, which is dominated by residual and unstratified worked flint assemblages, along with an absence of "deep subsoil features" (Brown and Murphy 1997, 14). Nothing can be gained by any further analysis of the two flakes.

4.4.2 Late Bronze Age/early Iron Age

A northern group of features appears to be focused on ditch [1052] and its apparent continuation by two parallel ditches [1067/1089/1087] and [1069]. These appear to form part of the same NW-SE boundary. The location of one



of the pair of waterpits adjacent to the two gaps in this boundary suggests they are contemporary. In terms of the smaller pits, the way these also occur adjacent to the boundary may also suggest that these are contemporary.

In terms of firm dating evidence, it is worth stressing that none was recovered from the ditches or small pits. One of the waterpits did produce a single sherd of late Bronze Age/early Iron Age pottery, but also a fragment of probable medieval roof tile. However, the intermittent and curving nature of the boundary is more typical of ditches dug in the late Bronze Age/early Iron Age than any other period e.g. Luton Road Wilstead (Luke and Preece in prep.). It is, therefore, possible that many of the isolated features in this area also date to this period.

Nationally and regionally, settlement evidence for this period can at best be described as sporadic (Bryant 1997, 25). However, the evidence from the excavation which may belong to this period is poorly dated and, with the exception of the boundary and waterpits, of uncertain function.

4.4.3 Late Iron Age/Roman

The southern group of features appears to be focused on ditch [1127]. The proximity of the pair of waterpits to ditch [1127], and the way the south side of waterpit [1019] is parallel to the ditch, suggests that they are likely to be contemporary with it. A number of small pits occur on both sides of the ditch and some of these may be contemporary.

In terms of firm dating evidence, this comprises five sherds of late Iron Age and Roman pottery from the ditch and three sherds of late Iron Age pottery from waterpit [1009]. Although these were all quite small, they probably do provide reliable dating, not least because this is the only part of the excavation area where such material was recovered. It is possible that they represent activity on the periphery of a settlement of this period to the south of the development area.

The precise status and dating of the evidence tentatively assigned to this period is uncertain. Even if it does represent activity on the periphery of a rural settlement, the nature of the evidence means that further analysis will not contribute to regional and national research agenda associated with Romano-British rural settlement (Brown and Glazebrook 2000).

4.4.4 Medieval

The nature of any medieval activity within the excavation area is uncertain. A single pit [1115] towards the north produced two small sherds of medieval pottery. However, these may be intrusive and may not provide a reliable date for the pit. In addition, it is worth noting that no furrows, often dated to this period, were identified.



5. POTENTIAL OF THE DATA

The original research aims set out in the Specification made reference to regional and national research priorities for both the Iron Age and Roman periods.

However, the nature and small number of the features, along with the tiny artefactual and ecofactual data-sets, mean that the potential of the recovered evidence to address regional and national research priorities is extremely low. In addition, the absence of firm dating evidence means that the secure chronological framework, necessary for further analysis, is not available.

It is therefore proposed that no further analysis is appropriate and that this document serves as a sufficient record of the archaeological investigations.

The project archive, comprising both finds and records, will be deposited with Luton Museum.





6. REFERENCES

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APPENDIX 1: CONTEXT DESCRIPTIONS





Extent (ha): 0.85

OS Co-ordinates: TL1102624855

Context:	Type:	Description: Excavat	ed: 1	Finds Present:
1000	Topsoil	Mid yellow brown clay silt moderate small stones. Topsoil.	✓	
1001	Subsoil	Firm mid orange brown silty clay frequent small-medium stones. Subsoil.	✓	
1002	Natural	Mid orange red clay gravel frequent small-large stones. Natural geology (terrace gravel type).		
1003	Pit	Sub-circular profile: concave base: concave dimensions: max breadth 0.57m, max depth 0.17m, max length 0.64m	✓	
1004	Fill	Firm dark yellow brown silty clay frequent small stones	✓	
1005	Pit	Sub-oval NE-SW profile: concave base: concave dimensions: max breadth 0.71m, max depth 0.22m, max length 2.2m	✓	
1006	Fill	Firm dark grey brown silty clay moderate small stones	✓	
1007	Ditch	Linear E-W profile: concave base: flat dimensions: max breadth 1.2m, max depth 0.24m	✓	
1008	Fill	Firm mid brown silty clay occasional small fired clay, moderate small stones. Stones concentrated on N side.	✓	✓
1009	Pit	Sub-circular profile: convex dimensions: min depth 3.7m, max diameter 7.m. Large water pit, sides convex, near vertical in lower part.	✓	
1010	Main fill	Firm dark grey brown silty clay occasional small fired clay, moderate small stones, occasional medium stones	✓	✓
1112	Fill	Firm dark grey black silty clay moderate small-medium burnt stones, occasional small-medium ceramic building material, frequent small-medium charcoal. Dump of ashy material within backfil	✓	✓
1013	Pit	Sub-oval N-S profile: irregular base: concave dimensions: max breadth 0.75m, max depth 0.3m, max length 1.4m	✓	
1014	Fill	Firm mid brown grey silty clay occasional small stones	✓	
1015	Pit	Sub-circular profile: concave base: concave dimensions: max depth 0.1m, max diameter 0.6m	✓	
1016	Fill	Firm dark grey black silty clay moderate flecks charcoal, occasional small stones	✓	
1017	Pit	Sub-rectangular NW-SE profile: concave base: flat dimensions: max breadth 0.65m, max depth 0.2m, max length 2.m	✓	
1018	Fill	Firm mid grey brown silty clay moderate small stones	✓	
1019	Pit	Irregular profile: irregular base: concave dimensions: max breadth 6.m, max depth 0.5m, max length 7.m. Large water pit. E side appears to have slumped.	✓	
1020	Lower fill	Compact light brown silty clay frequent small stones, occasional medium stones. Fill only visible on E side.	✓	
1021	Upper fill	Firm dark grey brown silty clay occasional small-medium stones	✓	
1022	Treethrow	Sub-oval NE-SW profile: concave base: concave dimensions: max breadth 0.68m, max depth 0.4m, max length 1.2m	✓	
1023	Fill	Firm mid grey brown silty clay frequent small stones	✓	
1024	Pit	Sub-oval NE-SW profile: concave base: concave dimensions: max breadth 0.75m, max depth 0.17m, max length 1.2m	✓	
1025	Fill	Firm mid grey brown silty clay occasional small stones	✓	
EEDA B	uttorfield Lute	n Innovation Centre (FD1101)		20



Extent (ha): 0.85

OS Co-ordinates: TL1102624855

1026	D:4	Sub-aval NE SW profiles conceve bases conceve dimensiones may breadth 0.7m	✓	
1026	Pit	Sub-oval NE-SW profile: concave base: concave dimensions: max breadth 0.7m, max depth 0.2m, max length 1.6m	•	
1027	Fill	Firm mid grey brown silty clay occasional small stones	✓	
1028	Pit	Sub-oval NE-SW profile: concave base: uneven dimensions: max breadth 0.45m, max depth 0.12m, max length 0.9m	✓	
1029	Fill	Firm mid brown silty clay occasional small stones	✓	
1030	Pit	Sub-oval NE-SW profile: concave base: uneven dimensions: max breadth 0.55m, max depth 0.14m, max length 0.85m	✓	
1031	Fill	Firm mid brown silty clay occasional small stones	✓	
1032	Pit	Sub-circular profile: concave base: concave dimensions: max depth 0.2m, max diameter 1.4m	✓	
1033	Fill	Firm mid brown silty clay occasional small stones	✓	
1034	Pit	Sub-oval NE-SW profile: concave base: concave dimensions: max breadth 0.75m, max depth 0.21m, max length 1.5m	✓	
1035	Fill	Firm mid grey brown silty clay occasional small stones	✓	
1036	Pit	Sub-oval NE-SW profile: concave base: concave dimensions: max breadth 0.7m, max depth 0.2m, max length 2.m	✓	
1037	Fill	Compact mid brown grey silt occasional small stones	✓	
1038	Ditch	Linear NW-SE profile: convex base: concave dimensions: max breadth 0.45m, max depth 0.11m	✓	
1039	Fill	Firm mid brown silty clay occasional small stones	✓	
1040	Ditch	Linear NE-SW profile: concave base: concave dimensions: max breadth 0.3m, max depth 0.7m. Terminus of ditch.	✓	
1041	Fill	Firm mid brown silty clay occasional small stones	✓	
1042	Ditch	Curving linear E-W base: flat dimensions: min breadth 0.45m, max depth 0.31m, max length 0.9m $$	✓	
1043	Fill	Firm light grey brown silty clay moderate small-medium stones. No finds. Stones concentrated towards base.	✓	
1044	Ditch	Curving linear NE-SW profile: 45 degrees base: concave dimensions: max breadth 0.65m, max depth 0.29m	✓	
1045	Primary fill	Firm mid brown silty clay frequent small-medium stones	✓	
1046	Main fill	Firm mid grey brown silty clay occasional small stones	✓	
1047	Ditch	Linear NW-SE profile: 45 degrees base: concave dimensions: max breadth 1.1m, max depth 0.52m	✓	
1048	Primary fill	Firm mid brown silty clay frequent small-medium stones	✓	
1049	Main fill	Firm mid grey brown silty clay occasional small stones	✓	
1050	Ditch	Linear NW-SE profile: concave base: concave dimensions: max breadth 0.8m, max depth 0.14m. Baulk section through ditch.	✓	
1051	Fill	Firm light grey brown silty clay occasional small stones	✓	
1052	Ditch	Curving linear NE-SW dimensions: max breadth 1.2m, max length 34.m. General number for unexcavated parts of ditch.		



Extent (ha): 0.85

OS Co-ordinates: TL1102624855

1054	Ditch	Linear N-S profile: concave base: concave dimensions: max breadth 0.95m, max depth 0.34m	✓	
1055	Primary fill	Firm mid grey brown sandy silt frequent small-medium stones	✓	
1056	Fill	Firm mid grey brown silty clay occasional small-medium stones	✓	
1057	Pit	Sub-oval E-W profile: irregular base: flat dimensions: max breadth 1.35m, max depth 0.48m, max length 3.3m	✓	
1058	Primary fill	Firm mid yellow brown clay silt occasional small stones	✓	
1059	Fill	Firm dark brown silty clay frequent flecks charcoal, occasional small stones. Localised fill on N side of pit. No finds. Ash dump into pit.	✓	
1060	Upper fill	Firm mid yellow brown clay silt frequent small stones	✓	
1061	Ditch	Linear NW-SE profile: concave base: flat dimensions: max breadth 0.35m, max depth 0.08m, max length 1.m	✓	
1062	Fill	Firm mid grey brown silty clay frequent small stones	✓	
1063	Ditch	Linear NW-SE profile: concave base: uneven dimensions: max breadth 0.25m, max depth 0.08m, max length 1.m	✓	
1064	Fill	Firm mid grey brown silty clay frequent small stones	✓	
1065	Ditch	Linear NW-SE profile: concave base: uneven dimensions: max breadth 0.3m, max depth 0.06m, max length 1.m	✓	
1066	Fill	Firm mid grey brown silty clay frequent small stones	✓	
1067	Ditch	Linear NW-SE dimensions: max breadth 1.1m, max length 24.25m. General number for unexcavated parts of ditch.		
1068	Fill	Firm mid brown grey silty clay occasional small stones. General number for fill of ditch		
1069	Ditch	Linear NW-SE dimensions: max breadth 0.9m, min breadth 0.5m, max length 50.m. General number for unexcavated parts of ditch.		
1070	Fill	Firm mid grey brown silty clay frequent small stones. General number for fill of ditch.		✓
1071	Ditch	Linear NW-SE profile: concave base: flat dimensions: max breadth 0.5m, max depth 0.28m, max length 1.05m	✓	
1072	Fill	Firm mid orange brown silty clay occasional small-medium stones	✓	
1073	Ditch	Linear NW-SE profile: concave base: concave dimensions: max breadth 0.9m, max depth 0.23m, max length 1.4m $$	✓	
1074	Fill	Firm mid orange brown silty clay occasional flecks manganese staining, occasional small stones	✓	
1075	Ditch	Linear NW-SE profile: concave base: uneven dimensions: max breadth 0.65m, max depth 0.06m, max length 0.7m. Terminus of probable boundary ditch.	✓	
1076	Fill	Firm mid yellow brown silty clay occasional small stones	✓	
1077	Pit	Sub-circular profile: concave base: flat dimensions: max depth 0.09m, max diameter 0.65m	✓	
1078	Fill	Firm mid orange brown silty clay occasional small stones	✓	
1079	Ditch	Linear NW-SE profile: irregular base: flat dimensions: max breadth 0.6m, max depth 0.11m, max length 1.1m	✓	
1080	Fill	Firm mid orange brown silty clay occasional small stones	✓	



Extent (ha): 0.85

OS Co-ordinates: TL1102624855

1081	Ditch	Linear NW-SE profile: stepped base: flat dimensions: max breadth 0.3m, max depth 0.05m, max length 0.8m	✓	
1082	Fill	Firm light brown grey silty clay occasional small stones	✓	
1083	Pit	Sub-rectangular NW-SE profile: irregular base: concave dimensions: max breadth 1.03m, max depth 0.48m	✓	
1084	Fill	Firm mid orange brown silty clay occasional small-medium stones	✓	
1085	Ditch	Linear NW-SE profile: concave base: concave dimensions: max breadth 0.55m, max depth 0.14m, max length 1.9m	K 🗸	
1086	Fill	Compact mid orange brown silty clay frequent small-medium stones	✓	
1087	Ditch	Linear NW-SE dimensions: max breadth 0.5m, min breadth 0.3m, min length 20.m. General number for unexcavated segments of ditch.		
1088	Fill	Firm light grey brown silty clay . General number for unexcavated fill of ditch.		
1089	Ditch	Linear NW-SE dimensions: max breadth 0.5m, min breadth 0.3m, max length 9.5m. General number for unexcavated sections of ditch.		
1090	Fill	Firm mid orange brown silty clay occasional small stones. General number for unexcavated fill of ditch.		
1091	Treethrow	Irregular N-S profile: concave base: concave dimensions: max breadth 0.6m, max depth 0.06m, min length 1.2m	✓	
1092	Fill	Firm mid blue brown silty clay occasional small stones	✓	
1093	Treethrow	Curving linear NW-SE profile: irregular base: concave dimensions: max breadth 0.7m, max depth 0.5m, max length 2.1m	✓	
1094	Fill	Firm dark grey brown silty clay moderate small stones	✓	
1095	Pit	Sub-oval NE-SW profile: irregular base: flat dimensions: max breadth 1.2m, max depth 0.22m, max length 1.75m	✓	
1096	Fill	Compact mid orange brown silty clay occasional small stones	✓	
1097	Ditch	Linear NW-SE profile: concave base: flat dimensions: max breadth 0.45m, max depth 0.03m, max length 1.m. Very truncated remains of linear ditch.	✓	
1098	Fill	Firm mid orange brown silty clay occasional small-medium stones	✓	
1099	Ditch	Linear NW-SE profile: concave base: flat dimensions: max breadth 0.45m, max depth 0.12m, max length 1.m	✓	
1100	Fill	Firm light brown grey silty clay occasional small stones	✓	
1101	Pit	Sub-circular profile: concave base: concave dimensions: max breadth 0.75m, max depth 0.26m, max length 1.1m	✓	
1102	Fill	Firm mid grey brown silty clay moderate small-medium stones	✓	
1103	Ditch	Linear NW-SE base: concave dimensions: max breadth 0.3m, max depth 0.05m, max length 1.1m. Truncated ditch cut	✓	
1104	Fill	Firm mid red brown silty clay occasional small stones	✓	
1105	Ditch	Linear NW-SE base: concave dimensions: max breadth 0.25m, max depth 0.03m, max length 0.6m. Severely truncated terminus of linear ditch. Profile lost in truncation.	✓	
1106	Fill	Firm mid grey brown silty clay occasional small stones	✓	



Extent (ha): 0.85

OS Co-ordinates: TL1102624855

1107	Ditch	Linear NW-SE profile: stepped base: uneven dimensions: max breadth 1.85m, max depth 0.56m, max length 0.75m	✓	
1108	Fill	Firm mid brown silty clay occasional small-medium stones	✓	
1109	Pit	Sub-circular profile: convex base: flat dimensions: max breadth 9.5m, max depth 1.55m, max length 9.25m. Large water pit.	✓	
1110	Lower fill	Firm light grey brown silty clay frequent small-medium stones. Slump on N side of water pit	✓	
1111	Upper fill	Firm mid brown grey silty clay moderate small-medium stones	✓	✓
1113	Ditch	Linear NE-SW profile: concave base: flat dimensions: max breadth 1.1m, max depth 0.22m	✓	
1114	Fill	Firm mid grey brown clay silt occasional small stones	✓	✓
1115	Pit	Sub-oval N-S profile: near vertical base: concave dimensions: max depth 1.2m, max diameter 2.2m	✓	
1116	Lower fill	Friable dark grey brown silty clay moderate small stones	✓	
1117	Secondary fill	Friable dark brown silty clay occasional small stones	✓	
1118	Fill	Friable mid orange brown sandy clay occasional small stones	✓	
1119	Fill	Friable mid grey brown silty clay occasional small stones	✓	
1126	Upper fill	Friable dark brown silty clay occasional flecks charcoal, occasional small stones	✓	✓
1120	Pit	Sub-oval NE-SW profile: concave base: concave dimensions: max breadth 7.m, max depth 0.5m, max length 9.5m	✓	
1121	Fill	Firm mid brown silty clay moderate small stones	✓	
1122	Ditch	Linear NE-SW profile: irregular base: uneven dimensions: max breadth 0.55m, max depth 0.14m, max length 1.m	✓	
1123	Fill	Firm mid orange brown silty clay occasional small stones	✓	
1124	Ditch	Linear NE-SW profile: irregular base: concave dimensions: max breadth 0.45m, max depth 0.16m, max length 1.m $$	✓	
1125	Fill	Firm mid orange brown silty clay occasional small stones	✓	
1127	Ditch	Linear NE-SW dimensions: max breadth 1.m, min breadth 0.5m, max length 25.m. General number for unexcavated ditch sections		
1128	Fill	Firm mid orange brown silty clay occasional small stones. General number for unexcavated fill of ditch		
1129	Pit	Sub-oval NE-SW dimensions: max breadth 0.75m, min length 2.5m. General number for unexcavated section of pit		
1130	Fill	Firm mid brown silty clay occasional small stones. General number for unexcavated fill of pit		



Figures



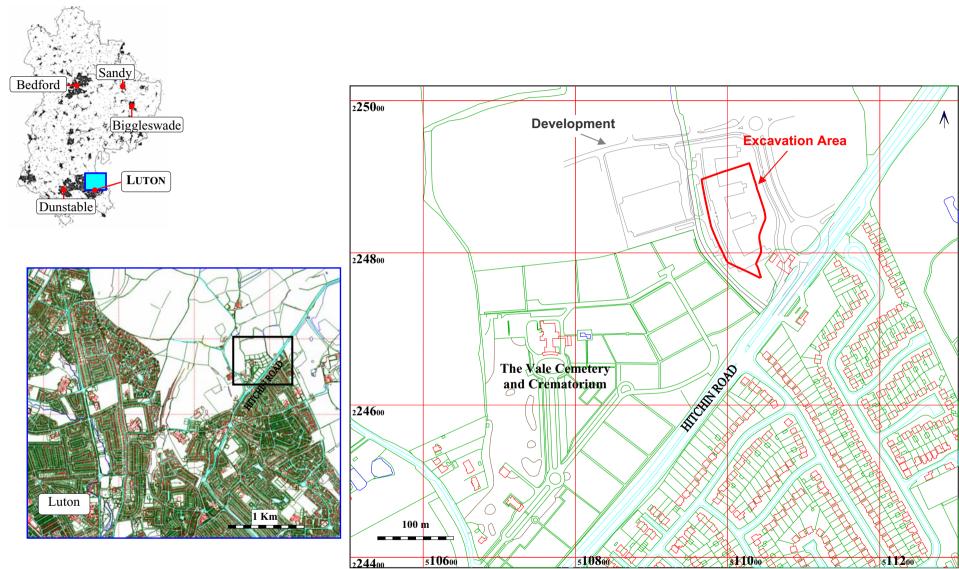


Figure 1: Location of the excavation area

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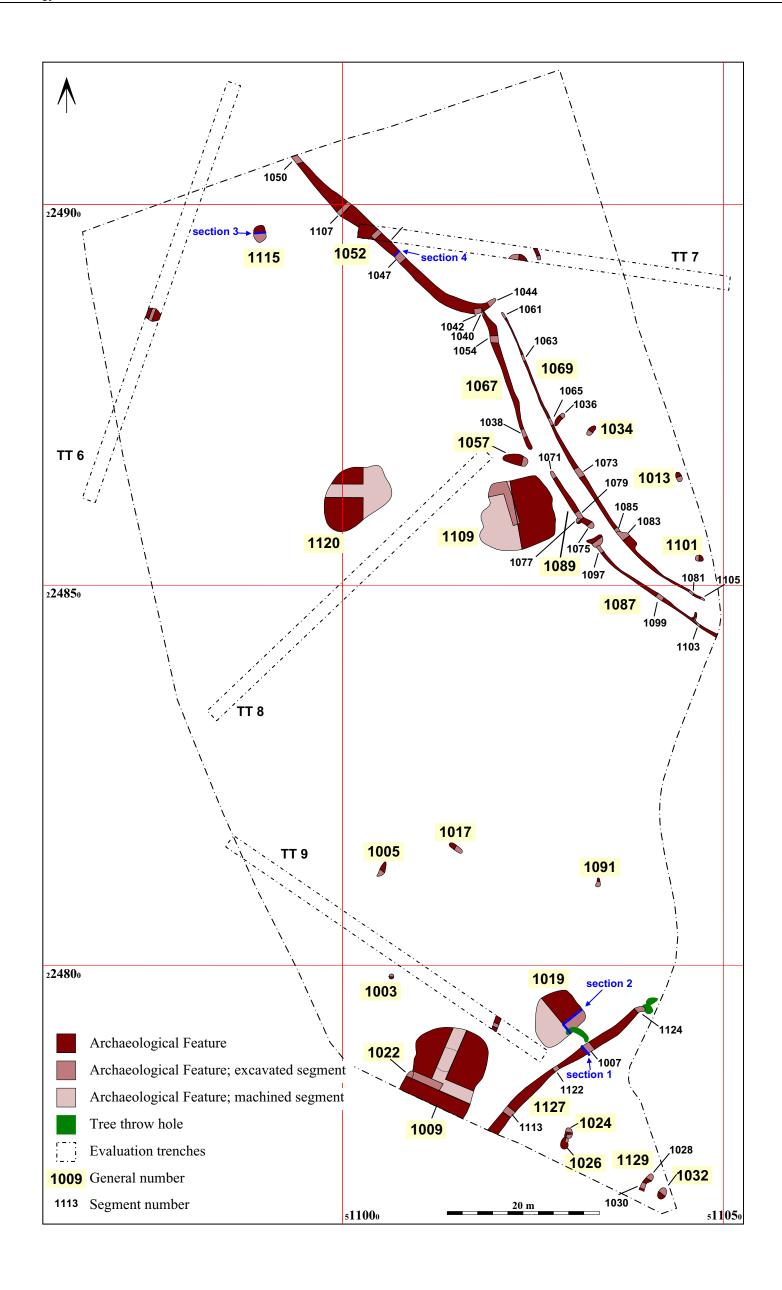


Figure 2: All features plan



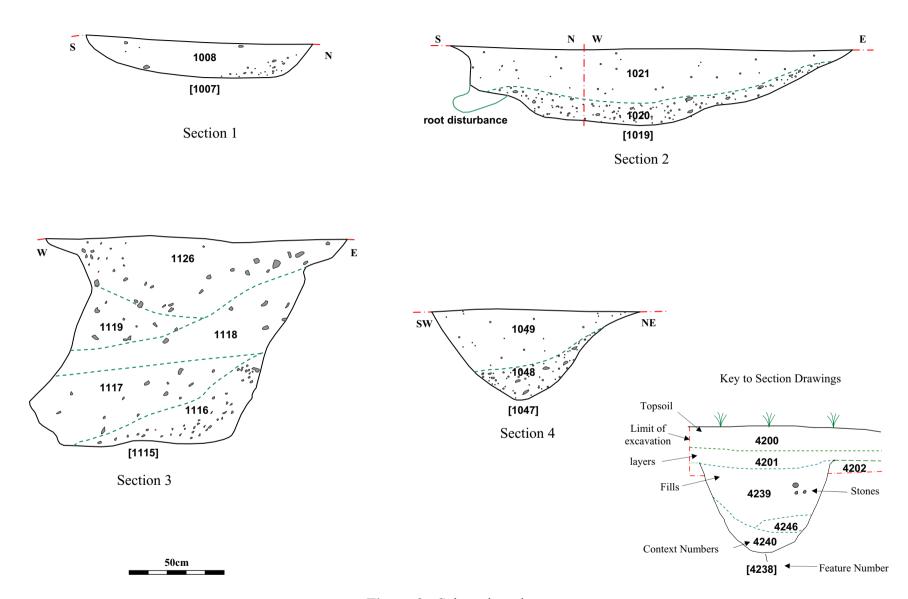


Figure 3: Selected sections