

# Luton M1 to A6 Link Road, Bedfordshire Archaeological Evaluation Report

March 2019

Client: Ringway Jacobs

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NGR: TL 04225 26031 to TL 07836 27078





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## Luton M1 to A6 Link Road, Bedfordshire

## Archaeological Evaluation Report

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## **Summary**

Between the 3rd and 19th December 2018, Oxford Archaeology East (OA East) undertook a 108 trench evaluation on land to the north of Luton, Bedfordshire ahead of the proposed construction of a link road between the M1 and A6 (TL 04225 26031 to TL 07836 27078).

Archaeological remains were identified across the length of the route in clear coherent clusters of activity, largely corresponding with the results of the geophysical survey. At the western end, Field 1 contained droveway ditches probably relating to a prehistoric hollow way or former field boundary. Field 2 contained a concentration of pits and ditches dating to the Late Iron Age and Early Roman periods. Pottery, kiln furniture, animal bone and hammerscale were recovered from the features, indicating industrial activity in this location. Field 4 contained a cobbled trackway and associated roadside ditch that produced a large amount of Middle Roman pottery. Field 6 contained the densest archaeological remains, all of which broadly corresponded with linear anomalies identified during the geophysical survey.

A large number of ditches were encountered across Field 6, with associated pottery dating from the Middle Iron Age through to the Late Roman period. Of particular note from this location is a large pit containing a number of high status cremation vessels and cremated human remains. Field 7 contained a single undated ditch which corresponded with a ditch identified during the geophysical survey and which is visible on satellite imagery. Field 9 towards the eastern end of the link route contained pits and ditches dating from the Middle Iron Age through to the Early Roman period. Two possible wells were uncovered in this location. Field 10 at the easternmost end of the route contained a series of parallel ditches, again identified by the geophysical survey. Little in the way of datable finds were recovered from these features, but what pottery was collected dates from the Roman period.

Overall the archaeological works have confirmed the presence of Iron Age and Roman remains across the length of the proposed link road, indicative of a widely exploited and managed landscape. The remains are likely to be related to agricultural settlements, with associated industrial and funerary activity, linked to known routeways and settlement areas recorded in the Central Bedfordshire and Luton Historic Environment Record.



## **Acknowledgements**

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The project was managed for OA East by Stephen Macaulay. The fieldwork was directed by Louise Moan, who was supported by Paddy Lambert and Emily Abrehart. Hand excavation was undertaken by Leventé Balázs, Simon Batsman, Rory Coduri, Liz Connelly, Grace Davies, Matt Edwards, Adam Moffat, Tamsin Jones, Tom Oliver, Sarah Peacop, Andy Smith and Frankie Wildmun. Survey and digitising was carried out by Emily Abrehart. The various finds processors and specialists, along with the illustrators and editor are also thanked for their contributions.



## 1 Introduction

## 1.1 Scope of work

- 1.1.1 OA East was commissioned by Ringway Jacobs to undertake a trial trench evaluation on land between the M1 and A6 just north of Luton, Bedfordshire (TL 04225 26031 to TL 07836 27078; Fig. 1) as part of a proposed 4.4km long link road.
- 1.1.2 The work was undertaken as part of the Town and Country Planning process for the proposed scheme. A broad Written Scheme of Investigation (WSI) has been produced by Jacobs (Alsford 2018) and supplemented by one by OA East (Moan 2018). This document outlines how OA East implemented the specified requirements.
- 1.1.3 The work was designed to assist in defining the character and extent of any archaeological remains within the easement of the proposed new link road, in accordance with the guidelines set out in National Planning Policy Framework (Ministry for Housing, Communities and Local Government 2018). The results will enable decisions to be made by CBAT with regard to the treatment of any archaeological remains found.

## 1.2 Location, topography and geology

- 1.2.1 The proposed link road lies immediately north of Luton, with the current M1 to its west and the current A6 to its east. The villages of Lower Sundon and Streatley lie approximately 0.5km and 1km to the north respectively.
- 1.2.2 The area of proposed development consists wholly of agricultural land, which is interspersed with areas of ancient woodland. Topographically, the link route crosses gently rolling hills, starting at the westernmost end at around 135m OD which then rises through the central portion to 151m OD and then ending at its eastern end at around 123m OD.
- 1.2.3 The bedrock geology across the 4.4km link route consists of a variety of chalks (Zig Zag formation, Holywell Nodular and New Pit and Melbourn), with superficial deposits of Lowestoft Formation Diamicton in the west and Head deposits of clay, silt, sand and gravel in the east (BGS 2018).

## 1.3 Archaeological and historical background

1.3.1 The archaeological and historical context of the Bedfordshire area is comprehensively discussed in the Cultural Heritage Desk Based Assessment (Jacobs 2018). The Central Bedfordshire and Luton Historic Environment Record (BHER) was consulted (search reference 201718/279) for records pertinent to the link route and are discussed by period below (Fig. 2)

## Prehistoric (c.4000BC-AD43)

1.3.2 A possible Neolithic long mound (BHER 118) is situated adjacent to the Icknield Way around 0.7km east of the A6. The mound, which was recorded as being approximately 90m in length is no longer extant, having been destroyed in the early 20th century and then levelled in 1975 during the construction of a golf course.



- 1.3.3 The westernmost field where the proposed link road starts has been subject to fieldwalking in the past (EBD 1521 and EBD 1524). A scatter of struck flint along with Bronze Age and Iron Age pottery sherds have been recovered from the eastern side of this field (BHER 8903), suggestive of a continuity of settlement in the vicinity. Fieldwalking around 0.8km north of the link route near Streatley Road has also identified a large quantify of struck flint and Neolithic pottery (BHER 9334). Further fieldwalking immediately south of the link road close to George Wood has also identified a Neolithic flint scatter (BHER 15820) along with pottery dating from the Bronze Age through to the Roman period. Additional fieldwalking approximately 0.6km south of the link route produced Mesolithic and Neolithic struck flint (BHER 15224), and 0.8km to the north (BHER 16175) has produced Neolithic and Bronze Age assemblages.
- 1.3.4 Other collections of struck flint have been recovered east of the A6 both immediately opposite the proposed link road (BHER 15225) and further to the north (BHER 15823).
- 1.3.5 Fieldwalking to the west of the proposed link road ahead of the widening of the M1 at Charlton Cross recovered an array of Neolithic and Bronze Age struck flints (BHER 16090, 16091, 16092). However, the landowner at the time stated that the topsoil had been imported from elsewhere, so the provenance of these finds cannot be confirmed.
- 1.3.6 The Scheduled Monument (NHLE 1003804, DBD 3, DBD 4738, BHER 113) of Dray's Ditches is located *c*.0.4km south of the proposed link road. It consists of a substantial triple ditched earthwork, believed to be Late Bronze Age in origin and then enlarged and strengthened during the Iron Age. A series of archaeological investigations have been undertaken along its route over the years (EBD 1411-1413, EBD 1200, EBD 677, EBD 378, EBD 793 and EBD 1217).
- 1.3.7 Around 0.5km north of the Neolithic long mound (see above) are the double ditched remains of a possible barrow (BHER 1780). Aerial photographs also identified a number of possible associated features on its immediate south side.
- 1.3.8 Slightly further afield, around 1km south of the link route are a small number of findspots including Bronze Age pottery sherds (BHER 14674) and a flint assemblage (BHER 15223).
- 1.3.9 The Icknield Way (BHER 353) passes around 0.7km east of the link road in a north-east to south-west direction. This ancient routeway existed from at least the Early Iron Age but could conceivable have its origins in the Neolithic period. It was utilised into the Roman period as a service road connecting villas and settlements to Watling Street and then formalised during medieval times. A series of archaeological investigations (EBD 1200, EBD 904, EBD 391, EBD 240, EBD 559 and EBD 1094) along its route have identified a road surface with preserved wheel ruts and ditches.
- 1.3.10 The central portion of the proposed link route, where it extends northwards around Sundon Wood, passes through an area identified as containing a large Iron Age settlement (BHER 9310), as supported by the presence of soilmarks and earthworks as well as the recovery of Late Iron Age pottery. Two further possible occupation sites have been recorded just to the east (BHER 9332) where Iron Age and Early Roman



pottery have been located, along with burnt stone, and just to the west (BHER 15816) where assemblages of Late Iron Age pottery have been recovered. This latter location is within the proposed route of the link road itself. Situated around 0.4km to the south of this are two further areas of potential occupation. Fieldwalking at the more westerly of the two identified Late Iron Age and Early Roman pottery along with burnt stones (BHER 9308), whilst the other (BHER 15817) was identified by scatters of Iron Age pottery and burnt flint. Early Roman pottery was also recovered from the location.

1.3.11 Fieldwork ahead of the M1 widening and A5 link road (EBD 803, EBD 1028, EBD 1144 and EBD 666) just 200m west of the current proposed link road identified an Early to Middle Iron Age settlement indicated by ditches, pits and postholes structures with associated pottery assemblages (BHER 15839 and BHER 18293).

## Roman (c.AD43-410)

- 1.3.12 Situated immediately adjacent to the western end of the proposed link route is the remains of a Roman well (BHER 6659). Roman pottery was found during the construction of the Midland Railway in 1865 and during its widening in the 1890s a 12m deep well containing Roman pottery and animal bone was uncovered. Fieldwork immediately west of the M1 (EBD 1211, EBD 1214, EBD 807, EBD 808 and EBD 1138) at Charlton Cross has identified 2nd to 4th century settlement remains (BHER 15501) producing large assemblages of pottery as well as building material, animal bone and metalwork.
- 1.3.13 Within close proximity, immediately north of the central portion of the proposed link road is evidence for Roman occupation in the form of cropmarks, Roman pottery and quern stone (BHER 9333). Fieldwalking (EBD 1521 and EBD 1524) which produced Roman pottery sherds, tegulae and tile fragments on land between Upper and Lower Sundon along with the presence of cropmarks suggests that Roman settlement remains are also located here (BHER 9309). Further cropmarks, along with Roman and Anglo-Saxon finds (BHER 9342) have also been recorded on land on the western outskirts of Upper Sundon.
- 1.3.14 A number of findspots are recorded on land to the immediate east of the A6, just beyond the limits of the proposed link road, and include two brooches (BHER 20485 and BHER 20488).
- 1.3.15 In the wider landscape are a number of conjectured Roman roads: around 1km north of the proposed route of the link road is a suggested Roman road (BHER 691) running between Tilsworth and Mortgrove. This road is also recorded in Viatores and by Margary as route number 177. Another possible Roman road (BHER 5020) is recorded running broadly north-sound and it bisected by the link road at George Wood. This road is recorded in Viatores and in Margary as route number 170b. A further supposed Roman road (BHER 2836) has been recorded around 1.3km south of the link road, however this is based on putative evidence identified during the digging of water pipe trenches in the 1950s.



## Anglo-Saxon (c. AD410-1066)

- 1.3.16 At the northern limit of Luton Borough, to the immediate south of the proposed route of the new link road, is an ancient routeway known as Theedway (Thiodweg or Ede Way) which crossed through Anglo-Saxon Bedfordshire for 12 miles (BHER 10843). Its origins are unknown, but like the Icknield Way it may have originated in the Neolithic period. Charters dating from 926 and 966 refer to Theedway as being the boundary for multiple parishes.
- 1.3.17 A field at the westernmost end of the link route, to the north of Sundon Road is recorded at being the possible site of an Anglo-Saxon cemetery (BHER 14733), found in 1858.

#### Medieval (c.AD1066-1500)

- 1.3.18 An area of land immediately north of the proposed link road, encompassing approximately 16ha, in Lower Sundon is the location of a deserted medieval settlement and parkland associated with Sundon House (BHER 3558). Recorded remains include ridge and furrow, lynchets, ditches, holloways, terraces, ponds, garden features and the house platform for Sundon House. The former village green, known as Finch's Green (BHER 12553) is also situated in this location. Just further north of this is the deserted medieval settlement of Upper Sundon (BHER 5469) which consists of well-preserved earthworks including hollow ways, property boundaries, house platforms, ridge and furrow and field boundaries.
- 1.3.19 Also situated within Lower Sundon, around 500m to the north of the proposed link road is the Grade I listed St Mary's Church (DBD 1409, BHER 1135) which dates from the 13th and 14th centuries and still contains surviving wall paintings from this period. A large pond (BHER 3132) within the grounds of Manor Farm in the village is thought to be the remains of a moat. A further possible moat (BHER 3450) is recorded around 400m south of the link road near Great Bramingham Wood.
- 1.3.20 The western portion of the link road passes north around Sundon Wood (BHER 9340), an ancient woodland surrounded by a medieval wood bank. The central portion of the link route passes through a medieval deer park (BHER 8758) which encompasses an area of around 80ha. The eastern end of the link road passes Streatley Wood (BHER 10203), which was first recorded 1379. However sometime between 1855 and 1882 it was completely cleared away. Just to the south of this is George Wood (BHER 10208), and associated with which is a record relating to a rectangular earthwork (BHER 3437), which is situated on either side of the link road. The earthwork has been ploughed away within the field itself however survives as a substantial ditch within George Wood itself. It is thought that the earthworks are the remains of a medieval rabbit warren. Earthworks relating to this possible rabbit warren are also recorded to the immediate east (BHER 3438) in a field formerly known as Bramingham Warren (BHER 10285). A further possible rabbit warren which the link road passes through, known as Coney Close, is located in the field to the immediate east of Sundon Park Road (BHER 12537).
- 1.3.21 On the outskirts of Streatley village, c.0.8km north of the link road is a complex of earthworks (hollow ways and enclosures) most probably representing subsidiary



- manorial enclosures (BHER 1467). The routes of the hollow ways are recorded on the 1844 Tithe Map.
- 1.3.22 Situated immediately adjacent to the Bronze Age Dray's Ditches are earthworks associated with the ancillary buildings of Bramhanger Manor (BHER 2832). In 1674 the manor was recorded as having a large number of associated outbuildings including five barns, stables, a granary and a dovecote. Fieldwalking in this area (EBD 1524) recovered medieval pottery. Immediately south of this location are further medieval finds (BHER 15224) recovered during the same fieldwalking survey and comprised a dense scatter of 13th to 16th century pottery.
- 1.3.23 A number of fields in the wider area have been recorded as containing ridge and furrow, including BHER 1263, BHER 3355, BHER 5343, BHER 19929, BHER 19930, BHER 19931, BHER 19932 and BHER 22122.

## Post-medieval and modern (c.AD1500-present)

- 1.3.24 Approximately 0.6km east of the A6 is the original alignment of the Bedford to Luton turnpike road (BHER 19561), dating from 1727. The portion of the A6 where the proposed link road ends is part of the later Luton-Barton-Rushden turnpike road which was constructed 1829-1832 (BHER 10197). The easternmost field which the link route passes through, adjacent to the A6, contains a series of circular depressions forming two parallel lines orientated broadly north-west to south-east. These craters are the remains of where WWII bombs were dropped (BHER 10212). At its western end, the link road meets the former Midland Railway line (BHER 12933) which opened in 1857 and ran from Wigston to Hitchin, being extended in 1858 to run to King's Cross in London.
- 1.3.25 Situated directly within the proposed route of the link road is the cropmark of a circular multi-ringed enclosure (BHER 3518). The rings are symmetrical with plough marks and have therefore been recorded as modern in date. A demolished lime kiln (BHER 12538) which is shown on 18th century mapping is located in the first field which the link road passes through. A 17th/18th century tile kiln and brickworks are also located *c*.200m to the north of the proposed link route. A chalk pit (BHER 3075) shown on the 1901 Ordnance Survey map is also recorded immediately north of Sundon Road at the western end of the link road.

#### **Undated**

1.3.26 Running broadly north-south through the westernmost field of the link road route are a set of parallel linear cropmarks (BHER 12530). Their location correlates with prehistoric fieldwalking finds (see BHER 8903 above) and suggests the possible presence of a prehistoric trackway. The field to the immediate east, which the link road passes through also contains linear cropmarks (BHER 12531). Further cropmarks (BHER 16650) in the form of parallel linears on multiple alignments and a curving double ditch have been identified within the central route of the link road. As well as this, cropmarks of rectilinear enclosures (BHER 16649) have been identified immediately north of, and curvilinear enclosures (BHER 16651) south of this section.



1.3.27 Just 200m south of the proposed link road are a set of linear cropmarks (BHER 3517). The lines do not appear to relate to one another therefore there is a possibility that they are geological.

## Geophysical survey

- 1.3.28 A geophysical survey (Turner & Viccari 2018) was undertaken along the proposed route of the link road prior to the evaluation. Archaeological activity was identified across four of the fields. At the western end (Field 1), several possible rectilinear and linear anomalies were identified. Additional linear responses were also recorded in Field 2, with several further isolated linear anomalies to the east. In Field 6, anomalies appeared to form a potential rectangular enclosure surrounded by linear responses widespread over the surveyed area. In the west of Field 10, there were several linear ditch-like responses which may suggest the presence of a field system.
- 1.3.29 Agricultural activity was also evident across the site along with recent ploughing (particularly in Fields 1, 2 and 7) and drainage features (in Fields 3, 4 and 7). The survey results also detected several regions of responses related to natural changes in the underlying soil and geology; these were particularly pronounced at the western and eastern extremities of the survey (Fields 1 and 10 respectively).



## 2 EVALUATION AIMS AND METHODOLOGY

#### 2.1 Aims

- 2.1.1 The evaluation sought to establish the character, date, state of preservation of archaeological remains within the proposed development area. The scheme of works detailed below aimed to:
  - i. ground truth the geophysical survey results by testing a range of anomalies of likely archaeological origin, and areas where no anomalies registered
  - ii. establish the presence or absence of archaeological remains, characterise where they are found (location, depth and extent), and establish the quality of preservation of any archaeology and environmental remains
  - iii. provide sufficient coverage to establish the character, condition, date and purpose of any archaeological deposits
  - iv. provide sufficient coverage to evaluate the likely impact of past land uses, and the possible presence of masking deposits
  - v. provide in the event that archaeological remains are found sufficient information to construct an archaeological mitigation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables, and orders of cost.

## 2.2 Methodology

- 2.2.1 The proposed scheme boundary extends for 4.4km, of which a 3% sample was investigated.
- 2.2.2 Overall, a total of 5,320 linear metres of trenching (one trench measuring 70x2.1m, 102 trenches measuring 50x2.1m and six trenches measuring 25x2.1m) was positioned across the proposed link route, targeted upon anomalies identified during the geophysical survey (Turner & Viccari 2018, Fig. 3).
- 2.2.3 Machine excavation was carried out under constant archaeological supervision with two tracked 360° excavators using 2.1m wide toothless ditching buckets.
- 2.2.4 The survey was carried out with a Leica GS08 GPS.
- 2.2.5 All archaeological features and deposits were recorded using OA East's pro-forma sheets. Trench locations, features and sections were recorded at appropriate scales. Digital photographs were taken of all relevant features and deposits.
- 2.2.6 A total of 15 bulk environmental soil samples were taken in order to investigate the possible survival of micro- and macro-botanical remains.



## 3 RESULTS

#### 3.1 Introduction

- 3.1.1 The results of the evaluation are presented below and include a stratigraphic description of the trenches that contained archaeological remains. Trench plans and selected section illustrating the findings can be seen in Figures 4 to 10. A selection of trenches and excavated features can be seen in Plate 1 to 21. The full details of all trenches with dimensions and depths of all deposits can be found in Appendix A. Finds and environmental reports are presented in Appendices B and C.
- 3.1.2 Of the 108 trenches excavated, 39 contained archaeological remains and 69 were archaeologically blank (Fig. 3). Topsoil across the route consisted of a dark brown silty clay. Subsoils where present, consisted of a mixture of light yellow brown chalky silts and sandy silts.
- 3.1.3 The results are presented below by field (1 to 10) moving along the link route from west to east. Only trenches containing archaeological remains are discussed. Unless otherwise stated, no finds were recovered from the fills of excavated features.

#### 3.2 Results

#### Field 1

#### Trench 2

3.2.1 Trench 2 (Fig. 3, Plate 1) contained a single ditch at the eastern end of the trench. Ditch 5 (Plate 2) was linear in plan and aligned north-northwest to south-southeast and measured 0.5m wide and 0.08m deep with gently sloping sides and an irregular base. Its single fill (4) comprised a light brownish-grey silty clay. One small sherd (1g) of Mid to Late Iron Age pottery was recovered from the fill.

#### Trench 17

3.2.2 Trench 17 (Fig. 4a) contained three undated ditches that broadly correspond with the results of the geophysics. Ditch terminus 33 was linear in plan and aligned north-west to south-east. It measured 0.53m wide and 0.11m deep with gently sloping sides and a concave base. Its single fill (34) comprised a mid greyish brown sandy silt. Located immediately adjacent was ditch 35, which was similarly aligned north-west to southeast and measured 0.65m wide and 0.2m deep with gentle sides and a concave base. Its single fill (36) comprised a mid-greyish brown sandy silt which contained 1g of Late Iron Age pottery (350BC-AD50). Ditch 35 was truncated on its north-eastern edge by parallel ditch 31 (Fig. 4a, S.59). It measured 0.9m wide and 0.26m deep with gently sloping sides and a concave base. Its single fill (32) comprised a mid-greyish brown sandy silt.

## Trench 20

3.2.3 Ditch terminus **29** was located at the western end of the trench and was aligned northwest to south-east (Fig. 4a). It measured 0.6m wide and 0.23m deep with gently



sloping sides and a concave base. Its fill (30) consisted of a light-greyish brown sandy silt from which a total of 17g of post-medieval ceramic building material (CBM) was recovered.

#### Trench 21

3.2.4 Trench 21 (Fig. 4a) contained two ditches (Plate 3) and a pit, located towards the western end of the trench. Ditch 19 was aligned north-west to south-east and measured 0.5m wide and 0.26m deep, with steep sides and a concave base. Its fill (20) comprised a light greyish-brown clayey silt. Two small sherds of CBM totalling 6g were recovered from the fill. Ditch 21 aligned north-south truncated ditch 19 on its western side and measured 0.8m wide and 0.23m deep with steep sides and a concave base. Its single fill (22) comprised a mid-greyish brown clayey silt. Located to the east of ditches 19 and 21 was a single sub-circular pit (23). Pit 23 measured 1.1m wide and 0.15m deep, with gently sloping sides and a concave base. Its single fill (24) comprised a mid-greyish brown clayey silt.

#### Trench 25

- 3.2.5 Trench 25 (Fig. 4b, Plates 5 and 6) contained two ditches on a north-northwest to south-southeast alignment and three sub-circular postholes. The westernmost posthole (7) measured 0.5m wide and 0.27m deep with steep sides and a flat base. Its single fill (8) comprised a mid-greyish brown sandy silt. Approximately 1.5m to the east, posthole 9 measured 0.77m wide, 0.35m deep, with steep sides and a concave base forming a steep U-shaped profile. Its single fill (10) comprised a mid-brownish grey sandy silt. A total of three sherds (6g) of Mid to Late Iron Age pottery, a small flint flake (7g) and a single burnt animal bone fragment (6g) were recovered from the fill. Additionally, an environmental sample was taken from this fill but did not produce any charred remains. A further 2m to the east of posthole 9 was posthole 11, which measured 0.23m wide and 0.07m deep with gentle sides and a concave base. Its single fill (12) comprised a dark brownish grey sandy silt with a moderate amount of tiny charcoal flecks throughout.
- 3.2.6 The two parallel ditches (13 and 15, Plate 5) were spaced approximately 1m apart. Ditch 13 measured 0.65m wide and 0.21m deep and had gently sloping sides and a concave base. Its single fill (14) comprised a mid-greyish brown sandy silt yielding one sherd (8g) of Late Iron Age pottery and one (3g) flint flake. An environmental sample taken from this fill did not produce anything of note. Ditch 15 (Fig.4, S.54) measured 0.5m wide and 0.23m deep and had steep sides and a flat base. Its single fill (16) comprised a mid-greyish brown sandy silt which yielded one flint flake (2g) and three pieces of animal bone (168g). An environmental sample was also taken from this fill but did not produce any charred remains.

#### Trench 28

3.2.7 Ditch **17** was aligned north-northwest to south-southeast and measured 0.94m wide and 0.38m deep with steep sides and a concave base, forming a deep U-shaped profile (Fig. 4). Its fill (18) comprised a mid-greyish brown sandy silt. A single small piece of



glass (1g), a clay pipe shaft (1g) and four pieces of CBM (55g) were recovered from the fill, each with a post-medieval date.

#### Field 2

#### Trench 42

3.2.8 Trench 42 (Fig. 5, Plate 7) contained two ditches. Ditch **25** was aligned north-west to south-east and measured 0.5m wide and 0.1m deep with gently sloping sides and a concave base. Its single fill (26) comprised a mid yellow brown clayey silt. Located in the middle of the trench, ditch terminus **27** was curvilinear in plan and aligned broadly north-east to south-west, terminating at its north-eastern end. The ditch measured 0.45m wide, 0.09m deep with gently sloping sides and a concave base. Its single fill (28) comprised a mid yellow brown clayey silt.

#### Trench 43

3.2.9 The two parallel ditches uncovered in Trench 43 (Plate 8) corresponded with anomalies identified on the geophysical survey. Ditch 41 (Fig. 5, Plate 9) was aligned north-east to south-west. It measured 1.45m wide and 0.57m deep with gently sloping sides and a concave base. Its single fill (42) comprised a mid greyish brown clayey silt which yielded three sherds (8g) of Early to Middle Roman pottery (AD40-200). Located towards the north of the trench, ditch 37 (Fig. 5, S.61) was also aligned north-east to south-west and measured 1.5m wide and 0.35m deep with gently sloping sides and a concave base. Its single fill (38) comprised a mid-brownish grey clayey silt. A total of 367 (1.7kg) fragments of animal bone representing a single deposition were recovered from the fill, along with two sherds (2g) of Early Roman pottery (AD0-100). An environmental sample taken from the fill contained abundant snail shell but no charred remains. Both of these ditches corresponded with linear anomalies identified by the geophysical survey.

- 3.2.10 Trench 44 (Fig. 5, Plates 10 & 11) contained one ditch and a number of pits, all of which related to anomalies identified during the geophysical survey. Pit 49 (Fig. 5, S.65, Plate 12) was sub-circular in plan and located at the north-eastern end of the trench, with its full extent not exposed. It measured at least 1.65m wide and 0.8m deep with near vertical sides and a flat base. Deposit 68 is believed to potentially have been constructed at the same time as the cutting of the pit and comprised a light brownish white clayey chalk redeposited natural measuring 0.9m wide and 0.4m thick. This deposit had been intentionally compacted to form a sub-circular ridge within the pit (Plate 7). An environmental sample of deposit 68 did not produce any charred remains but did contain moderate levels of snail shell.
- 3.2.11 The pit contained seven further fills. Basal fill 67 measured 0.1m thick and comprised a light brownish-grey clayey silt. This was overlain by fill 66 which comprised a midgreyish brown clayey-silt, which measured 0.1m thick. In total, three fragments (9g) of fired clay were recovered from this fill. Overlaying this was a re-deposited natural (65) measuring 0.16m in thickness and was a mid-orangey brown sandy-silt. This was



overlain by a dark greyish-brown clayey silt (64=69) that measured 0.52m wide and 0.45m deep. In total, five sherds (9g) of Early Roman pottery (AD0-100) were recovered from this fill. This was overlain by fill 51 which measured 0.18m thick and comprised a light brownish-grey clayey silt. The last and uppermost fill in the sequence (50) measured 0.4m thick and comprised a dark brownish-grey clayey silt. Five fragments (30g) of animal bone, five sherds (19g) of Early Roman pottery (AD40-100) and five fragments (41g) of structural plate-like fragments of fired clay were recovered from this fill.

- 3.2.12 Pit 49, which was not seen fully in plan within the trench, was connected via a small gully (86) on its south-western edge to pit 73 (Plate 13) to the immediate south-west. Gully 86 measured 0.22m wide and 0.10m deep with steep sides and a concave base and was aligned broadly east-west. Its single fill (87) comprised a mid-greyish brown clayey silt. Pit 73 (Fig. 5, S.69) was sub-circular in plan on its south-western side and sub-rectangular on its north-eastern side. Not excavated to its fullest extent, it measured 0.85m wide and 0.6m deep with near vertical sides and a flat base. The pit contained six fills.
- 3.2.13 Basal fill 81 measured 0.08m thick and comprised a light brownish-grey clayey silt. This was overlain by fill 80 which comprised a mid-greyish brown clayey silt and measured 0.08m thick. Overlaying this, fill 77 comprised a light brownish grey chalky-silt and measured 0.05m thick. This was overlain by fill 76 that measured 0.1m thick and comprised a mid-greyish brown clayey silt. Overlaying this was a light greyish-brown clay silt (75) with occasional flint inclusions measuring 0.3m thick. Three sherds (18g) of Late Iron Age pottery (50BC-AD50), one unworked stone (66g) and an iron artefact (SF.3) were recovered from this fill. The uppermost fill (74) comprised a mid-greyish brown clayey silt that measured 0.30m deep. Eight sherds (46g) of Late Iron Age (50BC-AD50) pottery and one fragment (15g) of fired clay with a flattened surface were recovered from this context.
- 3.2.14 On its northern edge, pit **73** truncated posthole **82** which measured 0.2m wide and 0.14m deep with gently sloping sides and a concave base. It was filled with a mid orange brown silty clay (83). Pit **84** was cut through the top of pit **73**. It was 0.5m wide and 0.25m deep with steeply sloping sides and a concave base. It was filled with a dark grey brown clay silt (85).
- 3.2.15 Pit 70 was located towards the centre of the trench. It was sub-circular in plan extending beyond the limit of the trench and measured 1.8m wide and 0.05 m deep. Its single fill (71) comprised a lid-greyish brown silt. Adjacent to this was sub-circular pit 78, which also extended beyond the limit of the trench, measuring 0.5m wide and 0.05m deep. Its single fill comprised a light greyish-brown silt. Pit 78 was the easternmost pit of a collection on probable intercutting pits, the others were not investigated. Around 10m to the west, sub-circular pits 43 and 45 were virtually identical in dimensions and in fill composition and were located approximately 2m apart. Both measured 1m wide and 0.18m deep with steep sides and a flat base. The sole fills (44) and (46), respectively, comprised a mid-greyish brown clayey silt.
- 3.2.16 Located in the middle of the trench were intercutting pits **58**, **60**, **62** and **54** (Fig. 5, S.67). Pit **62** was sub-circular in plan and measured 0.45m wide and 0.22m deep with



gently sloping sides and a concave base. Its sole fill (63) comprised a mid-greyish brown clayey silt. This was truncated by pit 54, which measured 0.7m wide and 0.28m deep with stepped sides and a concave base. The pit contained three fills. The earliest fill (55) was a dark greyish brown silt with frequent chalk inclusions and measured 0.07m thick. This was overlain by fill 56 which was a 0.14m thick light greyish brown silt with common medium chalk pieces throughout. The final fill in the sequence (57) measured 0.1m thick and comprised a dark greyish brown silt. A total of one fragment (5g) of CBM, seven fragments (103g) of animal bone and 15 sherds (71g) of Early to Middle Roman (AD60-200) pottery were recovered from this fill. This was cut by subcircular pit 58 which measured 0.7m wide and 0.2 deep with stepped sides and a flat base. Its single fill (59) comprised a mid-greyish brown silt. The last pit in the sequence (60) measured 1.2m wide and 0.38m deep and contained two fills. Basal fill 61 comprised a dark brownish grey silt and measured 0.1m thick. This was overlain by a redeposited natural fill (72) which measured 0.22m thick and comprised a midbrownish grey chalky silt. Twenty-four sherds (202g) of Late Roman (AD200-400) pottery, 303 fragments (2kg) of animal bone, one fragment (485g) of metal-working waste and two fragments (175g) of unworked stone were recovered from this context. Additionally, an environmental sample was taken which contained sparse charcoal flecks, which were too small for identification, along with abundant snail shell.

3.2.17 Located at the western end of the trench was ditch **39** (Fig. 5, S.63) which corresponded with a linear geophysical anomaly. It was aligned north-east to southwest, measured 1m wide and 0.37m deep with steep sides and a concave base. Its single fill (40) comprised a mid-brownish grey sandy silt. Ditch **39** was the probable continuation of ditch **37** from Trench 43.

#### Trench 45

3.2.18 This trench contained one ditch, located at its south-western end (Fig. 5). Ditch **52** was linear in plan, aligned north-east to south-west and measured 1m wide and 0.3m deep with steep sides and a flat base. Its single fill (53) comprised a mid-brown sandy silt. Although no finds were recovered, the environmental sample recovered from the fill highlights the presence of hammerscale which suggests metalworking in the vicinity.

#### Field 4

#### Trench 56

3.2.19 Trench 56 (Fig. 6) contained a single north-south ditch (560) with associated cobbled trackway (535, S.9, Plate 14). Trackway 535 was 1.9m wide and 0.18m deep and infilled with a mid grey silty clay (536). A number of very large tabular stones were identified within this fill, lying on the natural possibly to form the cobbled surface. A total of 131 sherds (1.28kg) of Mid-Roman pottery (AD100-200), 43g of animal bone, eight fragments (143g) of structural fired clay with flat surfaces and one flint (15g) were recovered from this fill. Ditch 560, which was situated on the western edge of the trackway, measured 0.64m wide and was 0.30m deep with gently sloping sides and a concave base. Its basal fill (562) consisted of a 0.08m thick mid grey silty clay. This was followed by a 0.18m thick mid yellow grey silty clay (561). A total of 50 sherds



(324g) of Mid-Roman pottery (AD100-200) and one fragment (13g) from a fired clay object were recovered from this fill. Additionally, an environmental sample was taken from this fill and produced low levels of cereals and charcoal. The uppermost fill comprised a mid brown grey (533) silty clay, which measured 0.08m in thickness.

## Field 6

#### Trench 59

3.2.20 Within Trench 59 (Fig. 7a), pit **513** was sub-circular in plan and measured 1.05m wide and 0.37m deep with steep sides and a concave base. Its single fill (514) consisted of a dark greyish brown sandy silt. Located to the immediate south-west, ditch **511** was aligned north-west to south-east and was 0.6m wide and 0.2m deep with steep sides and a concave base. Its single fill (512) was a mid-greyish brown sandy silt.

#### Trench 60

3.2.21 Trench 60 (Fig. 7a, Plate 15) contained one pit (515) which was located at the southwestern end of the trench and extended beyond the baulk. A number of natural features were also located across the length of the trench, three of which were investigated. Pit 515 measured 1.6m wide and 0.2m deep with steep sides and a concave base. Its single fill (516) was a dark greyish brown silty clay. Two sherds (37g) of Middle Iron Age to Early Roman pottery (350BC-AD60) and five fragments (12g) of animal bone were recovered from this fill.

- 3.2.22 Trench 61 contained four postholes, two ditch termini and a further ditch, which corresponded with anomalies from the geophysical survey (Fig. 7a). At the northernmost end of the trench, ditch 521 (S.3) was aligned east-northeast to west-southwest. It measured 1.6m wide and 0.62m deep with steep sides and a V-shaped base. Basal fill 522 was a mid yellow brown silty clay 0.42m thick. Overlaying this was a mid yellow brown silty clay (523). Two fragments (7g) of animal bone were recovered from this fill. To the south of this was a group of four postholes: 501, 503, 505 and 507. All postholes had deep U-shaped profiles and were steeply sided with concave bases. Posthole 501 measured 0.18m wide and 0.1m deep and was filled with a dark greyish brown silty clay (502). Posthole 503 measured 0.26m wide and 0.07m deep and was filled with a single mid-greyish brown silty clay (504). Posthole 505 measured 0.38m wide and 0.22m deep. Its sole fill (506) comprised a dark-greyish brown silty clay. Posthole 507 measured 0.45m wide and 0.21m deep and was filled with a midgreyish brown silty clay (508). One fragment (7g) of animal bone was recovered from the fill.
- 3.2.23 Ditch terminus **509** (Plate 16) was located to the south of the postholes. It was aligned north-east to south-west, terminating at its north-eastern end. Curvilinear in plan, it measured 0.48m wide and 0.2m deep with gently sloping sides and a concave base. Its sole fill (510) comprised a mid greyish brown silty clay. A total of 19 fragments (193g) of animal bone and five sherds (73g) of Middle Iron Age to Early Roman (350BC-AD60) pottery were recovered from the fill. To the immediate south of this was parallel



ditch terminus **519** (Plate 17), which similarly terminated at its north-eastern end. It measured 0.82m wide and 0.37m deep with steep sides and a concave base. Its single fill (520) comprised a dark greyish brown silty clay. The finds assemblage consisted of 38g of animal bone and 29 sherds (383g) of Middle Iron Age to Early Roman pottery (350BC-AD60). An environmental sample taken from the fill produced low levels of charcoal.

#### Trench 62

3.2.24 Trench 62 contained two ditches which broadly correlated with linear anomalies on the geophysics (Fig. 7a). Ditch **524** was aligned north-northeast to south-southwest and measured 0.57m wide and 0.23m wide with gently sloping sides and a concave base. Its single fill (525) was a mid-greyish brown silty clay. Towards the eastern end of the trench, ditch **526** was aligned north-northwest to south-southeast and measured 1.7m wide and 0.48m deep with steep sides and a concave base. Basal fill 527 was 0.23m thick and comprised a mid yellow brown clay. One sherd (10g) of Early Roman pottery (AD40-100) and 121g of animal bone were recovered from this fill. Overlaying this was a mid yellow brown silty clay (528), 0.25m in thickness.

- 3.2.25 Trench 63 (Figs 7a and 7b) contained six ditches which were all aligned north-west to south-east and corresponded with linear anomalies from the geophysical survey.
- 3.2.26 At the north-easternmost end of the trench was ditch **566** which measured 2m wide and 1.04m deep, with very steeply sloping sides and a near flat base (Fig. 7b, S.10). It was filled by a light greyish brown silty clay (567) with frequent lumps of chalk throughout. This was truncated by ditch **556** which similarly measured 2m wide and 1.18m deep with a round based V-shaped profile. Basal fill 565 was 0.75m thick and was a mid-brownish grey chalky clay with frequent chalk lump inclusions. Three sherds (19g) of Late Iron Age (50BC-AD50) pottery and four fragments (195g) of animal bone were recovered from this fill. The uppermost fill (557) was a dark greyish brown clayey silt that measured 0.44m thick. From this fill, 32 sherds (201g) of Middle to Late Iron Age (350BC-AD50) pottery and 27 fragments (294g) of animal bone were recovered.
- 3.2.27 Ditch **554** measured 0.68m wide and 0.23m deep with steeply sloping sides and a concave base. It was filled by a mid-brownish grey silty clay (553). Located approximately 4m to the south-west of ditch **554** was wide ditch **550** (Plate 18) which measured 3.25m wide and 0.54m deep, with gently sloping sides and a flat base. It was filled by a mid-brownish grey silty clay (549) with occasional small stone inclusions. Three sherds (3g) of Middle to Late Iron Age pottery and one flint (4g) were recovered from this fill. Immediately adjacent to ditch **550** was ditch **548** which measured 0.74m wide and 0.4m deep with steeply sloping sides and a concave base. Its single fill (547) was a mid-brownish grey silty clay containing two sherds (5g) of Early Roman (AD40-70) pottery and three fragments (29g) of animal bone.
- 3.2.28 Located at the south-western end of the trench, ditch **529** (Fig. 7b, S.5) measured 1.2m wide and 0.90m deep with an almost rounded V-shaped profile. The ditch contained four fills. Basal fill 530 was a light orangey-brown silty clay with frequent medium chalk



lump inclusions which measured 0.36m thick. Overlaying this was a slumped deposit (531) from the western edge which was 0.7m thick and comprised a light-orangey brown silty clay. This was overlain by a mid-brown silty clay (532) which measured 0.60m thick. The uppermost fill (534) measured 0.66m thick and comprised a midgreyish brown silty clay.

#### Trench 64

3.2.29 Trench 64 (Fig. 8) contained two ditches, both aligned north-west to south-east which related to anomalies on the geophysical survey. Ditch **539** was located in the middle of the trench and measured 2.05m wide and 0.57m deep, with steeply sloping sides and a concave base. Its single fill (540) comprised a light greyish brown silty clay. At the south-western end of the trench, ditch **537** measured 0.14m wide and 0.20m deep with steeply sloping sides and a concave base. It was filled by (538) which was a midgreyish brown silty clay.

#### Trench 65

3.2.30 Trench 65 (Fig. 8) contained a single north-east to south-west aligned ditch which corresponded with a linear anomaly from the geophysical survey. Ditch 517 (S.2) was truncated on its southern side by a field drain. It measured at least 1.14m wide and was 0.62m deep with steeply sloping sides and a concave base. Its basal fill (555) comprised a mid-greyish brown silty clay measuring 0.24m thick. From this fill, ten sherds (48g) of Early Roman (AD40-70) pottery and 20 fragments (90g) of animal bone were collected. An environmental sample taken from this fill did not produce any preserved remains. Overlaying this, fill 518 measured 0.46m thick and comprised a mid-brownish grey clayey silt with occasional charcoal throughout. Particularly rich in finds, 16 sherds (129g) of Mid to Late Roman (AD250-400) pottery, 125g of animal bone, one iron nail (SF4), nine fragments (156g) of fired clay, six fragments (268g) of metal-working slag and a bone hairpin (SF1) of an AD200-400 date were all recovered from this fill. Additionally, an environmental sample taken from this fill contained hammerscale and cereal grains.

- 3.2.31 Three ditches, which correlated with linear geophysical anomalies, and a pit were located in Trench 66 (Fig. 8). The more westerly of the ditches (570) was aligned north-northeast to south-southwest, measuring 2.4m wide and 0.9m deep with steeply sloping sides and a concave base. It was filled with a dark brown grey silty clay (571) which contained 246g of animal bone. Around 8m to the east was parallel ditch 572 which measured 1.9m wide and 0.86m deep with steeply sloping sides and an almost flat base (Fig. 8, S.12). It was filled with a mid grey brown sandy clay (573). The ditch was truncated on its eastern side by ditch 542 which was orientated north-east to south-west. Ditch 542 was 1.68m wide and 0.64m deep with very steeply sloping sides and a flat base. It was filled with a mid yellow brown sandy clay (543) with moderate small chalk fragment inclusions.
- 3.2.32 Cutting through the top of this ditch was pit **580** (Fig. 8, S.12; Plate 19). The pit had a diameter of 0.84m and was 0.67m deep with near vertical sides and a flat base. It was



filled with a dark grey sandy clay (581). Situated just above the base of this pit were at total of 739 sherds (8,889g) of Late Iron Age/Early Roman pottery, making up at least five semi-complete vessels (Plate 20) including two Gallo-Belgic whiteware beakers, two collared rim flagons and a pedestal jar (see Appendix B). Upon removal of the pottery two discrete areas of bone were identified – on the eastern edge of the pit were articulated vertebrae and ribs (Plate 21) and adjacent to this was a pile of cremated bone.

3.2.33 Under the assumption that these were human remains associated with the above cremation vessels and in consultation with Hannah Firth of CBAT, these remains were left *in situ* and carefully covered over with plastic sheeting before backfilling. A small fragment of the cremated bone was retained however, to clarify whether it was indeed of human in origin (this was confirmed by Natasha Dodwell, pers. comm). It is not currently clear whether the articulated bone is also of human origin as a sample of it was not collected at the time of excavation, it is possible that it could be an offering of animal bone interred with the cremated remains and vessels. During the cleaning of the cremated human remains for recording a small fragment of unidentifiable iron (SF2) was collected. A further piece of iron, which upon initial examination could potentially have been a nail, was identified in amongst the articulated bone and therefore left *in situ*.

#### Trench 67

3.2.34 Two ditches corresponding with geophysical anomalies were identified in Trench 67 (Fig. 8). Ditch 568 was aligned north-east to south-west measuring 0.58m wide and 0.07m deep with gently sloping sides and a concave base. It was filled with a mid brown grey silty clay (569). Around 8.5m to the north-west was substantial ditch 551 (Fig. 7, S.11). This ditch measured 5.08m wide and was excavated to a depth of 1.04m, the base was not identified. The earliest of the seven fills (575) consisted of a mid red brown clay sand 0.2m in thickness which slumped in from the south-east. This was followed by a 0.3m thick mid brown grey clay sand with flint and chalk inclusions (579), from which 6g of Late Iron Age pottery and 24g of animal bone was collected. Slumping in from the north-western edge was a 0.22m thick mid red brown clay sand (578) which was overlain by a mid grey brown silty clay (577) measuring 0.19m in thickness and containing frequent flint and chalk inclusions. A total of 22g of Early Roman pottery (AD0-100) and 2q of animal bone was recovered from this fill. Above this was a 0.16m thick mid grey brown clay silt (576), followed by a 0.4m thick mid grey brown silty clay (574) which contained 22g of Late Iron Age pottery. The uppermost fill comprised a 0.4m thick dark grey brown clay silt (552) which contained 1q of Romano-British pottery (AD40-400) and 45q of animal bone.

#### Field 7

#### Trench 69

3.2.35 Trench 69 (Fig. 3) was situated at the lowest point in Field 7, as a result two layers of colluvium were identified across almost the full length of the trench. The lower layer (564) consisted of a 0.34m thick dark red brown silty clay containing frequent small



and medium sub-angular stones. This was overlain by a light grey brown silty clay (563) which measured 0.18m in thickness.

#### Trench 70

3.2.36 A single north to south aligned ditch was identified in Trench 70 (Fig. 3). Ditch **558** (Plate 22), which correlated with the location of a linear geophysical anomaly, measured 2.33m wide and was 0.57m deep with gently sloping sides and a concave base. It was filled with a single mid grey brown silty clay.

#### Field 9

#### Trench 73

3.2.37 Ditch **641** was located at the westernmost end of Trench 73 (Fig. 9). It was orientated north-northwest to east-southeast and corresponded with a linear anomaly identified by the geophysical survey. The ditch measured 1.7m was 0.72m deep with steeply sloping sides and a concave base. The earliest of the three fills (642) consisted of a mid-yellow brown silty clay 0.18m thick which was slumping in from the west. This was followed by a 0.4m thick dark grey brown silty clay (643) which contained frequent small and large stones and produced 3g of residual Early Bronze Age pottery (*c*.2500-1600BC), 26g of Middle to Late Iron Age pottery (350BC-AD50). The uppermost fill (644) was made up of a 0.32m thick mid grey brown silty clay.

#### Trench 74

- 3.2.38 Pit 628 extended beyond the limit of the trench (Fig. 9, Plate 23), measuring 1.8m long, at least 1.2m wide and 0.24m deep with steeply sloping sides and a flat base. It was filled with a mid-red brown clay silt (629) which contained a concentration of charcoal, which was sampled but no other environmental remains were recovered.
- 3.2.39 At the north-western end of the trench was east-northeast to west-southwest aligned cobbled trackway 630 which measured 2m wide (Plate 24). A layer of small and medium sized sub-angular stones made up the cobbled surface of the trackway (631). This was overlain by a 0.1m thick mid red brown clay silt (632). On the trackways southern side was roadside ditch 645 (Plate 24) which measured 0.56m wide and 0.24m deep with very steeply sloping sides and a flat base. It was filled with a light brown grey clay silt (646) which produced a single (broken) struck flint blade of Mesolithic date and 3g of Early Bronze Age pottery.

#### Trench 75

3.2.40 Situated at the easternmost end of the trench (Fig. 9) was a north-northwest to south-southeast aligned ditch (638). It measured 1.7m wide and was 0.56m deep with steeply sloping sides and a concave base. The earliest of the three fills consisted of a mid-yellow brown clay silt (637) measuring 0.44m in thickness. A total of 22g of post-medieval ceramic building material (CBM) was recovered from this fill. This fill was overlain by a 0.2m thick mid yellow brown clay silt (636) containing frequent chalk pieces which was slumping in from the east. The uppermost fill was made up of a midgrey brown clay silt (635).



- 3.2.41 A pit, two possible wells and one ditch were identified across the length of Trench 76 (Fig. 10). At the easternmost end, ditch **647** (Fig. 10, S.26), which correlated with a linear anomaly on the geophysics, measured 2.3m wide and was 0.68m deep with steeply sloping sides and a flat base. It was filled with a single mid red brown sandy silt (648) which contained 17g of Early Roman pottery (AD40-100).
- 3.2.42 Possible well **640** was sub-circular in plan, measuring 1.42m long, 1.23m wide with undercutting sides. It was excavated to a depth of 0.75m but the base was not found. The fill (639) consisted of a mid-grey brown clay silt. Around 4.8m to the west was a similar possible well **625** (Plate 25), which was 1.6m long, 1.1m wide and excavated to a depth of 1m. The base was not identified for this feature. It was filled with a midbrown grey clay silt (624) which produced two struck flints and 22g of Early Roman pottery (AD40-70). Just to the west of pit **625** and extending beyond the limit of the trench was pit or possible ditch terminus **634**. It measured at least 1.2m long, was 0.9m wide and 0.4m deep with steeply sloping sides and a concave base. It was filled with a mid-brown grey clay silt (633).

#### Field 10

#### Trench 77

3.2.43 A single east-northeast to west-southwest aligned ditch **626** was identified in Trench 77 (Fig. 10). It measured 1m wide and 0.38m deep with an open U-shaped profile and was filled with a mid-brown silty clay (627).

- 3.2.44 A number of large circular geophysical anomalies were identified across Field 10, these corresponded to the known location of WWII bomb craters (BHER 10212, see paragraph 1.3.24). Machine sondages were dug through three of these features in an attempt to characterise them. Crater 604 was 10.1m long and was excavated to a depth of 0.9m. The base was not found. Two fills were identified within the crater, the lower of which (623) consisted of a mid-yellow brown clay silt which frequent chalk inclusions measuring at least 0.35m thick, above this was a 0.55m thick mid brown clay silt (605) which produced 21g of post-medieval tile.
- 3.2.45 At the north-western end of Trench 78 were ditches 610 and 612 (Fig. 10, Plate 26). These intercutting north-east to south-west aligned ditches corresponded with a linear anomaly identified by the geophysical survey. Ditch 612 was the earlier of the two ditches. It measured 1.1m wide and was 0.44m deep with gently sloping sides and a concave base. It was filled with a mid-red brown silty clay (613). Ditch 612 was truncated on its western side by ditch 610 which was 1.6m wide and 0.8m deep with steeply sloping sides and a concave base. It was filled with a mid-grey brown silty clay (611) and produced 75q of Late Roman pottery (AD240-400) and 7q of animal bone.



3.2.46 Two parallel ditches aligned east-northeast to west-southwest were identified in Trench 79 (Fig. 11), both of which correlated to geophysical anomalies. The more northerly of the two (582) measured 1m wide and was 0.29m deep with an open U-shaped profile. It was filled with a mid-grey brown silty clay (583). Ditch 584, which was located 3.8m to the south, was 0.65m wide and 0.13m deep with gently sloping sides and a concave base (Fig. 11, S.19). It was filled with a mid-grey brown silty clay (585) which contained 147g of Early Roman pottery (AD40-100). An environmental sample taken from this fill did not produce any preserved remains.

#### Trench 80

- 3.2.47 Pit **586** was only partially visible in the trench (Fig. 10). It measured 2.2m long, at least 0.7m wide and was 0.46m deep with very gently sloping sides and a concave base. It was filled with a single mid grey brown silty clay (587) which contained 7g of Romano-British pottery (AD40-400).
- 3.2.48 To the west of pit **586** was north-northwest to south-southeast aligned ditch **590** (Fig. 10, S.14) which measured 1.14m wide and at least 0.5m deep; the base was not identified due to the presence of a field drain. It was filled with a mid-yellow brown silty clay (591). Ditch **590** was truncated on its western edge by ditch **588** which measured 0.8m wide and was 0.4m deep with steeply sloping sides and a concave base. The earlier of the two fills (589) consisted of a 0.22m thick light yellow-brown silty clay and produced 302g of Early to Middle Roman pottery (AD100-200). This was followed by a 0.18m thick mid brown silty clay (541). A single posthole *c*.4.5m to the west of this was also identified. The posthole (**592**) was sub-circular in plan, measuring 0.4m long, 0.2m wide and 0.12m deep with near vertical sides and a concave base. It was filled with a mid-grey brown silty clay (593).

#### Trench 81

3.2.49 Two parallel ditches were identified at the western end of Trench 81, of which both broadly corresponded with the location of geophysical survey anomalies (Fig. 27). Ditch **594** was the more westerly of the two. The ditch, which was orientated northnorthwest to south-southeast, measured 0.8m wide and 0.42m deep with steeply sloping sides and a concave base. It was filled with a mid-grey brown silty clay (595) which produced 30g of Early Roman pottery (AD40-100). Parallel ditch **596** (Plate 20), which was situated 4.3m to the east, was 1.04m wide and 0.42m deep with steeply sloping sides and a concave base. It was filled with a mid-grey brown silty clay (597).

#### Trench 82

3.2.50 Bomb crater **622** was investigated by machine (Fig. 11). It was 7m long and 0.8m deep with steeply sloping sides and a very slightly concave base. It was filled with a single mid grey brown clay silt (621) which contained a moderate amount of small to medium sized chalk lumps.



3.2.51 The trench contained a bomb crater at the north-eastern end of the trench that was unexcavated.

#### Trench 84

3.2.52 Extending for 7.8m across Trench 84 was layer 614 (Fig. 11). It was made up of a light orange brown clay silt with frequent charcoal inclusions. which was 0.36m thick at its thickest point. Cut through this was east-west aligned ditch 616 which was 0.9m wide and 0.45m deep with a round based V-shaped profile. It was filled with a mid-brown clay silt (615). This ditch corresponds with ditch 582 in Trench 79 and is probably part of the same linear feature.

#### Trench 86

3.2.53 Bomb crater **602** was situated toward the south-western end of Trench 86 (Fig. 10). It extended beyond the limits of the trench but was at least 8.3m long and 2.1m wide. A small test pit was hand excavated into the top of the feature. The uppermost fill investigated (602) consisted of a mid-brown clay silt and contained 9g of an early 19th century yellow ware bowl.

#### Trench 88

3.2.54 The trench contained a bomb crater towards the north-eastern end of the trench that was unexcavated (Fig. 10)

#### Trench 89

3.2.55 Two parallel ditches aligned east-northeast to west-southwest were recorded in Trench 89 (Fig. 11). Both of these features corresponded with linear geophysical survey anomalies where were also identified in Trenches 79 and 84. The more northerly of the two (618) consisted of a 0.6m wide and 0.2m deep ditch with gently sloping sides and a concave base. It was filled with a mid-grey brown silty clay (617). Approximately 11m to the south-east was ditch 620 which measured 0.3m wide 0.06m deep with very gently sloping sides and a concave base. It was filled with a mid-brown clay silt (619).

#### Trench 98

3.2.56 Situated at the south-western end of the trench was bomb crater **601** (Fig. 10, Plate 28). It extended beyond the limits of the trench but was at least 7.4m in length. A machine slot excavated through the feature identified it as being at least 1.2m deep, the base was not identified. The earliest fill recorded (600) consisted of a 1.08m thick mid grey brown clay silt. This was overlain by a 0.02m thick very dark grey clay silt (599), the uppermost fill comprised a 0.1m thick dark yellow red clay silt (598). Both fills 598 and 599 appeared to comprise dumps of burnt material.



3.2.57 Trench 108 (Fig. 3) contained two postholes, positioned *c.*6.4m apart. Posthole **608** had a diameter of 0.4m and was 0.25m deep, whilst posthole **606** had a diameter of 0.35m and was 0.18m deep. Both postholes had U-shaped profiles and were filled with a single mid grey brown clay silt (609, 607).

## 3.3 Finds summary

## Small finds (Appendix B.1)

3.3.1 A total of four iron artefacts (SF2, SF3, SF4, SF5) and one worked bone artefact (SF1) were recovered from features in Trenches 44, 56, 65 and 66. These include a hobnail, two unidentified objects and incomplete nail. These items are attributed a broad Roman date. A single worked bone artefact (SF1) in the form of a hairpin was recovered from Trench 65, ditch 517. This has been identified as Roman with a date of AD200-400.

## Slag (Appendix B.2)

3.3.2 A small assemblage of smithing hearth cake slag, weighing 753g, was collected from features in Trenches 44 and 65.

## Flint (Appendix B.3)

3.3.3 A total of eight residual worked flints (of Later Neolithic and Bronze Age date) were recovered during the evaluation from features including ditches, pits and postholes; and included a broken blade from ditch 645 (Trench 74). A further three Mesolithic bladelet fragments were also recovered from the topsoil in Field 10.

## Glass (Appendix B.4)

3.3.4 Two fragments of glass, weighing 4g, were recovered from ditch 17 in Trench 28 and ditch 517 in Trench 65. The fragment of glass recovered from ditch 17 cannot be dated but the glass fragment recovered from ditch 517 is of a Roman date.

#### Pottery (Appendices B.5 and B.6)

- 3.3.5 All of the pottery was recovered from stratified deposits, mostly pits and ditches with pottery being recovered from 39 contexts across 20 trenches. In total, 1,247 sherds (13.2kg) were recovered. This overall total is dominated by a single assemblage of five semi-complete vessels dating to the Late Iron Age-Early Roman period (100BC-AD150) totalling 739 sherds (8.889kg). These were recovered from probable cremation deposit 851 from pit 850 in Trench 66 and are highly likely to represent associated grave goods.
- 3.3.6 The total of the rest of the pottery recovered is comparatively low compared to the size of the study area. The remaining pottery assemblage recovered totals 508 sherds (4.311kg) suggesting a date range across the proposed link road route of the Middle Iron Age through to the Late Roman period.



3.3.7 Two residual sherds (6g) of Early Bronze Age pottery were also recovered from features in Trenches 73 and 74. A single sherd (9g) of 20th century pottery was also collected from bomb crater **602** in Trench 86.

## Clay pipe (Appendix B.7)

3.3.8 A single bowl from a clay tobacco pipe (1g) of a post-medieval date was recovered from Trench 28.

## Non-building stone (Appendix B.8)

3.3.9 A total of three fragments of unworked stone, weighing 241g were recovered from pits **60** and **73** in Trench 44.

## Ceramic Building Material (Appendix B.9)

3.3.10 Eleven fragments (128g), of CBM were recovered from the site. All of the fragments have been attributed a medieval/post-medieval date.

## Fired clay (Appendix B. 10)

3.3.11 Nineteen fragments (220g) of fired clay were recovered from features in Trenches 44 and 56. These fragments were almost all structural pieces and probably derive from kilns. The fired clay has been attributed a Late Iron Age to Early Roman date.

## 3.4 Environmental Summary

## Environmental samples (Appendix C.1)

- 3.4.1 A total of 15 bulk samples were taken across the site. Preservation of plant remains is generally poor across the site, and a small number of samples were devoid of preserved remains. Two samples from a ditch and a pit in Trenches 43 and 44 contained large quantities of molluscs, which could suggest that the features have been open for long periods. Two samples, from Trenches 56 and 65 contained a small amount of cereal grains.
- 3.4.2 The most productive feature was ditch **52** in Trench 45 which contained an abundance of charcoal and hammerscale, which could suggest metalworking in the vicinity. This is particularly notable when taking into consideration its proximity to the possible kiln furniture recovered from Trench 44.

#### Animal bone (Appendix C.2)

3.4.3 In total, 93 fragments (6.31kg) were recovered from the evaluation, primarily from ditches. The assemblage is dominated by cattle and sheep/goat remains, making up 67.7% of the identifiable remains retrieved.



## 4 DISCUSSION

## 4.1 Reliability of field investigation

- 4.1.1 The results of the evaluation were in line with the broad overview provided by the geophysical survey (Turner & Viccari 2018). Although the geophysical survey proved useful in identifying some of the larger linear features, more discrete features such as pits and postholes were also uncovered which had not been identified via the geophysical survey. All features were clearly visible against the variable natural geology.
- 4.1.2 It has been noted that there is a slight discrepancy between some of the identified features and the geophysical survey. The exact reason for this is currently unclear.

## 4.2 Introduction

4.2.1 This investigation has uncovered features including ditches, pits, postholes, trackways and a cremation, concentrated across Fields 1, 2, 6, 7, 9 and 10 (Fig. 11) that suggest a peripheral, but extensive network of tracks, droveways, boundaries and enclosures with some associated settlement and industrial activity. The recovery of a total of 12,525g (1,149 sherds) of Middle Iron Age to Late Roman pottery (350BC-AD400) from across all the trenches attests to a longevity of occupation, peaking in the Early to Middle Roman period, with evidence of a tailing-off in activity post-200AD. The landscape is likely to have still been cultivated and utilised into the later Roman period, indicated by the presence of later Roman pottery in the upper disuse fills of the larger ditches. This evidence relates to and augments the information held in the BHER, notably in relation to known or suspected routeways and areas of previously identified settlement, which together indicates that this area was fairly heavily exploited during the Iron Age and Roman periods.

#### 4.3 Fields 1 and 2

## Routeways and boundaries

- 4.3.1 The geophysical survey in Field 1 identified two slightly curvilinear parallel ditches extending across the full length of the surveyed area, the more easterly of which is also visible as a cropmark on satellite imagery and recorded on the BHER (12530). Further to this, it is illustrated as a field boundary on the Second Edition Ordnance Survey map of 1882 (see Turner & Viccari 2018, fig. 8). Five trenches (17, 20, 21, 25 and 28) were excavated across these ditches, and confirmed their presence. The three trenches located across the more easterly ditch all produced small quantities of postmedieval CBM (totalling 80g), which ties in with the ditch being extant during the late 19th century. The sinuous nature of this ditch however, would indicate it pre-dates the post-medieval period, particularly when taking into account that all the surrounding field boundaries across this area are straight.
- 4.3.2 Topographically, these two ditches are located in a hollow in the landscape at around 128m OD, with the land on either side rising up to c.130m OD to the west and c.133m OD to the east. This naturally sheltered corridor would lend itself to being utilised as a routeway, with the two ditches formalising it and creating a hollow way which varies



in width from approximately 23m (at the south) to around 37m (to the north). In the BHER the area encompassed by this hollow way and the land to the immediate east is recorded as containing concentrations of Neolithic struck flint and Early Iron Age pottery (BHER 8903), this ties in with the recovery of 9g of Late Iron Age pottery from the western ditch (in Trenches 17 and 25). A posthole in Trench 25 also contained 6g of Middle to Late Iron Age pottery. It is therefore probable that these two ditches are the remnants of a prehistoric routeway which has survived over time and eventually been incorporated into a field boundary during the post-medieval period.

- 4.3.3 A second routeway aligned north-east to south-west measuring 10m wide was identified during the geophysical survey in Field 2, this too is recorded as a cropmark in the BHER (12531). Trenches 43 and 44 were excavated across these parallel ditches confirming their presence. The pottery (10g) collected from the fills dates from the Early to Middle Roman period. A dump of semi-articulated animal bone (1.7kg) was also recovered from the more northerly of the two ditches in Trench 43. It is notable that this possible track or droveway broadly lines up with the field boundary to the north. The geophysical survey also identified a possible second droveway (which was not trenched) orientated north-west to south east between Trenches 44 and 45.
- 4.3.4 In the wider landscape, the hollow way identified in Field 1 runs perpendicular to the suggested Roman Road (BHER 691) located around 450m to the north which passes through Upper Sundon and Streatley; however, this route is highly conjectural and so this apparent alignment may be coincidence. It is also notable that possible track or droveway in Field 2 is also parallel to the Icknield Way which is located *c*.2km to the south-east.

## Possible industrial activity

- 4.3.5 In the BHER for Field 2 there is a record for Iron Age and Roman occupation (15816) as evidenced by the presence of pottery sherds on the field's surface, which the proposed route of the road line cuts straight through. The discovery of an area of pitting in Trench 44 containing 428g of Early through to Late Roman pottery would appear to confirm this.
- 4.3.6 Of particular note in Trench 44 are pits **49** and **73** (situated at the easternmost end of the trench). Superficially they look somewhat like possible storage pits, however the unusual apparently deliberately-constructed ridge of chalk at the base of pit **49** and the small adjoining gully would indicate a more complex use. In addition to pottery, an iron object (SF3) and 64g of structural fired clay in the form of a plate-like object usually associated with pottery kilns was recovered. Environmental samples from these two pits contained high quantities of molluscs, suggesting that these pits contained standing water. Unfortunately, little else in the way of environmental remains were recovered from these two pits to aid in ascertaining their function.
- 4.3.7 However, further across Trench 44 was pit **52** which contained a fragment of planoconvex smithing hearth cake (465g) and an environmental sample taken from the ditch in Trench 45 (30m to the north) produced a moderate amount of hammerscale. Altogether, this would indicate a likelihood for industrial activities being undertaken in this vicinity.



#### 4.4 Field 6

## Settlement-related activity

- 4.4.1 A particularly dense area of archaeological features was identified across the length of Field 6. A series of ditches on at least three differing alignments was identified during the evaluation, all of which correspond with clear linear anomalies on the geophysical survey and are recorded in the BHER (16650) at cropmarks. Further to this, the BHER has identified three areas to the immediate north, south and west of these cropmarks which pertain to Iron Age and Roman occupation (BHER 9333, 9332 and 9310 respectively; Fig. 2). The features identified across Field 6 are located on a gentle south-east facing slope, situated between *c.*147m OD (Trench 59) and *c.*136.6m OD (Trench 67). The land then drops away to the south. Location-wise, the settlement/occupation identified in the BHER would be on the flat high ground to the north and on the more sheltered lower ground to the south.
- 4.4.2 Within the proposed route of the link road a large sub-rectangular enclosure measuring *c*.138m wide, which appears to be double-ditched on its south side, was investigated by Trenches 59, 61 and 62. A cluster of pitting within the enclosure was also identified by the geophysical survey and confirmed by the excavation of Trench 60. A series of possible enclosure ditches or potentially droveways measuring between 10m and 13m wide were also investigated in Trench 63. A further *c*.85m-wide double-ditched enclosure on the same alignment as the one above was also confirmed in Trenches 66 and 67. For the number of ditches and their size (measuring between 0.48m and 5.08m wide, with an average width of 1.68m) relatively little in the way of finds was recovered 725g of Middle to Late Iron Age pottery and 215g of Roman pottery and 937g of animal bone. This relative paucity of finds recovered in comparison with the size of the site indicates that these particular features may lie at the edge of any settlement and may have been related to stock-management.
- 4.4.3 Ditch **517** in Trench 65 is however of note because unlike the other ditches, its upper fill produced a rich finds assemblage comprising 129g of Mid to Late Roman pottery along with 156g of structural fired clay normally associated with kiln furniture, 268g of a plano-convex smithing hearth cake and a complete bone hairpin (SF1). A north-south aligned trackway (**560**) with associated roadside ditch in Trench 56 (Field 4), located around 165m to the west produced 1,606g of Mid to Late Roman pottery and 156g of fired clay which showed evidence for flattened surfaced (synonymous with kiln furniture) may also have been associated with these ditched enclosures and the wider settlement remains.

#### Penannular enclosure/structure

- 4.4.4 Of particular note and identified by the geophysics was a circular enclosure investigated by Trench 61. According to the geophysics it has an internal diameter of around 12m with an entranceway on its south-eastern side.
- 4.4.5 The presence of two adjacent ditch terminals (of similar dimensions) in the trench confirmed that there is indeed an entranceway. It has also identified that this feature is more complex in that it is either double ditched or has been recut/reworked. Middle



- Iron Age to Early Roman pottery was recovered from both ditches, which would potentially indicate that it was long-lived/had more than one phase. Four postholes were identified in its interior, indicating the presence of a wooden structure.
- 4.4.6 The geophysics identified that the large double ditched enclosure and this penannular structure overlap one other, the relationship between the two features was not targeted during the evaluation however. Nonetheless, feature typology and pottery dating would suggest that this circular enclosure is more likely Iron Age in date, being reminiscent of a roundhouse, and the large enclosure is probably Roman.

## Funerary remains

- 4.4.7 Within Trench 66 was a notable feature in the form of a large pit (580) containing 8,889g (739 sherds) of Late Iron Age to Early Roman pottery. Within this assemblage were five semi-complete vessels (two Gallo-Belgic whiteware beakers, two collard rim flagons and a pedestal urn) representing cremation goods. Underneath these vessels were deposits of cremated human remains and articulated bone and metalwork (which were left *in situ*). It is likely that the pottery from this cremation represents a pre-conquest deposit and can be paralleled with the Iron Age cemetery at King Harry Lane, Verulamium (Stead & Rigby 1989).
- 4.4.8 The presence of a potentially high-status cremation pit on the site is of some significance and suggests that other burials may be located in the near vicinity.

## 4.5 Fields 9 and 10

#### Peripheral settlement activity and trackway

- 4.5.1 Archaeological remains attesting to the probable presence of a nearby Late Iron Age to Early Roman settlement have also been uncovered in Field 9 and the western edge of Field 10. Trench 76 on the eastern edge of Field 9 revealed a group of three pits containing Early Roman pottery. However, the base of two of these pits (625 and 640) was not identified due to excessive depth and their profiles vertical sided with a slight undercut is suggestive that these pits are actually wells. These three pits correlate with anomalies on the geophysical survey and there are another four very similar sized anomalies to the immediate north and south.
- 4.5.2 The geophysical survey also identified a series of parallel north-northwest to south-southeast aligned ditches across Field 9, from which Middle Iron Age and Early Roman pottery was recovered. It is notable that the BHER records a putative Roman Road (5020) as bisecting the proposed route of the link road in this location, the orientation of which corresponds with the linear geophysical anomalies. The evaluation confirmed the presence of two ditches flanking either side of this road, in Trenches 73 and 76. Whilst the location of this suggested Roman road was not specifically investigated in Trench 74, which was positioned immediately adjacent to it, this trench did contain a cobbled trackway with associated roadside ditch on a perpendicular alignment. This discovery suggests a wider network of minor roads connecting various farmsteads and settlements with the towns and large settlements/economic centres across the surrounding landscape.



## Droveways and tracks

- 4.5.3 The parallel ditches in Field 10 identified in the geophysical survey look very similar to those identified in Field 2 (see above). It is therefore probable that the ditches uncovered in Trenches 78, 79, 81, 84 and 89 are a series of narrow droveways or field tracks, measuring between 3.5 and 4.5m wide, relating to field systems or enclosures beyond the limits of the site. The paucity of datable and environmental material coming from these ditches (totalling 177g of Early Roman pottery, 75g of Late Roman pottery and 7g of animal bone) reinforces their potential interpretation as droveways rather than anything directly settlement-related.
- 4.5.4 Topographically these droveways are located on the higher ground, with the north-northwest to south-southeast aligned ditches being situated along a crest at approximately 130m OD and the perpendicular ditches run down the slope where they are recorded at around 125m OD. The land eastward continues to drop down to *c*.120m OD towards the valley bottom.

#### 4.6 Conclusion

- 4.6.1 Across the 4.4km proposed route of the link road, a variety of archaeological remains have been uncovered, including trackways, boundaries, enclosures, pits and a cremation burial. The archaeological works have confirmed the findings of the geophysical survey and that of past fieldwalking events recorded in the BHER and are indicative of extensive, if not intensive, exploitation of this landscape during the Iron Age and Roman periods.
- 4.6.2 It is perhaps of little surprise that archaeological features were encountered given the location of the proposed link road across a known area of high archaeological potential. The large Iron Age settlement to the west identified during the M1 widening (see BHER 15839 and BHER 18293) and the presence of the Icknield Way approximately 0.7km to the east are likely to be related to the archaeological activity revealed by this evaluation.



# APPENDIX A TRENCH AND CONTEXT INVENTORY

Trench	Field	Orientation	Length (m)	Topsoil (m)	Subsoil (m)	Archaeology
1	1	NNW-SSE	50	0.35	0.2	
2	1	WNW-ESE	50	0.35	0.3	Υ
3	1	WNW-ESE	50	0.25	0.35	
4	1	NE-SW	50	0.3	0.2	
5	1	NW-SE	50	0.3	0.2	
6	1	NNW-SSE	50	0.3	0.2	
7	1	WNW-ESE	50	0.35	0.3	
8	1	NNE-SSW	50	0.3	0.3	
9	1	NNW-SSE	50	0.3	0.4	
10	1	NNW-SSE	50	0.3	0.2	
11	1	NE-SW	50	0.4	0.2	
12	1	NW-SE	50	0.3	0.35	
13	1	NNW-SSE	50	0.35	0.4	
14	1	NW-SE	50	0.35	0.15	
15	1	NNW-SSE	50	0.4	0.45	
16	1	ENE-WSW	50	0.35	0.5	
17	1	NE-SW	50	0.35	0.2	Υ
18	1	NE-SW	50	0.35	0.15	
19	1	ENE-WSW	50	0.45	0.35	
20	1	ENE-WSW	50	0.4	0.35	Υ
21	1	ENE-WSW	50	0.3	0.2	Υ
22	1	ENE-WSW	50	0.3	0.15	1
23	1	NW-SE	50	0.3	0.45	
24	1	NNW-SSE	50	0.3	0.43	
25	1	ENE-WSW	50	0.4	0.2	Υ
26	1	NNW-SSE	50	0.4	0.2	1
27	1	NNW-SSE	50	0.3	0.15	
28	1	ENE-WSW	50	0.3	0.35	Υ
29	1	NNW-SSE	50	0.3	0.13	1
30	1	NNW-SSE	50	0.3	0.1	
31	1	NW-SE	50	0.3	0.05	
32	1	ENE-WSW	50	0.3	0.05	
33	1	ENE-WSW	50	0.25	0.03	
34	1	NNW-SSE	50	0.35	0.3	
35	1	ENE-WSW	50			
36	-	NW-SE	50	0.35	0.05	
37	1		50			
	1	NE-SW		0.3	0.1	
38	1	NNW-SSE	50	0.35	0.1	
39	1	NE-SW	50	0.25	0.1	
40	1	NNW-SSE	50	0.3	0.15	
41	2	WNW-ESE	50	0.3	0.2	V
42	2	NE-SW	50	0.3	0.3	Υ
43	2	NW-SE	25	0.4	0.3	Υ
44	2	ENE-WSW	70	0.4	0.1	Υ
45	2	NNE-SSW	25	0.4	0.3	Υ
46	2	NW-SE	25	0.4	0.3	
47	2	NE-SW	25	0.4	0.4	
48	2	NNW-SSE	50	0.35	0.15	
49	3	NNW-SSE	50	0.2	0.3	
50	3	NE-SW	50	0.2	0.2	
51	3	NNE-SSW	50	0.25	0.2	



52	3	WNW-ESE	50	0.3	0.25	
53	3	NE-SW	50	0.25	0.25	
54	4	NE-SW	50	0.2	0.2	
55	4	NW-SE	50	0.2	0.15	
56	4	E-W	50	0.3	0.15	Υ
57	5	ENE-WSW	50	0.2	0.10	'
58	6	WNW-ESE	50	0.2	0.2	
59	6	NE-SW	50	0.3	0.3	Υ
60	6	ENE-WSW	50	0.3	0.2	Y
61	6	NW-SE	25	0.25	0.1	Y
62	6	E-W	50	0.25	0.2	Y
63	6	NE-SW	50	0.25	0.15	Y
64	6	NE-SW	25	0.3	0.15	Y
65	6	NW-SE	50	0.2	0.15	Y
66	6	WNW-ESE	50	0.2	0.2	Y
67	6	NW-SE	50	0.2	0.25	Y
68	6	NE-SW	50	0.2	0.23	'
69	7	NE-SW	50	0.25	0.1	
70	7	E-W	50	0.25	0.1	Υ
71	7	NE-SW	50	0.23	0.1	1
72	7	NW-SE	50	0.2	0.25	
73	9	NE-SW	50	0.2		Υ
74	9	NW-SE	50	0.25	-	Y
75	9	ENE-WSW	50	0.23	-	Y
76	9	ENE-WSW	50	0.35	-	Y
77	10	NNW-SSE	50	0.33	0.25	Y
78	10	NW-SE	50	0.25	0.25	Y
79	10	NNW-SSE	50	0.23	0.1	Y
80	10	ENE-WSW	50	0.3	0.1	Y
81	10	ENE-WSW	50	0.3	0.25	Y
	_			0.25	+	Y
82	10	NNW-SSE NEN-WSW	50	0.25	0.15	Y
84	10	NE-SW	50	0.23	0.1	Y
85	10	NNW-SSE	50	0.3	-	ĭ
86	10	NE-SW	50	0.3	0.2	Υ
	+		1		+	Y
87	10	NNW-SSE	50	0.3	0.3	V
88	10	NE-SW	50	0.3	0.2	Y
89	10	NW-SE	50	0.3	-	Y
90	10	NE-SW	50	0.3	-	
91 92	10	NNW-SSE	50	0.2	0.2	
93	10	ENE-WSW ENE-WSW	50 50	0.2	0.15	
93	+	NNW-SSE	50	0.2	<del>}</del>	
95	10	NNW-SSE	50	0.2	0.15	
96	10	NNW-SSE	50	+	0.2	
97	10	ENE-WSW	50	0.3	0.3	<del>                                     </del>
98	10	ENE-WSW	50	0.25	0.2	Υ
98	+	ł	50	0.3	0.2	ſ
100	10	NNW-SSE NE-SW	50	0.2	+	+
	10		1	<u> </u>	0.1	+
101	10	ENE-WSW	50	0.3	0.1	
102	10	NW-SE	50	0.25	0.1	
103	10	ENE-WSW	50	0.25	0.1	
104	10	NW-SE	50	0.3	0.2	



105	10	NNW-SSE	50	0.2	0.2	
106	10	NNW-SSE	50	0.25	0.1	
107	10	NNW-SSE	50	0.15	0.15	
108	10	ENE-WSW	50	0.35	0.2	Υ

Context	Cut	Trench	Field	Category	Feature Type
1				layer	topsoil
2				layer	subsoil
3				layer	layer
4	5	2	1	fill	ditch
5	5	2	1	cut	ditch
6				layer	natural
7	7	25	1	cut	pit
8	7	25	1	fill	pit
9	9	25	1	cut	post hole
10	9	25	1	fill	post hole
11	11	25	1	cut	post hole
12	11	25	1	fill	post hole
13	13	25	1	cut	ditch
14	13	25	1	fill	ditch
15	15	25	1	cut	ditch
16	15	25	1	fill	ditch
17	17	28	1	cut	ditch
18	17	28	1	fill	ditch
19	19	21	1	cut	ditch
20	19	21	1	fill	ditch
21	21	21	1	cut	ditch
22	21	21	1	fill	ditch
23	23	21	1	cut	pit
24	23	21	1	fill	pit
25	25	42	2	cut	ditch
26	25	42	2	fill	ditch
27	27	42	2	cut	ditch
28	27	42	2	fill	ditch
29	29	20	1	cut	ditch
30	29	20	1	fill	ditch
31	31	17	1	cut	ditch
32	31	17	1	fill	ditch
33	33	17	1	cut	ditch
34	33	17	1	fill	ditch
35	35	17	1	cut	ditch
36	35	17	1	fill	ditch
37	37	43	2	cut	ditch
38	37	43	2	fill	ditch
39	39	44	2	cut	ditch
40	39	44	2	fill	ditch
41	41	43	2	cut	ditch
42	41	43	2	fill	ditch
43	43	44	2	cut	pit
44	43	44	2	fill	pit
45	45	44	2	cut	pit
46	45	44	2	fill	pit



49	49	44	2	cut	pit
50	49	44	2	fill	pit
51	49	44	2	fill	pit
52	52	45	2	cut	ditch
53	52	45	2	fill	ditch
54	54	44	2	cut	ditch
55	54	44	2	fill	ditch
56	54	44	2	fill	ditch
57	54	44	2	fill	ditch
58	58	44	2	cut	pit
59	58	44	2	fill	pit
60	60	44	2	cut	pit
61	60	44	2	fill	pit
62	62	44	2	cut	pit
63	62	44	2	fill	pit
64	49	44	2	fill	pit
65	49	44	2	fill	pit
66	49	44	2	fill	pit
67	49	44	2	fill	pit
68	49	44	2	deposit	pit
69	49	44	2	fill	
70	70	44	2		pit
70	70	44	2	cut fill	pit
					pit
72	60	44	2	fill	pit
73	73	44	2	cut	pit
74	73	44	2	fill	pit
75	73	44	2	fill	pit
76	73	44	2	fill	pit
77	73	44	2	fill	pit
78	78	44	2	cut	pit
79	78	44	2	fill	pit
80	73	44	2	fill	pit
81	73	44	2	fill	pit
82	82	44	2	cut	post hole
83	82	44	2	fill	post hole
84	84	44	2	cut	pit
85	84	44	2	fill	pit
86	86	44	2	cut	pit
87	86	44	2	fill	pit
501	501	61	6	cut	post hole
502	501	61	6	fill	post hole
503	503	61	6	cut	post hole
504	503	61	6	fill	post hole
505	505	61	6	cut	post hole
506	505	61	6	fill	post hole
507	507	61	6	cut	post hole
508	507	61	6	fill	post hole
509	509	61	6	cut	ditch
510	509	61	6	fill	ditch
511	511	59	6	cut	ditch
512	511	59	6	fill	ditch
513	513	59	6	cut	pit
514	513	59	6	fill	pit
					12.5



515         515         60         6         cut         pit           516         515         60         6         fill         pit           517         517         65         6         cut         ditch           518         517         65         6         fill         ditch           519         519         61         6         cut         ditch           520         519         61         6         fill         ditch           520         519         61         6         fill         ditch           521         521         61         6         fill         ditch           522         521         61         6         fill         ditch           523         521         61         6         fill         ditch           524         524         62         6         cut         ditch           525         524         62         6         fill         ditch           527         526         62         6         fill         ditch           529         529         63         6         fill         ditch           5						
516         515         60         6         fill         pit           517         517         65         6         cut         ditch           518         517         65         6         fill         ditch           519         519         61         6         cut         ditch           520         519         61         6         fill         ditch           521         521         61         6         fill         ditch           522         521         61         6         fill         ditch           524         524         62         6         cut         ditch           524         524         62         6         cut         ditch           525         524         62         6         fill         ditch           525         524         62         6         fill         ditch           527         526         62         6         fill         ditch           529         529         63         6         fill         ditch           530         529         63         6         fill         ditch <td< td=""><td>515</td><td>515</td><td>60</td><td>6</td><td>cut</td><td>pit</td></td<>	515	515	60	6	cut	pit
517         517         65         6         cut         ditch           518         517         65         6         fill         ditch           519         519         61         6         cut         ditch           520         519         61         6         fill         ditch           521         521         61         6         fill         ditch           522         521         61         6         fill         ditch           523         521         61         6         fill         ditch           523         521         61         6         fill         ditch           524         524         62         6         cut         ditch           525         524         62         6         fill         ditch           525         524         62         6         fill         ditch           526         526         62         6         fill         ditch           527         526         62         6         fill         ditch           530         529         63         6         fill         ditch						
518         517         65         6         fill         ditch           519         519         61         6         cut         ditch           520         519         61         6         fill         ditch           521         521         61         6         fill         ditch           522         521         61         6         fill         ditch           523         521         61         6         fill         ditch           524         524         62         6         cut         ditch           525         524         62         6         fill         ditch           527         526         62         6         fill         ditch           527         526         62         6         fill         ditch           527         526         62         6         fill         ditch						·
519         519         61         6         cut         ditch           520         519         61         6         fill         ditch           521         521         61         6         fill         ditch           522         521         61         6         fill         ditch           523         521         61         6         fill         ditch           524         524         62         6         cut         ditch           525         524         62         6         fill         ditch           525         524         62         6         fill         ditch           526         526         62         6         fill         ditch           527         526         62         6         fill         ditch           529         529         63         6         cut         ditch           530         529         63         6         fill         ditch           531         529         63         6         fill         ditch           531         529         63         6         fill         ditch				6		
520         519         61         6         fill         ditch           521         521         61         6         cut         ditch           522         521         61         6         fill         ditch           523         521         61         6         fill         ditch           524         524         62         6         cut         ditch           525         524         62         6         fill         ditch           526         526         62         6         fill         ditch           527         526         62         6         fill         ditch           528         526         62         6         fill         ditch           530         529         63         6         fill         ditch           530         529         63         6         fill         ditch           531         529         63         6         fill         ditch           531         529         63         6         fill         ditch           532         529         63         6         fill         ditch	519					
522         521         61         6         fill         ditch           523         521         61         6         fill         ditch           524         524         62         6         cut         ditch           525         524         62         6         fill         ditch           526         526         62         6         fill         ditch           527         526         62         6         fill         ditch           528         526         62         6         fill         ditch           529         529         63         6         cut         ditch           530         529         63         6         fill         ditch           531         529         63         6         fill         ditch		519				
522         521         61         6         fill         ditch           523         521         61         6         fill         ditch           524         524         62         6         cut         ditch           525         524         62         6         fill         ditch           526         526         62         6         fill         ditch           527         526         62         6         fill         ditch           528         526         62         6         fill         ditch           529         529         63         6         cut         ditch           530         529         63         6         fill         ditch           531         529         63         6         fill         ditch						
523         521         61         6         fill         ditch           524         524         62         6         cut         ditch           525         524         62         6         fill         ditch           526         526         62         6         fill         ditch           527         526         62         6         fill         ditch           528         526         62         6         fill         ditch           528         526         62         6         fill         ditch           529         63         6         fill         ditch           530         529         63         6         fill         ditch           531         529         63         6         fill         ditch           531         529         63         6         fill         ditch           533         537         64         6         cut         ditch           533         537         64         6         cut         ditch           539         539         64         6         fill         ditch           540	522			6		
525         524         62         6         fill         ditch           526         526         62         6         cut         ditch           527         526         62         6         fill         ditch           528         526         62         6         fill         ditch           529         529         63         6         fill         ditch           530         529         63         6         fill         ditch           531         529         63         6         fill         ditch           533         537         64         6         cut         ditch           533         537         64         6         cut         ditch           539         539         64         6         fill         ditch           540         539         64         6         fill         ditch	523		61	6	fill	ditch
525         524         62         6         fill         ditch           526         526         62         6         cut         ditch           527         526         62         6         fill         ditch           528         526         62         6         fill         ditch           528         526         62         6         fill         ditch           529         529         63         6         fill         ditch           530         529         63         6         fill         ditch           531         529         63         6         fill         ditch           533         537         64         6         cut         ditch           533         537         64         6         fill         ditch           540         539         64         6         fill         ditch			62	6	cut	
526         526         62         6         fill         ditch           527         526         62         6         fill         ditch           528         526         62         6         fill         ditch           529         529         63         6         cut         ditch           530         529         63         6         fill         ditch           531         529         63         6         fill         ditch           532         529         63         6         fill         ditch           534         529         63         6         fill         ditch           534         529         63         6         fill         ditch           534         529         63         6         fill         ditch           537         537         64         6         cut         ditch           538         537         64         6         cut         ditch           540         539         64         6         cut         ditch           541         548         63         6         fill         ditch           <			62	6		ditch
527         526         62         6         fill         ditch           528         526         62         6         fill         ditch           529         529         63         6         cut         ditch           530         529         63         6         fill         ditch           531         529         63         6         fill         ditch           532         529         63         6         fill         ditch           534         529         63         6         fill         ditch           537         537         64         6         cut         ditch           538         537         64         6         cut         ditch           539         539         64         6         fill         ditch           540         539         64         6         fill         ditch           540         539         64         6         fill         ditch           540         539         64         6         cut         ditch           541         548         63         6         fill         ditch           <				6	cut	
529         529         63         6         cut         ditch           530         529         63         6         fill         ditch           531         529         63         6         fill         ditch           532         529         63         6         fill         ditch           534         529         63         6         fill         ditch           537         537         64         6         cut         ditch           538         537         64         6         cut         ditch           539         539         64         6         cut         ditch           540         539         64         6         fill         ditch           540         539         63         6         cut         ditch <t< td=""><td>527</td><td></td><td>62</td><td>6</td><td>fill</td><td>ditch</td></t<>	527		62	6	fill	ditch
530         529         63         6         fill         ditch           531         529         63         6         fill         ditch           532         529         63         6         fill         ditch           534         529         63         6         fill         ditch           537         537         64         6         cut         ditch           538         537         64         6         fill         ditch           539         539         64         6         cut         ditch           540         539         64         6         fill         ditch           540         539         64         6         cut         ditch           547         548         63         6         cut         ditch           549         550         63         6         cut         ditch <t< td=""><td>528</td><td>526</td><td>62</td><td>6</td><td>fill</td><td>ditch</td></t<>	528	526	62	6	fill	ditch
531         529         63         6         fill         ditch           532         529         63         6         fill         ditch           534         529         63         6         fill         ditch           537         537         64         6         cut         ditch           538         537         64         6         fill         ditch           539         539         64         6         cut         ditch           540         539         64         6         fill         ditch           540         539         64         6         cut         ditch           548         63         6         cut         ditch           550         550         63         6         cut         ditch           551 <t< td=""><td>529</td><td>529</td><td>63</td><td>6</td><td>cut</td><td>ditch</td></t<>	529	529	63	6	cut	ditch
532         529         63         6         fill         ditch           534         529         63         6         fill         ditch           537         537         64         6         cut         ditch           538         537         64         6         fill         ditch           539         539         64         6         fill         ditch           540         539         64         6         fill         ditch           540         539         64         6         fill         ditch           547         548         63         6         cut         ditch           548         548         63         6         cut         ditch           549         550         63         6         cut         ditch           549         550         63         6         cut         ditch           550         550         63         6         cut         ditch           551         67         6         fill         ditch           552         551         67         6         fill         ditch           553 <td< td=""><td>530</td><td>529</td><td>63</td><td>6</td><td>fill</td><td>ditch</td></td<>	530	529	63	6	fill	ditch
534         529         63         6         fill         ditch           537         537         64         6         cut         ditch           538         537         64         6         fill         ditch           539         539         64         6         fill         ditch           540         539         64         6         fill         ditch           547         548         63         6         fill         ditch           548         548         63         6         cut         ditch           549         550         63         6         fill         ditch           549         550         63         6         cut         ditch           550         550         63         6         cut         ditch           551         551         67         6         fill         ditch           552         551         67         6         fill         ditch           553         554         63         6         cut         ditch           555         551         65         6         fill         ditch <t< td=""><td>531</td><td>529</td><td>63</td><td>6</td><td>fill</td><td>ditch</td></t<>	531	529	63	6	fill	ditch
537         537         64         6         cut         ditch           538         537         64         6         fill         ditch           539         539         64         6         fill         ditch           540         539         64         6         fill         ditch           547         548         63         6         fill         ditch           548         548         63         6         cut         ditch           548         548         63         6         cut         ditch           549         550         63         6         cut         ditch           548         548         63         6         cut         ditch           550         550         63         6         cut         ditch           550         551         67         6         fill         ditch           552         551         67         6         fill         ditch           553         554         63         6         cut         ditch           555         517         65         6         fill         ditch	532	529	63	6	fill	ditch
538         537         64         6         fill         ditch           539         539         64         6         cut         ditch           540         539         64         6         fill         ditch           547         548         63         6         fill         ditch           548         548         63         6         cut         ditch           549         550         63         6         cut         ditch           549         550         63         6         cut         ditch           550         550         63         6         cut         ditch           551         571         65         6         fill         ditch           552         551         67         6         fill         ditch           553         554         63         6         fill         ditch           553         554         63         6         cut         ditch           555         517         65         6         fill         ditch           555         556         63         6         fill         ditch <td< td=""><td>534</td><td>529</td><td>63</td><td>6</td><td>fill</td><td>ditch</td></td<>	534	529	63	6	fill	ditch
539         539         64         6         cut         ditch           540         539         64         6         fill         ditch           547         548         63         6         fill         ditch           548         548         63         6         cut         ditch           549         550         63         6         cut         ditch           550         550         63         6         cut         ditch           550         550         63         6         cut         ditch           551         551         67         6         cut         ditch           552         551         67         6         fill         ditch           553         554         63         6         cut         ditch           553         554         63         6         cut         ditch           555         517         65         6         fill         ditch           555         517         65         6         fill         ditch           557         556         63         6         fill         ditch           5	537	537	64	6	cut	ditch
540         539         64         6         fill         ditch           547         548         63         6         fill         ditch           548         548         63         6         cut         ditch           549         550         63         6         cut         ditch           550         550         63         6         cut         ditch           550         550         63         6         cut         ditch           551         551         67         6         cut         ditch           552         551         67         6         fill         ditch           553         554         63         6         fill         ditch           554         554         63         6         cut         ditch           555         517         65         6         fill         ditch           555         517         65         6         fill         ditch           557         556         63         6         fill         ditch           559         558         70         7         fill         ditch <td< td=""><td>538</td><td>537</td><td>64</td><td>6</td><td>fill</td><td>ditch</td></td<>	538	537	64	6	fill	ditch
547         548         63         6         fill         ditch           548         548         63         6         cut         ditch           549         550         63         6         cut         ditch           550         550         63         6         cut         ditch           551         551         67         6         fill         ditch           552         551         67         6         fill         ditch           553         554         63         6         cut         ditch           553         554         63         6         fill         ditch           554         554         63         6         cut         ditch           555         517         65         6         fill         ditch           556         556         63         6         cut         ditch           557         556         63         6         fill         ditch           559         558         70         7         cut         ditch           561         560         56         4         fill         ditch	539	539	64	6	cut	ditch
548         548         63         6         cut         ditch           549         550         63         6         fill         ditch           550         550         63         6         cut         ditch           551         551         67         6         cut         ditch           552         551         67         6         fill         ditch           553         554         63         6         fill         ditch           554         554         63         6         cut         ditch           555         517         65         6         fill         ditch           555         517         65         6         fill         ditch           556         556         63         6         cut         ditch           557         556         63         6         fill         ditch           559         558         70         7         fill         ditch           560         56         4         cut         ditch           561         560         56         4         fill         ditch           562 <td< td=""><td>540</td><td>539</td><td>64</td><td>6</td><td>fill</td><td>ditch</td></td<>	540	539	64	6	fill	ditch
549         550         63         6         fill         ditch           550         550         63         6         cut         ditch           551         551         67         6         cut         ditch           552         551         67         6         fill         ditch           553         554         63         6         cut         ditch           554         554         63         6         cut         ditch           554         554         63         6         cut         ditch           555         517         65         6         fill         ditch           556         556         63         6         cut         ditch           557         556         63         6         fill         ditch           559         558         70         7         cut         ditch           560         560         56         4         fill         ditch           561         560         56         4         fill         ditch           563         69         7         layer         natural hollow           564	547	548	63	6	fill	ditch
550         550         63         6         cut         ditch           551         551         67         6         cut         ditch           552         551         67         6         fill         ditch           553         554         63         6         fill         ditch           554         554         63         6         cut         ditch           555         517         65         6         fill         ditch           556         556         63         6         cut         ditch           557         556         63         6         fill         ditch           558         558         70         7         cut         ditch           559         558         70         7         fill         ditch           560         56         4         cut         ditch           561         560         56         4         fill         ditch           562         560         56         4         fill         ditch           563         69         7         layer         natural hollow           564         69	548	548	63	6	cut	ditch
551         551         67         6         cut         ditch           552         551         67         6         fill         ditch           553         554         63         6         fill         ditch           554         554         63         6         cut         ditch           555         517         65         6         fill         ditch           556         556         63         6         cut         ditch           557         556         63         6         fill         ditch           558         558         70         7         cut         ditch           559         558         70         7         fill         ditch           560         560         56         4         cut         ditch           561         560         56         4         fill         ditch           562         560         56         4         fill         ditch           563         69         7         layer         natural hollow           565         556         63         6         fill         ditch           566	549	550	63	6	fill	ditch
552         551         67         6         fill         ditch           553         554         63         6         fill         ditch           554         554         63         6         cut         ditch           555         517         65         6         fill         ditch           556         556         63         6         cut         ditch           557         556         63         6         fill         ditch           557         556         63         6         fill         ditch           558         558         70         7         cut         ditch           559         558         70         7         fill         ditch           560         560         56         4         cut         ditch           561         560         56         4         fill         ditch           562         560         56         4         fill         ditch           563         6         7         layer         natural hollow           565         556         63         6         fill         ditch           567	550	550	63	6	cut	ditch
553         554         63         6         fill         ditch           554         554         63         6         cut         ditch           555         517         65         6         fill         ditch           556         556         63         6         cut         ditch           557         556         63         6         fill         ditch           558         558         70         7         cut         ditch           559         558         70         7         fill         ditch           560         560         56         4         cut         ditch           561         560         56         4         fill         ditch           562         560         56         4         fill         ditch           563         6         7         layer         natural hollow           564         69         7         layer         natural hollow           565         556         63         6         fill         ditch           567         567         63         6         fill         ditch           568 <td< td=""><td>551</td><td>551</td><td>67</td><td>6</td><td>cut</td><td>ditch</td></td<>	551	551	67	6	cut	ditch
554         554         63         6         cut         ditch           555         517         65         6         fill         ditch           556         556         63         6         cut         ditch           557         556         63         6         fill         ditch           558         558         70         7         cut         ditch           559         558         70         7         fill         ditch           560         560         56         4         cut         ditch           561         560         56         4         fill         ditch           561         560         56         4         fill         ditch           562         560         56         4         fill         ditch           563         69         7         layer         natural hollow           564         69         7         layer         natural hollow           565         556         63         6         fill         ditch           567         566         63         6         cut         ditch           568 <td< td=""><td>552</td><td>551</td><td>67</td><td>6</td><td>fill</td><td>ditch</td></td<>	552	551	67	6	fill	ditch
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	576	551	67	6	fill	ditch



577	551	67	6	fill	ditch
578	551	67	6	fill	ditch
579	551	67	6	fill	ditch
580	580	66	6	cut	pit
581	580	66	6	fill	pit
582	582	79	10	cut	ditch
583	582	79	10	fill	ditch
584	584	79	10	cut	ditch
585	584	79	10	fill	ditch
586	586	80	10	cut	pit
587	586	80	10	fill	ditch
588	588	80	10	cut	ditch
589	589	80	10	fill	ditch
592	592	80	10	cut	post hole
593	592	80	10	fill	ditch
594	594	81	10	cut	ditch
595	594	81	10	fill	ditch
596	596	81	10	cut	ditch
597	596	81	10	fill	ditch
598	601	98	10	fill	bomb crater
599	601	98	10	fill	bomb crater
600	601	98	10	fill	bomb crater
601	601	98	10	cut	bomb crater
602		86	10		
	602		10	cut fill	bomb crater
603	602	86			bomb crater
604	604	78	10	cut	bomb crater
605	604	78	10	fill	bomb crater
606	606	108		cut	post hole
607	606	108 108	10	fill	post hole
608	608		10	fill	post hole ditch
609	608	108	10		
610	610	78	10	cut fill	ditch ditch
611	610	78 78	10		ditch
613	612	78	10	fill	
	012	84	10		ditch
614	414			layer	layer
615	616	84	10	fill	ditch
616	616	84	10	cut	ditch
617	618	89	10	fill	ditch ditch
618	618	89	10	cut	
619	620	89	10	fill	ditch
620	620	89	10	cut	ditch
621	622	82	10	fill	bomb crater
622	622	82	10	cut	bomb crater
623	604	78	10	fill	bomb crater
624	625	76	9	fill	well
625	625	76	9	cut	well
626	626	77	10	cut	ditch
627	626	77	10	fill	ditch
628	628	74	9	cut	pit
629	628	74	9	fill	pit
630	630	74	9	cut	trackway
631	631	74	9	layer	trackway



### Luton M1 to A6 Link Road, Bedfordshire

632	630	74	9	fill	trackway
633	634	76	9	fill	pit
634	634	76	9	cut	pit
635	638	75	9	fill	ditch
636	638	75	9	fill	ditch
637	638	75	9	fill	ditch
638	638	75	9	cut	ditch
639	640	76	9	fill	well
640	640	76	9	cut	well
641	641	73	9	cut	ditch
642	641	73	9	fill	ditch
643	641	73	9	fill	ditch
644	641	73	9	fill	ditch
645	645	74	9	cut	ditch
646	645	74	9	fill	ditch
647	647	76	9	cut	ditch
648	647	76	9	fill	ditch



# APPENDIX B FINDS REPORTS

### B.1 Small finds

By Denis Sami and Paddy Lambert

### Introduction

- B.1.1 A total of four iron artefacts and a bone pin were recovered from archaeological features excavated in four evaluation trenches (Trenches 44, 56, 65 and 66). The finds were recovered from the fills of pits and ditches that are on the most part securely dated via ceramic evidence to the Roman period.
- B.1.2 The small assemblage consists of poorly preserved and incomplete metal artefacts and a worked bone hair pin. The bone pin is complete and well preserved, with all of the decorative elements intact.

#### Results

- B.1.3 The small size and poor condition of the iron assemblage make it difficult to define a precise conclusion as to what the finds may indicate, other than being analysed in conjunction with other forms of evidence. The bone hair pin (SF 1, ditch 517, Tr. 65) is well-preserved and complete. It is decorated by three parallel and horizontal grooves across the head. Worked bone hair pins of this type were ubiquitous throughout the Roman period, styles were relatively long-lived and are found across a wide range of site-types. This example is ascribed a later Roman date (AD 200-410) due to its decoration style.
- B.1.4 The fragment of metalwork (SF2) cannot be identified conclusively due to its corrosion. However, its form and size may indicate the head section of a brooch. It was recovered from a pit containing Roman cremation vessels and cremated bone and is therefore likely to be contemporary.
- B.1.5 SF3, is a large iron object recovered from pit **73** in Trench 44. It is badly corroded, and its function is unclear. The artefact was recovered from a feature with an industrial function and it is therefore likely to be related to an industry.
- B.1.6 SF4 is a handmade iron hobnail dated to the Roman period (AD 43-410), with a squared cross-section and pyramidal head displaying only partial wear, is indicative of accidental loss.
- B.1.7 SF5 is an incomplete handmade iron nail with a square cross section, primarily used in construction but can have a variety of uses. Hand-made nails can be any date between the Roman period and the late medieval period, with little variation. However, nearby contextual data suggests that this example is broadly Roman (AD43-410) in date.

## Retention, dispersal and display

B.1.8 The metal assemblage is of a relatively low potential in its current state. However, it does indicate that there will likely be more of the same artefact types recovered during any future works. It is recommended that SF3 be retained. Due to its possible links



with a cremation context, SF2 should be retained. The remaining metal work can be discarded after incorporation into any future reports.

B.1.9 The bone hair pin should be kept and stored accordingly to the current guidance.

# Catalogue

SF	Context	Cut	Feature	Trench	Description	Length (mm)	Width (mm)	Thickness (mm)	Spot date
1	518	517	ditch	65	Complete bone pin with trapezoidal flat head decorated by three parallel and horizontal grooves. Shaft is slightly swollen at the centre	70	7.8	4.5	Roman (AD200- 400)
2	581	580	pit	66	Incomplete shapeless fragment	16.7	11.3	9.8	Roman
3	75	73	pit	44	Incomplete shapeless fragment	63	60	54	Roman
4	518	517	ditch	65	Nail with square cross-section (4mm), tapering shank and pyramidal head	21.3	11.6		Roman
5	562	560	ditch	56	Incomplete and bent shank of a nail with square cross-section	31.3	6.5		Roman/ medieval

Table 1: Small finds catalogue



# B.2 Slag

By Carole Fletcher

## Introduction and methodology

B.2.1 A small assemblage of slag, weighing 0.753kg, was collected by hand from a pit and ditch in Trenches 44 and 65. The slag was weighed and rapidly recorded, with basic description and weight recorded in the text.

#### Results

B.2.2 Slag was recovered from pit **60**, in Trench 44. It consists of a fragment of a planoconvex smithing hearth cake (SHC), weighing 0.485kg. This fragment is externally dark grey to black and rust-coloured, with moderate small vesicles and occasional larger ones. The upper surface of the SHC is slightly concave, with several of the larger vesicles present, one of which is sub-square and retains an impression/traces of the charcoal fuel used during the smithing process. The lower surface is convex, and both surfaces are very irregular and rough (English Heritage 2015 36, figs 31-32). Six fragments (non-refitting) of similar appearance, weighing 0.268kg, of another possible SHC were recovered from ditch **517** in Trench 65.

#### Discussion

B.2.3 The slag assemblage is fragmentary, and its significance is uncertain, other than to indicate metalworking in the vicinity. Both pit **60** and ditch **517** also produced Roman pottery and, although the slag cannot be closely dated, it is reasonable to assume that it is contemporary with the pottery.

## Retention, dispersal and display

B.2.4 Should further work be undertaken, additional metalworking debris may be recovered. If no further work is undertaken, this statement acts as a full record and the slag may be deselected prior to archive deposition.



## B.3 Flint

## By Lawrence Billington

#### Introduction

B.3.1 A total of eleven worked flints were recovered during the evaluation. The flintwork derives mostly from the fills of seven cut features (only one of which produced more than a single piece), with three pieces coming from unstratified (plough and topsoil) deposits. The assemblage is quantified by type and context in Table 2.

Trench	Context	Cut	Context type	Secondary Flake	Tertiary Flake	Secondary Blade/let	Tertiary Blade/let	Retouched	Total worked
74	646	645	Ditch			1			1
25	10	9	Post hole	1					1
25	14	13	Ditch	1					1
63	549	550	Ditch		1				1
66	581	580	Pit	1					1
76	624	625	Well		2				2
56	562	560	Ditch					1	1
n/a	99999	n/a	Unstratified			1	2		3
Totals				3	3	2	2	1	11

Table 2: Flint catalogue

#### Results

- B.3.2 All of the flintwork collected from cut features is likely to be residual and the condition of the material is consistent with having seen a degree of post-depositional disturbance. Taken as a whole the assemblage is chronologically mixed. The most distinctive element of the assemblage is made up of four fine blade-based products, comprising a broken blade from ditch 645 (Trench 74) and three heavily recorticated blade/bladelet fragments recovered form unstratified (plough and topsoil) deposits. These pieces can be broadly dated to the Mesolithic or earlier Neolithic, and the regularity and morphology of the unstratified pieces in particular suggest a Mesolithic date is more likely.
- B.3.3 The remainder of the assemblage is made up of generalised flake-based material which is not strongly diagnostic, but probably largely dates to the later Neolithic and Bronze Age. The only retouched piece is a robust flake with somewhat crude, very steep retouch around its perimeter, giving an elongated oval planform. It cannot be assigned to a formal tool category and its function and date is unclear.

### Discussion

B.3.4 This small assemblage provides some, limited, evidence for prehistoric activity at the site, although this may well represent no more than occasional task-based visits, as opposed to any significant/sustained episodes of occupation. The relatively high



proportion of probable Mesolithic blade-based material in the assemblage is notable, but as material of this date is likely to be found only in low densities in ploughsoil deposits or the fills of later cut features, there is probably limited potential for further work at the site to characterise activity during this period in any detail.



## B.4 Glass

## By Carole Fletcher

## Introduction and methodology

B.4.1 Two fragments of glass, weighing 4g, were recovered from ditch **17** in Trench 28 and ditch **517** in Trench 65. The glass was scanned and recorded by form, colour, count and weight, dated where possible and recorded in the text.

#### Results

B.4.2 Trench 28, ditch 17 produced a single fragment (0.6g) of thin (2.4mm), colourless slightly curved glass from a vessel; the glass has few faults and is of uncertain date. Trench 65, ditch 517 produced a single fragment (3.2g) of thin (3mm), clear, pale green Roman flat glass, somewhat matt or weathered on both surfaces and with numerous bubbles and some faults. It may be a fragment of window glass rather than from a prismatic bottle, which are generally made in quality glass (Price and Cottam 1998 194 and 199).

#### Discussion

B.4.3 The assemblage is small and fragmentary. The presence of possible Roman window glass suggests a Roman structure, although the material may be the result of a manuring scatter, and the structure may be some distance from Trench 65.

## Retention, dispersal or display

B.4.4 Should further work be undertaken, additional glass may be recovered. If no further work is undertaken, this statement acts as a full record and the glass may be deselected prior to archive deposition.



# B.5 Prehistoric and Roman Pottery

By Katie Anderson (with Matt Brudenell)

## Introduction and methodology

B.5.1 The evaluation recovered an assemblage of Early Bronze Age to later Roman pottery totalling 1149 sherds, weighing 12525g and representing 10.30 EVEs (estimated vessel equivalent) and a minimum of 57 vessels (MNV). All of the pottery was analysed and recorded in accordance with the Study Group for Roman Pottery guidelines (Perrin 2011) and the Prehistoric Ceramic Research Group guidelines (2009). Matt Brudenell assisted with the identification of the Early Bronze Age pottery and the Middle Iron Age material. This report provides quantification and characterisation of the pottery, as well as a brief discussion on the distribution of material across the evaluation.

## Assemblage Chronology

- B.5.2 The earliest pottery in the assemblage comprises two small body sherds (6g) of Early Bronze Age, flint-tempered pottery, recovered from contexts 643, Trench 73 and 646, Trench 74. The sherd from context 643 was found alongside a sherd of Roman pottery, thus implying it is likely to be residual. Very little inference can be gained from these two sherds, other than suggesting a background presence of activity in the Early Bronze Age. Therefore, this pottery is not considered in any further detail in this report.
- B.5.3 The main period of activity, as indicated by the pottery took place between the Middle Iron Age to the Late Roman period, although activity after the mid-2nd century AD is minimal (Table 3). It should be noted that the division of the pottery illustrated in Table 3 is based on individual sherd dates and therefore should be applied with caution as this method does not account for residual and/or intrusive material. Furthermore, the categories below are in several cases, likely to overlap, partly due to those sherds which could only be broadly assigned a date, but also because certain potting traditions continued alongside others. For example, pottery dated as 'Middle-Late Iron Age' in not necessarily any earlier than material dated Late Iron Age, as the date is based on Middle Iron Age tradition pottery, which has a date range of 350BC-AD50, thus often overlaps with Late Iron Age pottery and in some cases, the earliest Roman pottery. In addition to which, the overall size and condition of the assemblage (and therefore limited number of vessel forms), make more precise dating difficult. Therefore, the categories used in Table 5 should not be seen as distinct phases of activity, but rather potting styles and technologies, and for the purposes of this report some of the phases have been combined in the summary by period.
- B.5.4 Middle-Late Iron Age pottery (*c*.350BC-AD50) represents 7.3% of the overall assemblage (by sherd count), with Middle-Late Ion Age pottery (100BC-AD50) representing 0.9% and Late Iron Age (*c*.50BC-AD50) totalling 1.8%. There is then an apparent peak in activity in the Late Iron Age/Early Roman period (*c*.AD20-50/60), which represents 66.5% of the total evaluation assemblage by sherd count and 73% by weight. However, this figure should be viewed with caution, as the high percentage is largely due to the pottery from a single context; (581), cut **580**, Trench 66, which



accounts for 92% of the Late Iron Age/Early Roman assemblage by count. If the assemblage is analysed by MNV, then it is the Early-Mid Roman period which appears to show a peak in activity (49.1% of the overall assemblage).

Sherd date	No.	Wt(g)	MNV	EVE	% of assemblage by sherd count
Early Bronze Age	2	6	0	0	0.2
Middle-Late Iron Age	83	757	8	0.2	7.3
Late Iron Age	21	191	2	0.11	1.8
Late Iron Age-early Roman	764	9183	8	5.82	66.5
Early Roman	35	214	4	0.1	3
Early-mid Roman	179	1518	28	3.39	13.6
Mid-later Roman	13	161	6	0.44	3.1
Romano-British (AD40-400)	52	505	1	0.28	4.5
Total	1149	12535	57	10.34	100

Table 3: All pottery by period

B.5.5 Material dating to the Early Roman period (*c*.AD50-100), represents 3% of the total assemblage, while pottery dating to the Early-Mid Roman period (*c*.AD70-200) accounts for 13.6%. Mid-later Roman period (*c*.AD150-400) accounts for 3.1%, while the remaining 4.5% of the assemblage is Roman in date, although it comprises sherds which could only be broadly dated due to the generic nature of the fabrics/forms.

## Assemblage Character

- B.5.6 The assemblage comprises primarily small sherds reflected in the low assemblage mean weight of 10.9g. There are some examples of refitting sherds (particularly in the case of context 851), however, there are no examples of any cross-context refits.
- B.5.7 Pottery dating to the Middle Iron Age/Middle Iron Age-Late Iron Age totals 83 sherds weighing 757g. This material is characterised by exclusively handmade vessels, in a limited range of fabrics. Within this group, quartz sand tempered sherds are the most commonly occurring, representing 47% of the pottery, including fabrics with additional calcareous tempers, mica and/or vegetable tempers. Quartz sand with silver mica account for a further 33.7% of the pottery of this date, while shell-tempered sherds represent the remaining 19.3%. A minimum of eight vessels were identified, based on the number of unique rims present. However, only two vessel forms could be identified, comprising; one slack-shouldered jar with a slightly everted rim and one slack-shouldered jar with a flat-topped rim, both of which derived from context 520, cut **519**, Trench 61. The remaining diagnostic sherds comprise only the rim itself, thus the exact vessel forms cannot be determined, however, the rim types comprised three further flat-topped rims, one of which has fingernail decoration along the rim top, from context 510, cut **509**, Trench 61. This sherd also represents the only decorated sherd dating to this period.
- B.5.8 The Late Iron Age and Late Iron Age/Early Roman component of the assemblage represents the largest group (785 sherds, 9,374g) and is dominated by five semi-complete vessels from a probable cremation 851 (pit 850, Trench 66), with the remaining pottery totalling 66 sherds weighing 599g. Material dated as Late Iron Age/early Roman is defined by wheel-made sherds, which may have been produced



either side of the Roman conquest and can include contexts where there is a combination of later Iron Age tradition pottery alongside earliest Roman pottery.

Fabric Code	Fabric	No.	Wt(g)	MNV	EVE
BLKSL	Black-slipped ware (unsourced)	21	167	8	0.44
CC	Colour-coat (unsourced)	15	16	0	0
CSBLK	Coarse sandy black-slipped ware (unsourced)	24	206	0	0
CSGW	Coarse sandy greyware (unsourced)	99	893	11	0.91
CSMGW	Coarse sandy micaceous greyware (unsourced)	7	38	0	0
CSMRDU	Coarse sandy micaceous reduced ware (unsourced)	6	15	0	0
CSOX	Coarse sandy oxidised ware (unsourced)	13	85	2	0.07
CSRDU	Coarse sandy reduced ware (unsourced)	22	175	4	0.15
FLINT	Flint-tempered ware	2	6	0	0
FSBUFF	Fine sandy buff ware (unsourced)	4	16	0	0
FSGW	Fine sandy greyware (unsourced)	5	15	1	0
FSMGW	Fine sandy micaceous oxidised ware (unsourced)	2	24	1	0.1
FSMOX	Fine sandy micaceous oxidised ware (unsourced)	5	34	2	0
FSMOX-WS	Same as FSMOX but with white slip	264	2022	1	1.15
FSMRDU	Fine sandy micaceous reduced ware (unsourced)	4	27	1	0.3
FSOX	Fine sandy oxidised ware (unsourced)	2	32	0	0.08
GBWW	Gallo-Belgic whiteware	163	535	1	1.48
GROG	Grog-tempered ware	22	453	1	0
HADRDU	Hadham reduced ware	3	14	0	0
IMITBB	Imitation black-burnished ware (unsourced)	3	38	2	0.18
OXFRS	Oxfordshire red-slipped ware	1	2	0	0
Q1	Moderately coarse sandy ware	4	3	0	0
QC1	Medium fine sandy ware with common calcareous inclusions	2	10	0	0
	Coarse sandy ware with moderate calcareous inclusions and				
QCF1	rare flint	2	56	0	0
	Moderately coarse sandy ware with rare to occasional small				
QCM1	calcareous inclusions and silver mica	26	201	2	0
	Moderately coarse sandy ware with moderate to common				
QCV1	calcareous inclusions and linear voids	9	112	0	0
	Medium sandy fabric with moderate to common very small				
QG1	grog inclusions	116	502	1	0.16
	Medium sandy fabric with moderate small grog inclusions and				
QGM1	common silver mica	213	5926	3	1.1
QM1	Medium coarse sandy ware with common silver mica	42	461	8	0.45
	Moderately fine sandy ware with rare to occasional linear shell				
QS1	inclusions	3	48	0	0
	Medium sandy ware with occasional to moderate shell				
QSM1	inclusions and common silver mica	10	40	1	0
SAMSG	Samian South Gaulish	1	1	0	0
SHELL	Shell-tempered ware	22	202	2	0.1
VRW	Verulamium whiteware	10	153	2	0.46
WW	Whiteware (unsourced)	2	7	0	0
Total	fication of all nottery by fabric type (those in italics are prehistoric though	1149	12535	54	7.13

Table 4: Quantification of all pottery by fabric type (those in italics are prehistoric though some are Early Roman in date)

B.5.9 Taken as a single assemblage, the pottery dating to this period is characterised by predominately wheel-finished or wheel-made vessels, in a range of fabrics, which can be broadly grouped into three main types. Quartz sand tempered sherds represent



57.3% of the pottery (by sherd count), while grog-tempered sherds total 42.5%, with the remaining 0.2% comprising shell-tempered sherds, thus there is an important difference between the pottery from this phase and that from the previous, where there was no grog-tempered material. Two probable Gallo-Belgic whiteware vessels were identified in context 581 (Pit 580, Trench 66), totalling 163 sherds weighing 535g. The range of vessel forms is somewhat restricted, with a minimum of ten vessels, seven of which derive from context 581, comprising sherds from two beakers, two flagons and a pedestal jar, all of which were semi-complete, along with one further sherd (9g) from a reduced ware butt-beaker and a beaded rim sherd. The remaining diagnostic sherds comprise two everted rim vessels from contexts 562 (ditch 560, Trench 56) and 624 (well 625 Trench 76), and one long-necked, plain rounded rim vessel from context 577 (ditch 551, Trench 67).

- B.5.10 Early Roman pottery (c.AD50-100) is exclusively wheelmade, and comprises material produced in the immediate decades following the Roman conquest. and is dominated by sandy wares, which represent 86% of the material from this phase. Grog-tempered sherds and shell tempered sherds account for 11.4% and 2.6% respectively. A single, abraded South Gaulish samian sherd was recovered from context 555 (ditch 517, Trench 65), weighing 1g. However, the assemblage is dominated by unsourced coarse, sandy wares representing 65% of the pottery. This group includes greywares, reduced wares and oxidised wares, as well as sherds with and without mica. A minimum of four vessels were identified (MNV), comprising one lid and three further rim sherds.
- B.5.11 Early-Mid Roman pottery (*c*.AD70-200), totals 179 sherds weighing 1518g, dominated by sandy wares which account for 91.6% of the pottery, with grog-tempered sherds representing 7.3% and shell-tempered sherds 1.1%. The only sourced wares in this period comprise ten Verulamium whiteware sherds (153g). Coarseware fabrics dominated, representing 86.6% by sherd count, with finewares accounting for the remaining 13.4%. There are no imported wares dating to this period. There are, however, a minimum of 28 vessel forms, including; four jars, three bowls (including two reeded vessels), two beakers and one dish (based on MNV). The remaining 18 sherds comprise just the rim, therefore the exact vessel form cannot be determined.
- B.5.12 A small assemblage of Mid-Late Roman pottery was recovered, totalling 13 sherds weighing 161g, within which sand-tempered sherds dominate (85% by sherd count), with shell-tempered wares representing 15% of the pottery. Sourced wares are limited to three Hadham reduced wares, and one Oxfordshire red-slipped ware. Diagnostic vessel forms comprise four beaded, flanged bowls (all dating *c*.AD250-400) and one flanged bowl (AD120-400).

### Distribution of Pottery Summary

B.5.13 Pottery was recovered from 39 contexts from 20 trenches, in varying quantities (Tables 5 and 6). There is some spatial patterning in the distribution of pottery with trenches in the eastern half of the site producing the most material (Trenches 56, 60-63 and 65-67), representing 89.5% by sherd count and 91.4% by weight. Furthermore, the pottery evidence indicates that these 'core' trenches saw activity from the Middle Iron Age to the early or mid-later Roman period, suggesting this area remained a focus of activity throughout different periods of occupation. Trench 66 produced the largest



assemblage of pottery (739 sherds, 8,889g) most of which derived from the cremation (581). Trench 56 produced an assemblage of 180 sherds weighing 1,606g from a single feature, ditch 560.

B.5.14 The largest assemblage from a single assemblage derived from context 581, cut 580, Trench 66, which contained 739 sherds weighing 8,889g, dating to the Late Iron Age/Early Roman. Within this group were five semi-complete vessels which appear to represent a cremation burial. The five vessels are summarised below in Table 7, which together make a very interesting group. The presence of two semi-complete Gallo-Belgic whiteware beakers in a single context is of note, likewise two collard rim flagons, one of which is in a sand and grog-tempered fabric. The sand and grog-tempered pedestal urn is likely to represent the cremation urn itself. The pottery from this context dates to the Late Iron Age/early Roman period, with a strong possibility that this context represents a pre-conquest deposit, paralleled with, for example, the Iron Age cemetery at King Harry Lane, Verulamium (Stead & Rigby 1989).

Trench	No.	Wt(g)	MNV	EVE	Pottery Dates
2	1	1	0	0	MIA-LIA
17	2	1	0	0	MIA-LIA
25	4	13	1	0	MIA-LIA
43	5	9	1	0	LIA-ER - E-MR
44	61	428	5	0.59	LIA - M-LR
56	180	1606	25	3.43	LIA-MR
60	2	37	0	0	MIA
61	34	456	5	0.2	MIA
62	1	10	0	0	ER
63	40	228	1	0	MIA-ER
65	26	177	3	0	LIA-LR
66	739	8889	6	5.82	LIA/ER
67	7	51	0	0	MIA - LIA/ER
73	4	26	1	0	EBA, MIA, RB
74	1	3	0	0	EBA
76	6	39	1	0	MIA - LIA/ER
78	4	75	1	0.1	LR, RB
79	7	147	0	0	E-MR
80	21	309	3	0.1	LIA/ER - MR
81	4	30	1	0.1	ER

Table 5: Quantification and dating of Iron Age and Roman pottery by trench

Context	Cut	Trench	No.	Wt(g)	MNV	EVE	Context spot date
4	5	2	1	1	0	0	350BC-AD50
10	9	25	3	6	1	0	350BC-AD50
14	13	25	1	7	0	0	50BC-AD100
36	35	17	2	1	0	0	350BC-AD50
38	37	43	2	2	0	0	AD0-100
42	41	43	3	7	1	0	AD40-200
50	49	44	5	19	0	0	AD40-100
57	54	44	15	70	0	0.15	AD60-200
61	60	44	4	83	0	0	AD50-400
69	49	44	5	9	0	0	AD0-100
72	60	44	21	182	5	0.44	AD200-400



74	73	44	8	47	0	0	50BC-AD50
75	73	44	3	18	0	0	50BC-AD50
510	509	61	5	73	2	0	350BC-AD50
516	515	60	2	37	0	0	350BC-AD50
518	517	65	16	129	1	0	AD250-400
520	519	61	29	383	3	0.2	350BC-AD50
527	526	62	1	10	0	0	AD40-100
547	548	63	2	5	0	0	AD40-70
549	550	63	3	3	0	0	350BC-AD50
552	551	67	1	1	0	0	AD40-400
555	517	65	10	48	2	0	AD40-70
557	556	63	32	201	1	0	350BC-AD50
561	560	56	49	324	7	0.52	AD100-200
562	560	56	131	1282	18	2.91	AD100-200
565	556	63	3	19	0	0	50BC-AD50
574	551	67	1	22	0	0	350BC-AD50
577	551	67	4	22	0	0	AD0-100
579	551	67	1	6	0	0	350BC-AD50
581	580	66	739	8889	6	5.82	AD20-50- CREM GROUP
585	584	79	7	147	0	0	AD40-100
587	586	80	1	7	0	0	AD50-400
589	589	80	20	302	3	0.1	AD100-200
595	594	81	4	30	1	0.1	AD40-100
611	610	78	4	75	1	0.1	AD240-400
624	625	76	4	22	1	0	AD40-70
643	641	73	4	26	1	0	350BC-AD50
646	645	74	1	3	0	0	Early Bronze Age
648	647	76	2	17	0	0	AD40-100

Table 6: Quantification and spot date of Iron Age and Roman pottery

Form	Type	Fabric code	No.	Wt(g)	Dec
Jar	Pedestal, necked, everted rim	QGM1	187	5754	Χ
Flagon	Collard rim	FSMOX-WS	264	2022	Х
Flagon	Collard rim	QG1	105	464	Х
Beaker	Butt beaker	GBWW	79	260	Rouletted, cordon
Beaker	Butt beaker	GBWW	84	275	Rouletted, cordon

Table 7: Summary of probable grave goods from context 581 (pit **580**) in Trench 66

### Discussion

B.5.15 Overall, the pottery demonstrates that there was activity from the Early Bronze Age to the later Roman period, however, occupation was seemingly not continuous. From the Middle Iron Age, the level of activity began to increase, and it is likely that between this period and the later Roman period, activity may have continued without hiatus. There was an apparent peak in activity in the 1st century AD, however, this is largely influenced by the five semi-complete vessels recovered from cremation burial 580 (Trench 66), and if just the MNV are used, the peak shifts to the Early-Mid Roman period. Overall however, the pottery demonstrates fairly low-level activity throughout the later Iron Age and Roman periods. Furthermore, the pottery, certainly in the Roman period is indicative of fairly low status, domestic activity, with very few finewares and/or imported wares identified. The exception to this is the cremation



burial recovered from cremation **580**, which represents a different type of deposit, and is possibly pre-conquest in date. However, it is important to remember that this is an evaluation, thus attempting to characterise the site from this relatively small pottery assemblage is problematic. Ideas of status and function are hinted at rather than proven, and the size of the assemblage may simply be due to the limited area of excavation, with the core of any associated settlements falling outside of the evaluation trenches.



# **B.6** Post-Roman Pottery

By Carole Fletcher

## Methodology and assemblage

- B.6.1 The Prehistoric Ceramics Research Group (PCRG), Study Group for Roman Pottery (SGRP), and The Medieval Pottery Research Group (MPRG), 2016 A Standard for Pottery Studies in Archaeology and the MPRG A guide to the classification of medieval ceramic forms (MPRG 1998) act as standards. However, a simplified method of recording has been undertaken, with fabric, basic description, weight and count are recorded in the text. The pottery and archive are curated by Oxford Archaeology East until formal deposition or dispersal.
- B.6.2 Archaeological works produced a moderately abraded, beaded rim sherd (0.009kg) from a Yellow ware bowl (diameter 160mm, estimated vessel equivalent 10%). Recovered from feature 602, described as a bomb crater (Trench 86), the pottery dates from the early 19th century onwards, with Yellow ware mixing bowls still being produced in the 21st century, although this particular sherd is likely to be 20th century.

## Retention, dispersal or display

B.6.3 Should further work be undertaken, the pottery should be incorporated into any later catalogue. Further work is likely to produce additional post-Roman pottery; however, the sherds are likely to be sparsely distributed. The sherd may be dispersed prior to archive deposition.



# B.7 Clay Tobacco Pipe

# By Carole Fletcher

## Introduction and methodology

B.7.1 During the evaluation, a single fragment of white ball clay tobacco pipe was recovered from Trench 28. Simplified recording only has been undertaken, with basic description and weight recorded in the text. Terminology used in this report is taken from Oswald's simplified general typology (Oswald 1975, 37–41), and Crummy and Hind (Crummy 1988, 47-66).

## Assemblage

B.7.2 Ditch **17** in Trench 28 produced a slightly abraded length of clay tobacco pipe stem (weighing 1g), somewhat oval (4.85 x 5.85mm) and 32mm in length, with a slight curve.

#### Discussion

B.7.3 The fragment of clay tobacco pipe recovered represents what is most likely a casually discarded pipe. The pipe fragment does little, other than to indicate the consumption of tobacco on, or near, the site, sometime after 1600, until to the 19th century.

## Retention, dispersal or display

B.7.4 The assemblage is fragmentary and is of little significance. If no further work is undertaken, this statement acts as a full record and the clay tobacco pipe stem may be deselected prior to archival deposition.



# B.8 Non-Building Stone

# By Carole Fletcher

## Introduction and Methodology

B.8.1 Three fragments of unworked stone, weighing 0.241kg, were recovered from pits **60** and **73** in Trench 44. Simplified recording has been undertaken, with material type, basic description and weight recorded in the text.

# Assemblage

B.8.2 Unworked stone: pit **60** in Trench 44 produced a small fragment of pale pinkish grey micaceous sandstone weighing 0.066kg, probably burnt. Pit **73** produced a small irregular fragment of clunch, weighing 0.01kg, and a small fragment of pale grey micaceous sandstone weighing 0.165kg. The clunch is unworked, as are the sandstone fragments, which exhibit fractures along natural cleavage that mimic human action.

### Discussion

B.8.3 The unworked stone is not closely datable and is of little significance.

## Retention, dispersal or display

B.8.4 Should further work be undertaken, more unworked stone may be recovered. If no further work is undertaken, the assemblage may be dispersed, and this report acts as a full record.



# B.9 Ceramic Building Material

## By Ted Levermore

## Introduction and methodology

- B.9.1 The archaeological evaluation work recovered eleven fragments, 128g, of ceramic building material (CBM); collected from features in Trenches 20, 21, 28, 44, 75 and 78. The assemblage was moderately to severely abraded, containing tile fragments (six, 96g) and undiagnostic pieces (five, 32g). It is likely this assemblage derives from medieval to post-medieval periods, however this conclusion is limited by the condition of the material.
- B.9.2 The assemblage was quantified by context, fabric and form and counted and weighed to the nearest whole gram. Width, length and thickness were recorded where possible. Woodforde (1976) and McComish (2015) formed the basis of reference material for identification and dating. The quantified data and fabric descriptions are recorded on an Excel spreadsheet held with the site archive.

### Results

- B.9.3 The fabrics recorded were all typical CBM recipes, with preference for refined clays with few to no coarse inclusions. None of the fabrics were of note and therefore will not be expanded on here. Full fabric descriptions can be found with the site archive.
- B.9.4 The spread of the material and the severity of the abrasion (average weight 11.6g) seen suggests this material is largely intrusive and of little archaeological significance. As such, the assemblage is simply outlined in Table 8 below, no further commentary is necessary.

Trench	Context	Cut	Feature	Form	Date	Comment	Count	Weight (g)
20	30	29	Ditch	Tile	Med-Pmed	Fragment of 1/2 inch tile. Very abraded.	1	18
21	20	19	Ditch	Undiag	?Med-Pmed	-	2	5
28	18	17	Ditch	Tile	Med-Pmed	Fragments of 1/2 inch tile. Very abraded.	4	57
44	57	54	Pit	Undiag	?	Might be an early fabric, uncertain.	1	5
75	637	638	Ditch	Undiag	?Med-Pmed	Refitting frags of CBM with a face with calcy/lime accretions. Undiag form.	2	22
78	605	604	Bomb Crater	Tile	Pmed	Fragment of 1/2 inch tile. Sanded base and remnant upper face with possible wear. Upper face has an inward bow and a smoothness to the touch. ?Floor tile. Pinkish-buff/cream colour.	1	21
Total	•	•	•	•	•		11	128

Table 8: Summary of CBM catalogue

## Statement of potential

B.9.5 This assemblage has little archaeological significance. It is simply background noise within the modern agricultural landscape.

Version 2



# B.10 Fired Clay

## By Ted Levermore

## Introduction and methodology

- B.10.1 Archaeological evaluation work recovered 19 fragments, 220g of fired clay, from feature in Trenches 44 and 56. In general, the assemblage is fragmentary (average weight 11.8g), the presence of flattened plate-like forms is of note.
- B.10.2 The assemblage was quantified by context, fabric and form and counted and weighed to the nearest whole gramme. Fabrics were examined using a x20 hand lens and were described by main inclusions present. The quantified data and fabric descriptions are presented on an Excel spreadsheet held with the site archive. A summary of the fired clay catalogue is in Table 9.

## Results of Analysis

- B.10.3 A narrow set of fabrics were recorded. They largely reflect the local clay geology and likely derive from similar sources, with any difference present indicating varying degrees of paste preparation as well as geological variability. Generally, they were compact silty clays with common to rare calcareous and gritty inclusions. Full fabric descriptions can be found with the site archive.
- B.10.4 Much of the material was recorded as 'structural' (16 fragments, 212g), with three fragments (8g) recorded as amorphous. The structural pieces showed signs of flattened surfaces, corners and organic impressions. The structural material consisted of several fragments of plate-like objects and a squared arris from another object, perhaps a bar or weight. The plate-like objects were 10 to 15mm thick and possessed organic/grassy impressions on their surfaces.
- B.10.5 Kiln plates or oven flooring, from the Late Iron Age and Early Roman period, tend to present the features described (see Swan 1984). The fragmentary nature of this assemblage prevents conclusive identification, but if they were originally portable kiln furniture then we may expect a kiln of this period to be nearby.

### Statement of Potential

B.10.6 The concentration of material to two trenches (44 in Field 2 and 56 in Field 4) very likely indicates a very local origin. The tentative identification of this material as related to Iron Age/Early Roman kiln furniture may point to a pottery kiln in the locality.

## Recommendations for further work

B.10.7 The material has been fully recorded. This material and report should be consulted when/if excavation work produces more fired clay. The material is worthy of retention.

### Luton M1 to A6 Link Road, Bedfordshire

Trench	Context	Cut	Feature	Frag type	Structural type	Notes	Count	Weight (g)
44	50	49	Pit	S	object	Refitting fragments of a plate-like object, with two parallel surfaces and organic/grassy impressions on both. Upper face of the largest fragment has a circumferential lip, lower face is brown in colour (body and rest is mid orange). Similar to other plate material, with fewer calcareous inclusions remaining	6	40
	66	49	Pit	а	-	-	3	8
	74	73	Pit	S	?fs	A very abraded lump of fired clay with a small portion of a flattened surface remaining. Dark reduced colours. Appears water affected.	1	16
	561	560	Ditch	S	fs/c	Fragment of an object, remnant arris of something poss. square in profile	1	13
56	562	560	Ditch	S	fs	Fragment of fired clay with a flattened surface with organic/grassy impressions. Unclear if the reverse is a remnant face, all about 15mm thick if so. May originate from plate-like objects	5	115
	562	Fragments of slightly sandy fired clay with surface.  Each has a reduced dark grey body and orange oxidised surface		3	28			
Total							19	220

Table 9: Summary Fired Clay catalogue (a=amorphous, s=structural, fs=flattened surface, c=corner)



## APPENDIX C ENVIRONMENTAL REPORTS

# C.1 Environmental Samples

By Martha Craven

#### Introduction

C.1.1 Fifteen bulk samples were taken from features within the evaluated area at the M1-A6 Link Road, Bedfordshire in order to assess the quality of preservation of plant remains and their potential to provide useful data as part of further archaeological investigations. Samples were taken from features encountered within Trenches 25, 43, 44, 53, 56, 61, 63, 65, 66, 74 and 79 from deposits that are thought Iron Age to Roman in date.

# Methodology

- C.1.2 The samples were soaked in a solution of sodium carbonate for 24hrs prior to processing to break down the heavy clay matrix. The total volume (up to 18L) of each of the samples was processed by tank flotation using modified Siraff-type equipment for the recovery of preserved plant remains, dating evidence and any other artefactual evidence that might be present. The floating component (flot) of the samples was collected in a 0.3mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and a 0.5mm sieve.
- C.1.3 The dried flots were scanned using a binocular microscope at magnifications up to x 60 and an abbreviated list of the recorded remains are presented in Table 1. Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands (Cappers *et al.* 2006) and the authors' own reference collection. Nomenclature is according to Zohary and Hopf (2000) for cereals and Stace (1997) for other plants. Plant remains have been identified to species where possible. The identification of cereals has been based on the characteristic morphology of the grains and chaff as described by Jacomet (2006).

## Quantification

C.1.4 For the purpose of this initial assessment, items such as seeds and cereal grains have been scanned and recorded qualitatively according to the following categories:

C.1.5 Items that cannot be easily quantified such as charcoal and molluscs have been scored for abundance

```
+ = occasional, ++ = moderate, +++ = frequent, ++++ = abundant
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#### Results

C.1.6 Preservation of plant remains is by carbonisation and is generally poor; many of the flots contain rootlets which may have caused movement of material between contexts. All the samples, bar one, contained varying amounts of snail shell.



- C.1.7 Only two samples contained cereal grains; Sample 1, fill 518 of ditch **517** (Trench 65), and Sample 4, fill 562 of ditch **560** (Trench 56). Sample 1 contains single grains of charred barley (Hordeum vulgare) and wheat (Triticum sp.) and Sample 2 contains a single charred oat (Avena sp.).
- C.1.8 Sample 1 fill 518 of ditch **517** (Trench 65), and Sample 8, fill 629 of pit **628** (Trench 74) contained relatively large quantities of charcoal; in comparison with the rest of the samples taken.
- C.1.9 Sample 1 and Sample 54, fill 53 in ditch **52** (Trench 45), contains evidence of hammerscale, which could suggest metalworking in the vicinity. The relatively large amount of charcoal found within Sample 1 may also be linked to this. Sample 1 also contains a metal hobnail.
- C.1.10 Two samples, Sample 53, fill 33 of ditch **37** (Trench 43) and Sample 56, fill 73 of pit **60** (Trench 44) contain large quantities of reasonably well-preserved molluscs, which could suggest that the features remained open for long periods. However, no wetland species of snail are present, only land snails usually identified on calcareous soils. Identifiable species comprise open-country snails including species such as *Puppila muscorum*, *Vallonia* sp. and *Cochlicopa* sp. and there are frequent shells of the burrowing snail *Ceciloides acicula*.

Sample	Context	Cut	Trench	Feature	Cereals	Snails	Charcoal volume (ml)	Pottery	Hammerscale
1	518	517	65	Ditch	#	+	16	#	++
2	520	519	61	Ditch		+	<1	##	
3	555	517	65	Ditch		+			
4	562	560	56	Ditch	#	+	<1	##	
5	567	566	63	Ditch					
6	581	580	66	Pit		++	15	##	
7	885	584	49	Ditch		+			
8	629	628	74	Pit					
50	10	9	25	Posthole		+			
51	14	13	25	Ditch		+			
52	16	15	25	Ditch		+			
53	38	37	43	Ditch		++++			
54	65	52	45	Ditch		+			+
55	68	49	44	Pit		++			
56	72	60	44	Pit		++++	<1	#	

Table 10: Environmental samples

### **Discussion**

- C.1.11 The recovery of such a limited amount of charred plant remains and charcoal suggests that there is low potential for the preservation of plant remains at this site. Future excavation may have the potential to recover larger, more meaningful assemblages that would contribute to the evidence of diet and economy at this site.
- C.1.12 If further excavation is planned for this area, it is recommended that environmental sampling is carried out in accordance with Historic England guidelines (2011).



## C.2 Animal Bone

# By Hayley Foster

#### Introduction

- C.2.1 The animal bone from the M1 to A6 link road evaluation represents faunal remains weighing 6.31kg. There were 93 fragments recorded retrieved solely from hand collection. Bone was recovered mainly from ditches, with additional fragments from pits and a post hole. The species represented include cattle (*Bos taurus*), sheep/goat (*Ovis/Capra*), dog (*Canis familiaris*), pig (*Sus scrofa*), horse (*Equus caballus*) and rabbit (Oryctolagus cuniculus). The material dates to the Iron Age to Roman period.
- C.2.2 The method used to quantify this assemblage was based on that used for Knowth by McCormick and Murray (2007) which is modified from Albarella and Davis (1996). Identification of the faunal remains was carried out at Oxford Archaeology East. References to Hillson (1992), Schmid (1972), von den Driesch (1976) were used where necessary.

### Results

- C.2.3 The assemblage was heavily dominated by cattle and sheep/goat remains, making up 67.7% of the identifiable remains retrieved. The remains of rabbit and dog retrieved are likely from individual animals.
- C.2.4 The condition of the bone is moderate to poor, with much of the assemblage exhibiting signs of surface weathering. Fragmentation is high, with very few complete bones retrieved. Ageing data was minimal, however dental wear indicates that cattle were 40 months of age and older at time of death and a single sheep/goat mandible of 25-26 months of age at death.
- C.2.5 There appears to be a distinct bias in element distribution as most elements are cranial and feet elements, suggesting they are remnants of butchery waste, disposed of in the ditches.
- C.2.6 Those remains belonging to rabbit are likely from an intrusive animal as rabbit are burrowing animal and the bone appears more modern in appearance and partially articulated.
- C.2.7 Taphonomic changes were predominantly caused by surface weathering, however there is a small amount of carnivore gnawing and burning evidence. Four small fragmentary pieces of calcined bone were retrieved from pit **580** (Trench 66) and are likely human skeletal remains associated with a cremation vessel.
- C.2.8 While the volume of bone recovered was not abundant, the remains do indicate that there were signs of domestic activity in those features where bone was recovered. Cattle would have made up the bulk of the resident's diet, not only due to the higher number of fragments, but because cattle yield more meat than both sheep and pig.



Species	NISP	NISP%
Cattle	36	38.7
Sheep/Goat	27	29.0
Rabbit	15	16.1
Dog	7	7.5
Horse	7	7.5
Pig	1	1.1
TOTAL	93	100

Table 11: Total number of identifiable fragments (NISP) by species

## Recommendations for further work

C.2.9 The assemblage is of a small size and cannot provide any further significant interpretations. Should further faunal remains be recovered from the site, a broader understanding of trends in husbandry practices and spatial distribution would be more viable.

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# APPENDIX D BIBLIOGRAPHY

Albarella, U. and Davis, S.J. 1996. 'Mammals and birds from Launceston Castle, Cornwall: decline in status and the rise of agriculture', *Circaea* 12 (1), 1-156

Alsford, S. 2018. *M1 to A6 Link Road. Written Scheme of Investigation for Archaeological Geophysical Survey and Archaeological Trial Trenching*. Jacobs Project No. BRJ10503. Unpublished

British Geological Survey, n.d Geology of Britain Viewer http://mapapps.bgs.ac.uk/geologyofbritain/home.html

Cappers, R.T.J, Bekker R.M, and Jans, J.E.A. 2006 Digital Seed Atlas of the Netherlands. Groningen Archaeological Studies 4, Barkhuis Publishing, Eelde, The Netherlands. www.seedatlas.nl

Crummy, N. and Hind, J. Clay Tobacco Pipes in Crummy, N. 1988 *The post-Roman small finds from excavations in Colchester, 1971-85*, p46-66. Colchester Archaeological Report No 6 Colchester Archaeological Trust

Davis, S.J. 1992. A rapid method for recording information about mammal bones from archaeological site (AML report 19/92), London: English Heritage

Grant, A. 1982. 'The use of tooth wear as a guide to the age of domestic ungulates', in B. Wilson, C. Grigson and S. Payne (eds.), Ageing and sexing animal bones from archaeological sites, 91-108. BAR 109. Oxford: BAR

Hillson, S. 1992. *Mammal Bones and Teeth: An Introductory Guide to Methods and Identification*. London Institute of Archaeology: University College London

Historic England 2011 Environmental Archaeology. *A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (2nd edition), Centre for Archaeology Guidelines

Historic England 2015 Archaeometallurgy: Guidelines for Best Practice Historic England, Swindon, pdf available at <a href="https://historicengland.org.uk/images-books/publications/archaeometallurgy-guidelines-best-practice/">https://historicengland.org.uk/images-books/publications/archaeometallurgy-guidelines-best-practice/</a>

Jacomet, S. 2006 Identification of cereal remains from archaeological sites. (2nd edition, 2006) IPNA, Universität Basel / Published by the IPAS, Basel University

McComish, J.M. 2015. A Guide to Ceramic Building Materials. York Archaeological Trust. Report Number 2015/36. Web Based Report

McCormick, F. and Murray E. 2007. *Knowth and the Zooarchaeology of Early Christian Ireland*. Dublin: Royal Irish Academy



Medieval Pottery Research Group 1998 A Guide to the Classification of Medieval Ceramic Forms. Medieval Pottery Research Group Occasional Paper I

Moan, L. 2018. Luton M1-A6 Link Road. Written Scheme of Investigation. OA East. Unpublished

Ministry for Housing, Communities and Local Government. 2018, National Planning Policy Framework

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/740441/National\_Planning\_Policy\_Framework\_web\_accessible\_version.pdf

Oswald, A. 1975 Clay Pipes for the Archaeologist British Archaeological Reports No. 14 British Archaeological Reports, Oxford

Payne, S. 1973. 'Kill off patterns in sheep and goats: the mandible from Asvan Kale', *Anatolian Studies* 23, 281-303

PCRG 2009. The Study of Later Prehistoric Pottery: General Policies and Guidelines for Analysis and Publication. Oxford: Prehistoric Ceramics Research Group Occasional Papers 1 and 2 (third edition)

PCRG SGRP MPRG, 2016 A Standard for Pottery Studies in Archaeology

Perrin, R. 2011. Guidelines for the Archiving of Roman Pottery. Study Group for Roman Pottery

Schmid, E. 1972. Atlas of Animal Bones for Prehistorians, Archaeologists and Quaternary Geologists. Amsterdam-London-New York: Elsevier Publishing Company

Stace, C., 1997 *New Flora of the British Isles*. Second edition. Cambridge University Press

Stead, I. M and Rigby, V. 1989. Verulamium: the King Harry Lane site. English Heritage Archaeological Report 12. English Heritage in association with British Museum Publications

Swan, V. 1984. The Pottery Kilns of Roman Britain. Royal Commission on Historical Monuments. Supplementary Series 5

Turner, P. and Viccari, A. 2018 *Geophysical survey report of M1 and A6 Link Road, Luton.* Magnitude Surveys Report No. MSTL408. Unpublished

Woodforde, J. 1976. Bricks: To Build a House. Routledge and Kegan Paul



Zohary, D., Hopf, M. 2000 Domestication of Plants in the Old World – The origin and spread of cultivated plants in West Asia, Europe, and the. Nile Valley. 3rd edition. Oxford University Press





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N/A

Project Brief Originator

Luton M1 to A6 Link Road, Bedfordshire

Version 2

Project Design Originato
Project Manager
Project Supervisor

Jacobs UK Ltd	
Stephen Macaulay	
Louise Moan	

# **Project Archives**

Physical Archive (Finds) Digital Archive Paper Archive

Location	ID
Luton Museum	LTNMG 1351
OA East	XBDLUM18
Luton Museum	LTNMG 1351

Physical Contents	Present?	Digital files associated with Finds	Paperwork associated v Finds	vith
Animal Bones Ceramics Environmental Glass Human Remains Industrial Leather Metal Stratigraphic Survey Textiles Wood Worked Bone Worked Stone/Lithic None Other				
Digital Media Database GIS Geophysics Images (Digital photos) Illustrations (Figures/Plan Moving Image Spreadsheets Survey Text Virtual Reality	tes)	Paper Media Aerial Photos Context Sheets Correspondence Diary Drawing Manuscript Map Matrices Microfiche Miscellaneous Research/Notes Photos (negatives/prints) Plans Report Sections Survey	/slides)	



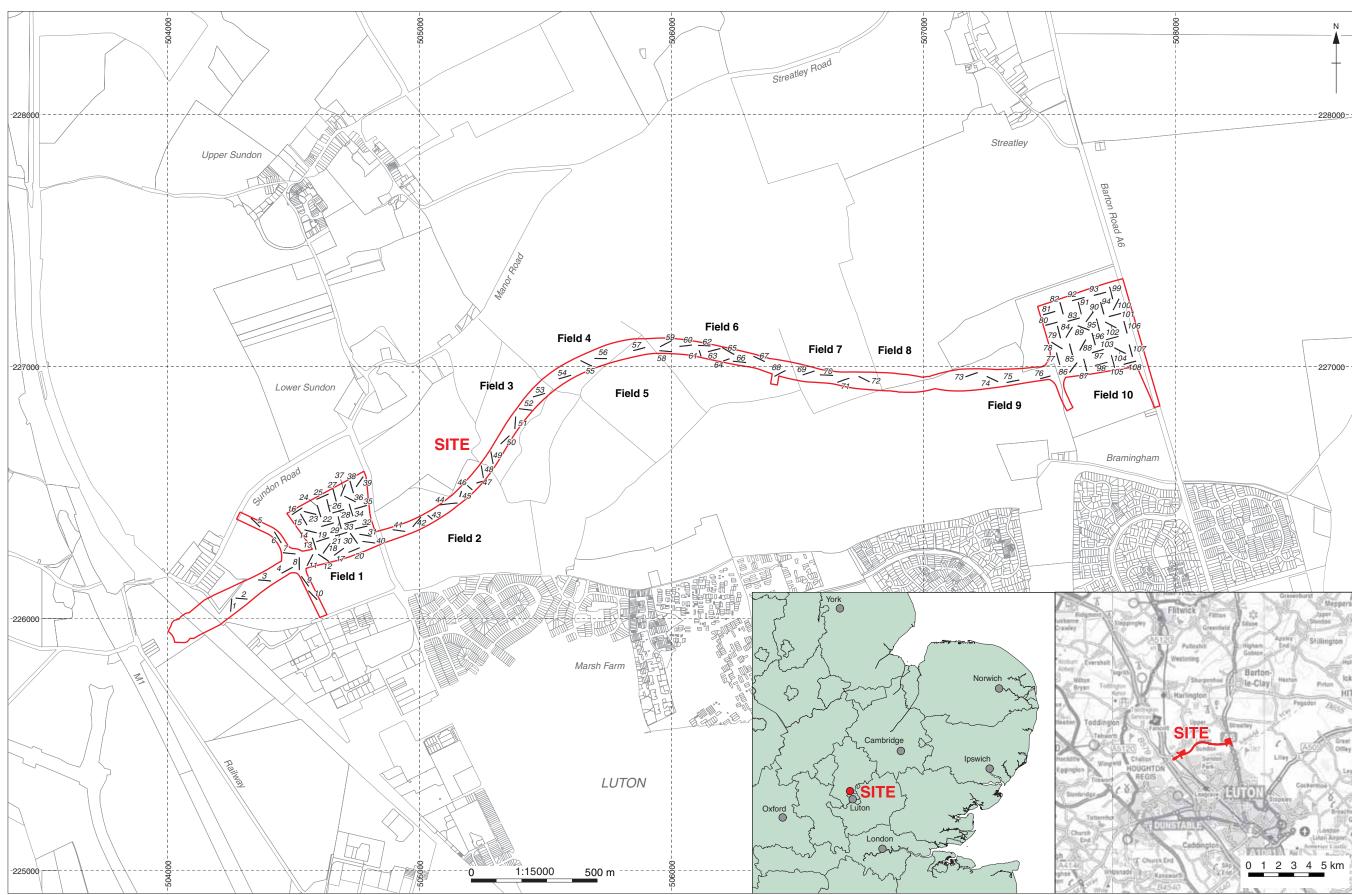
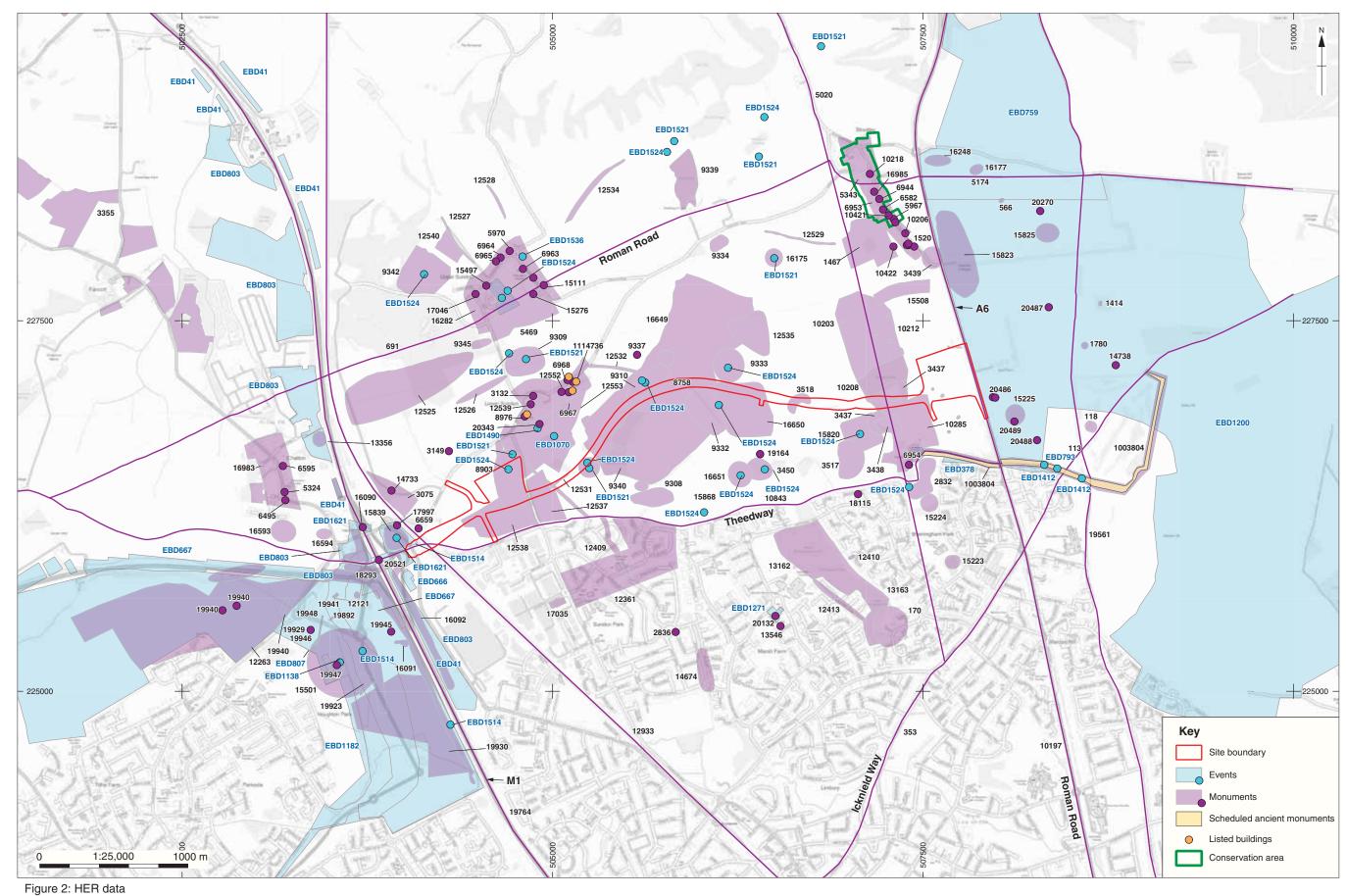


Figure 1: Site location showing evaluation trenches (black) in development area (red)

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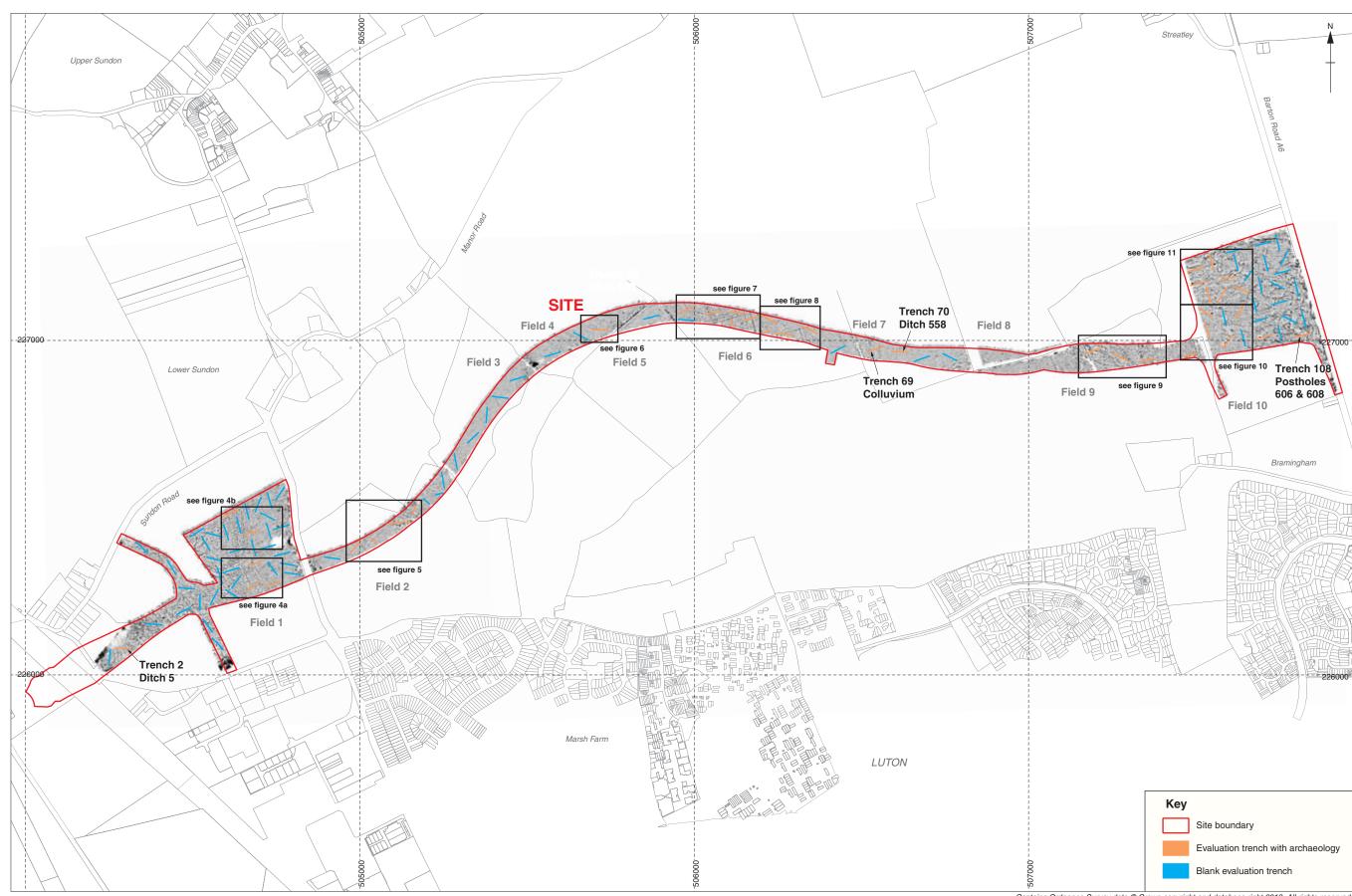
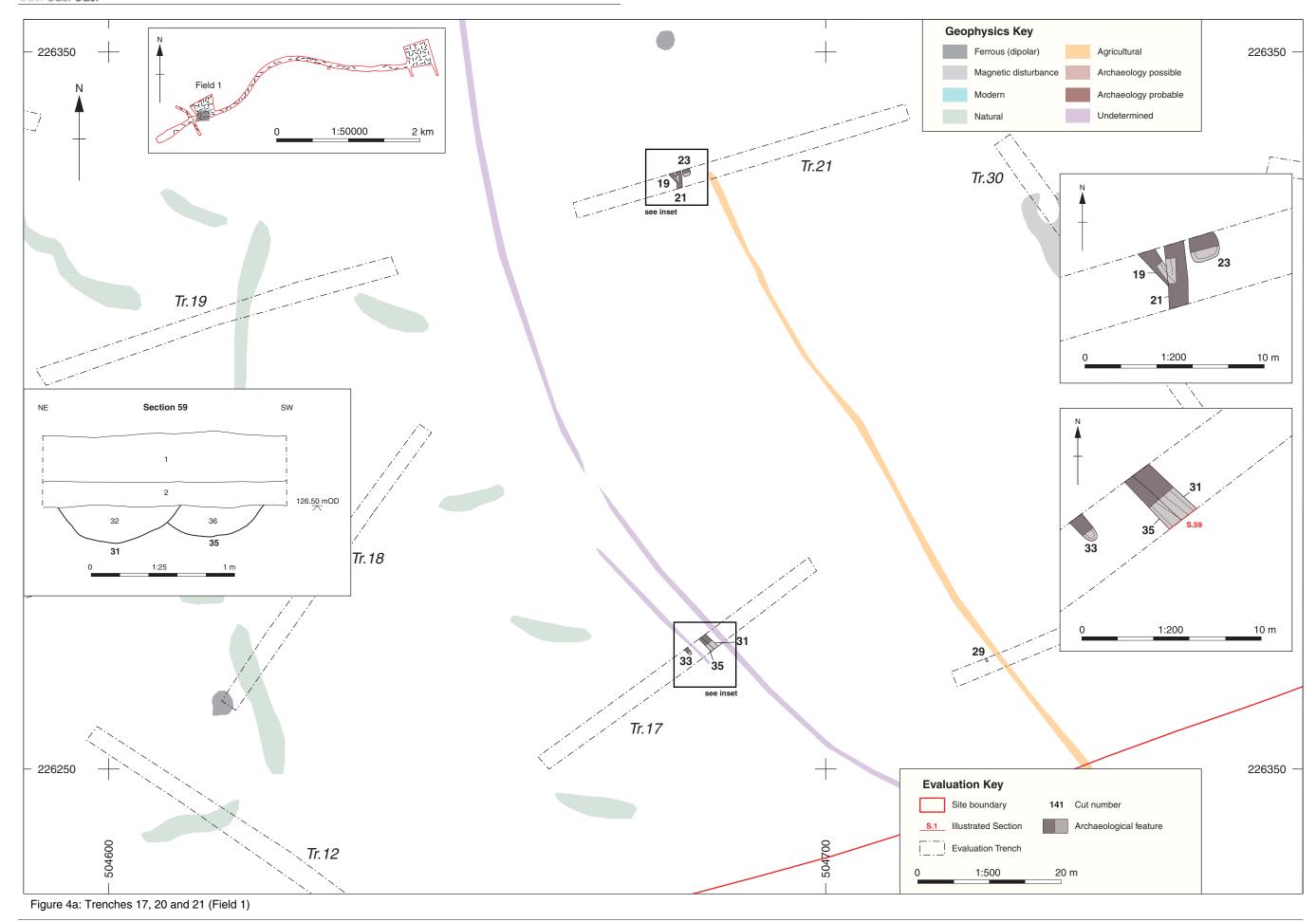


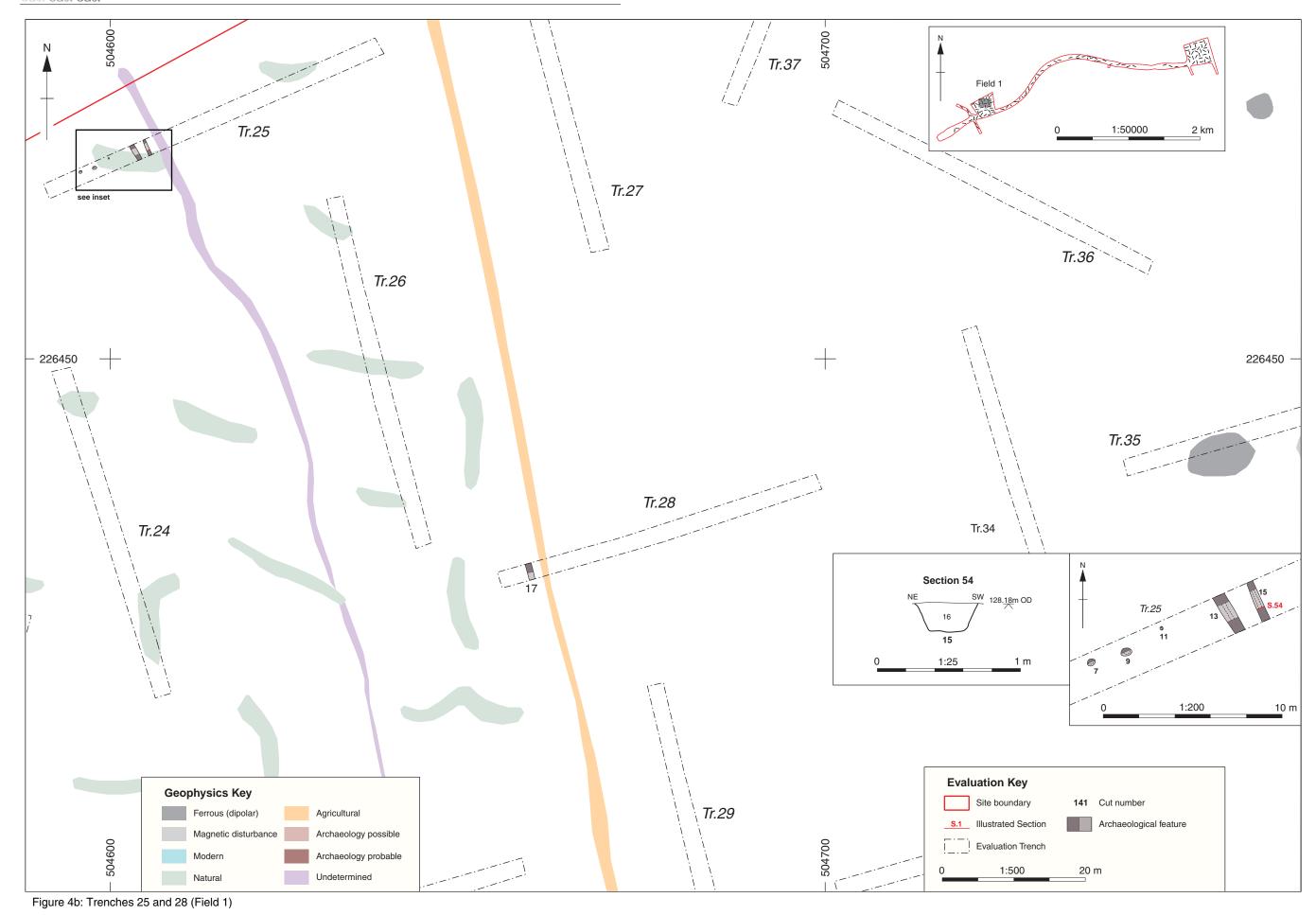
Figure 3: Geophysical greyscale with trenches overlain

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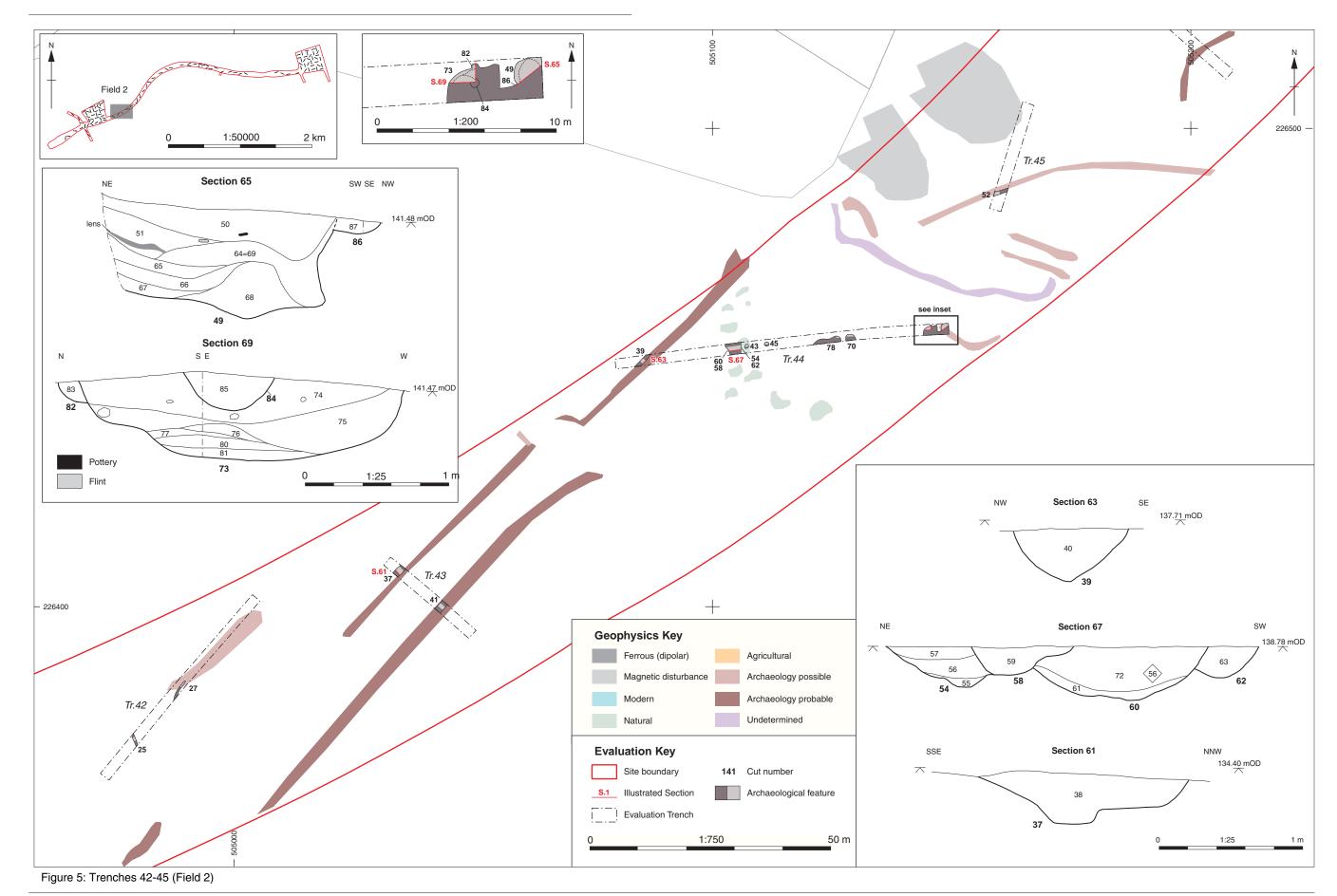












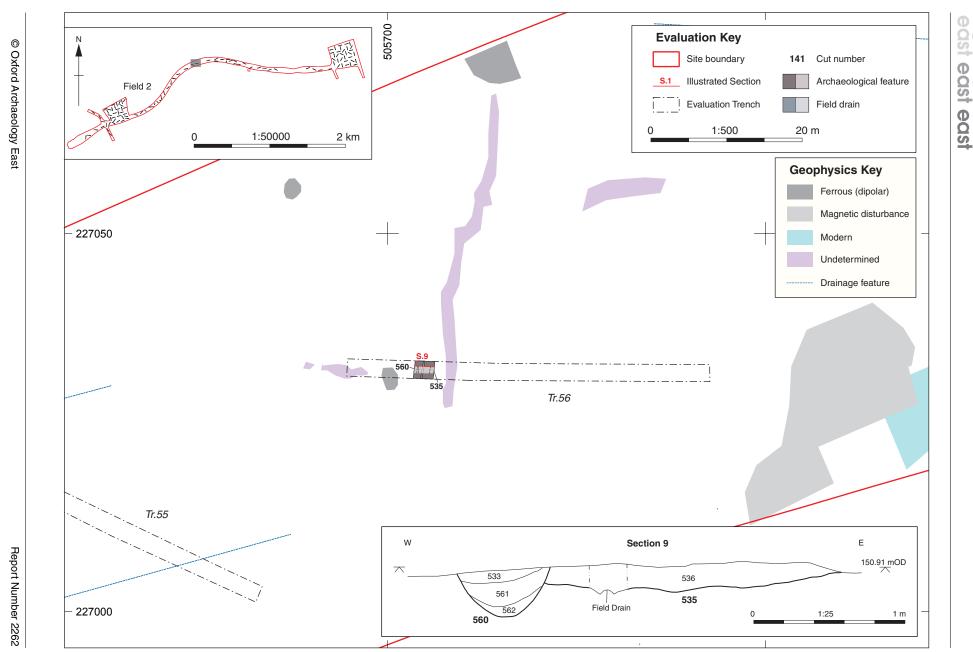
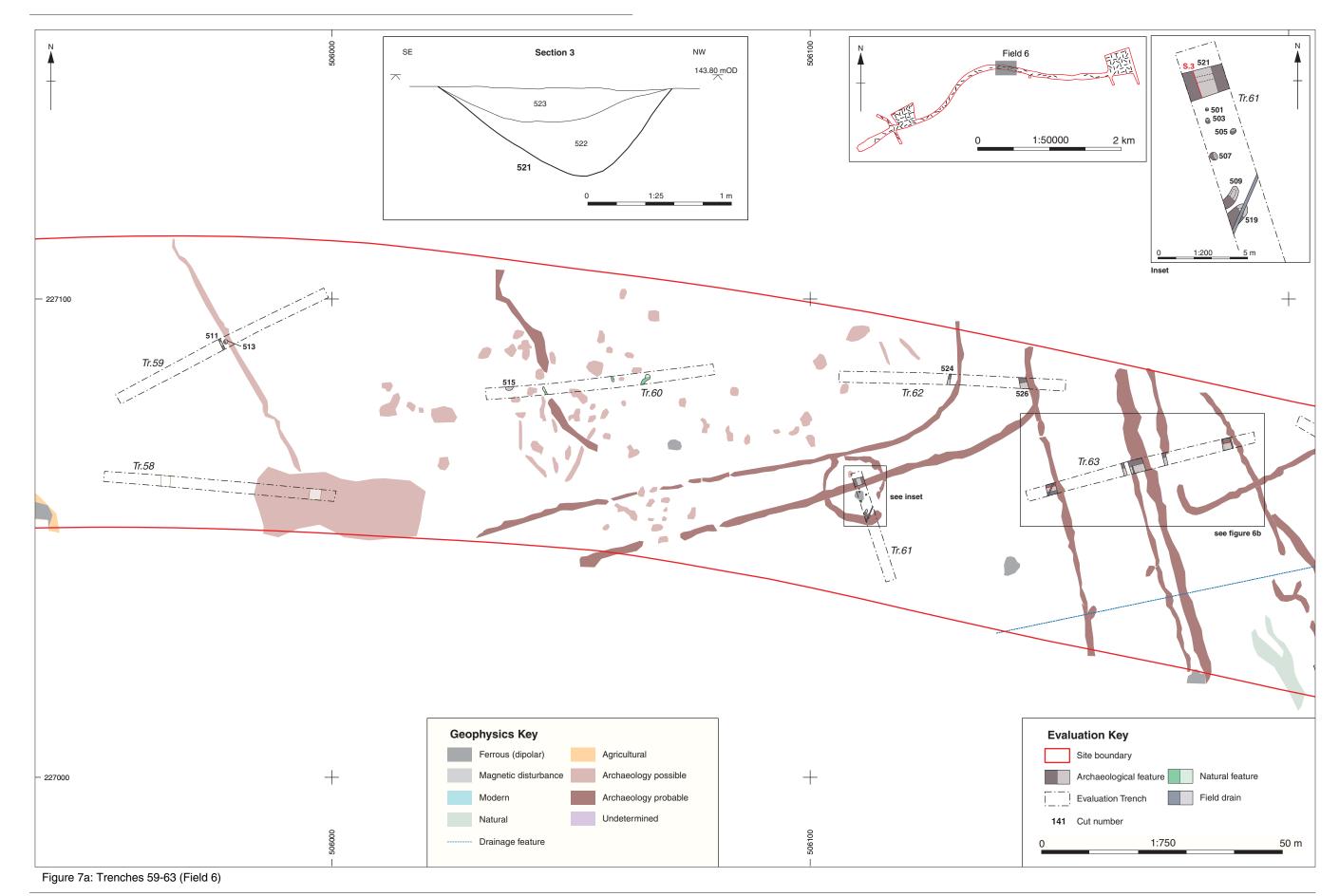


Figure 6: Trench 56 (Field 4)





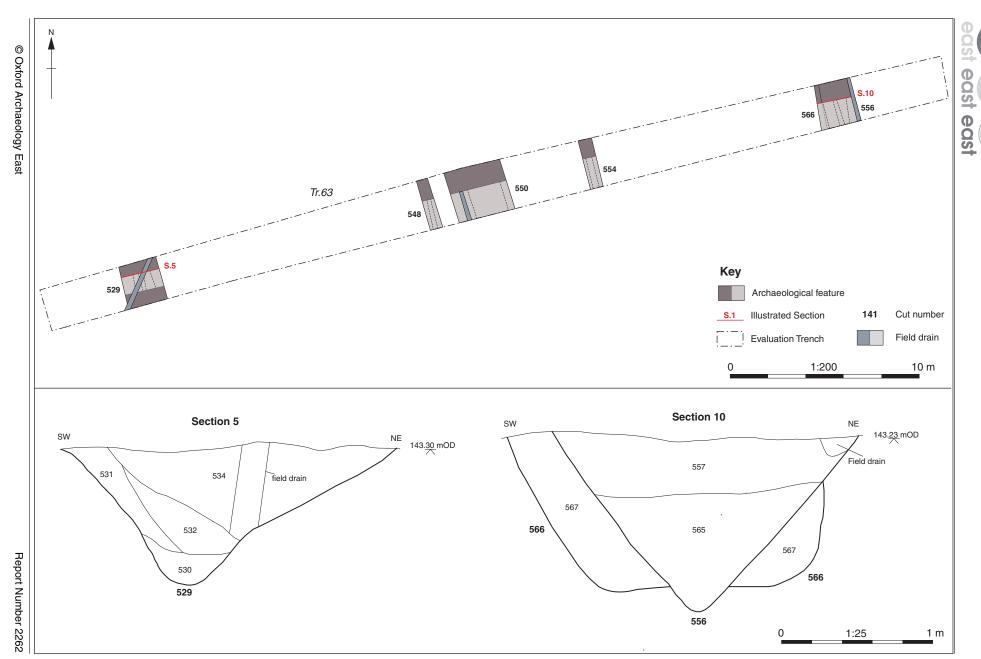
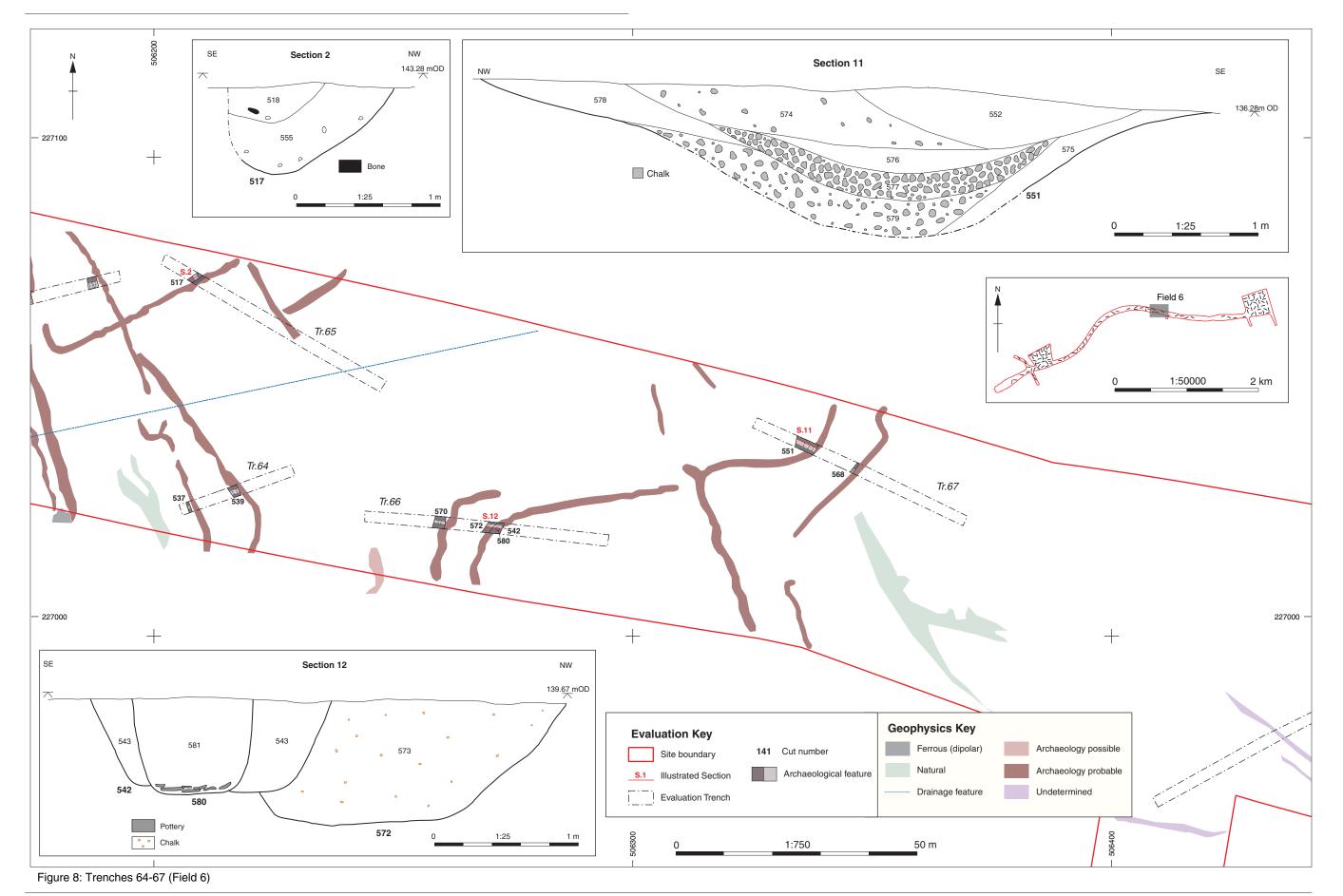
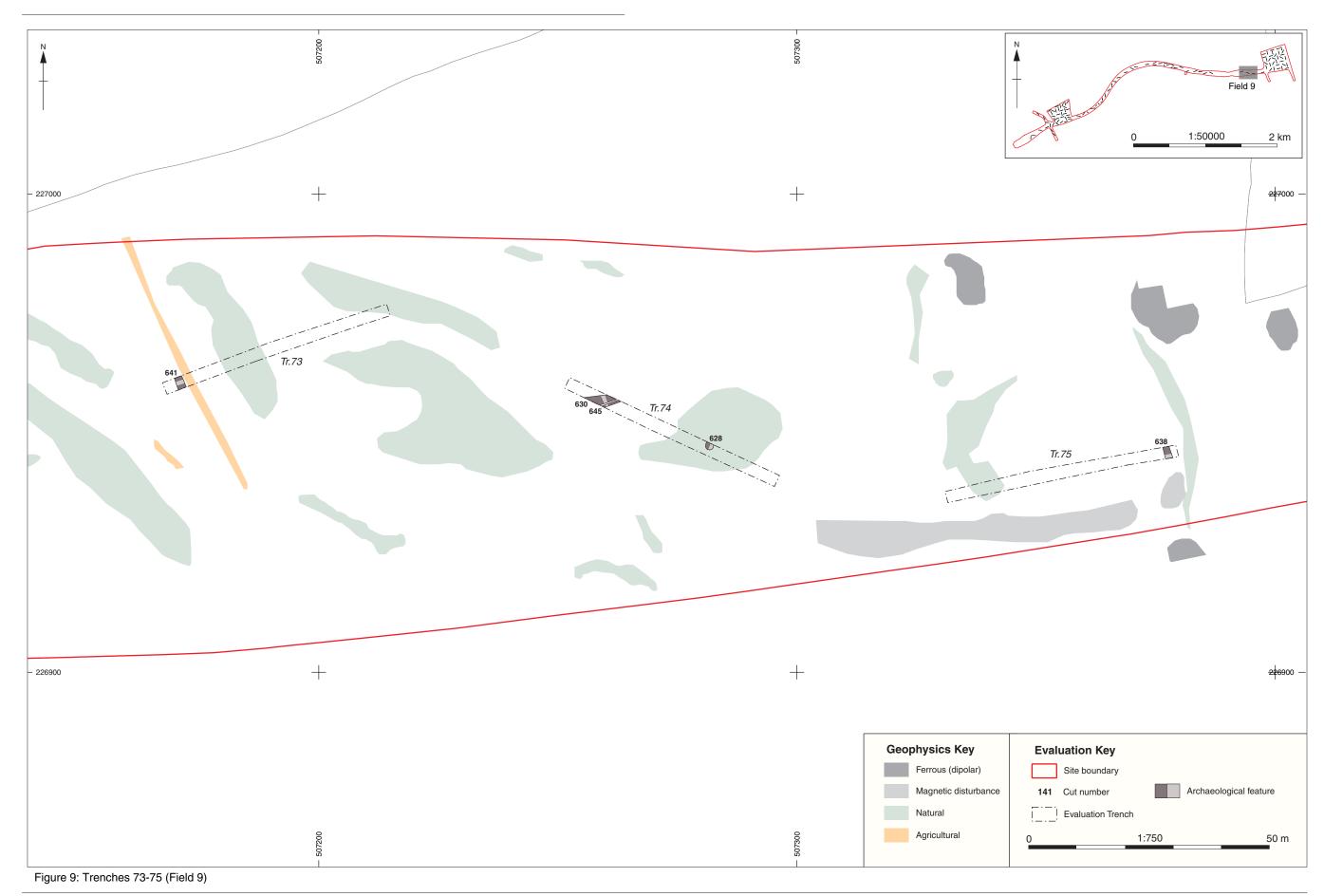


Figure 7b: Detail of Trench 62 and selected sections



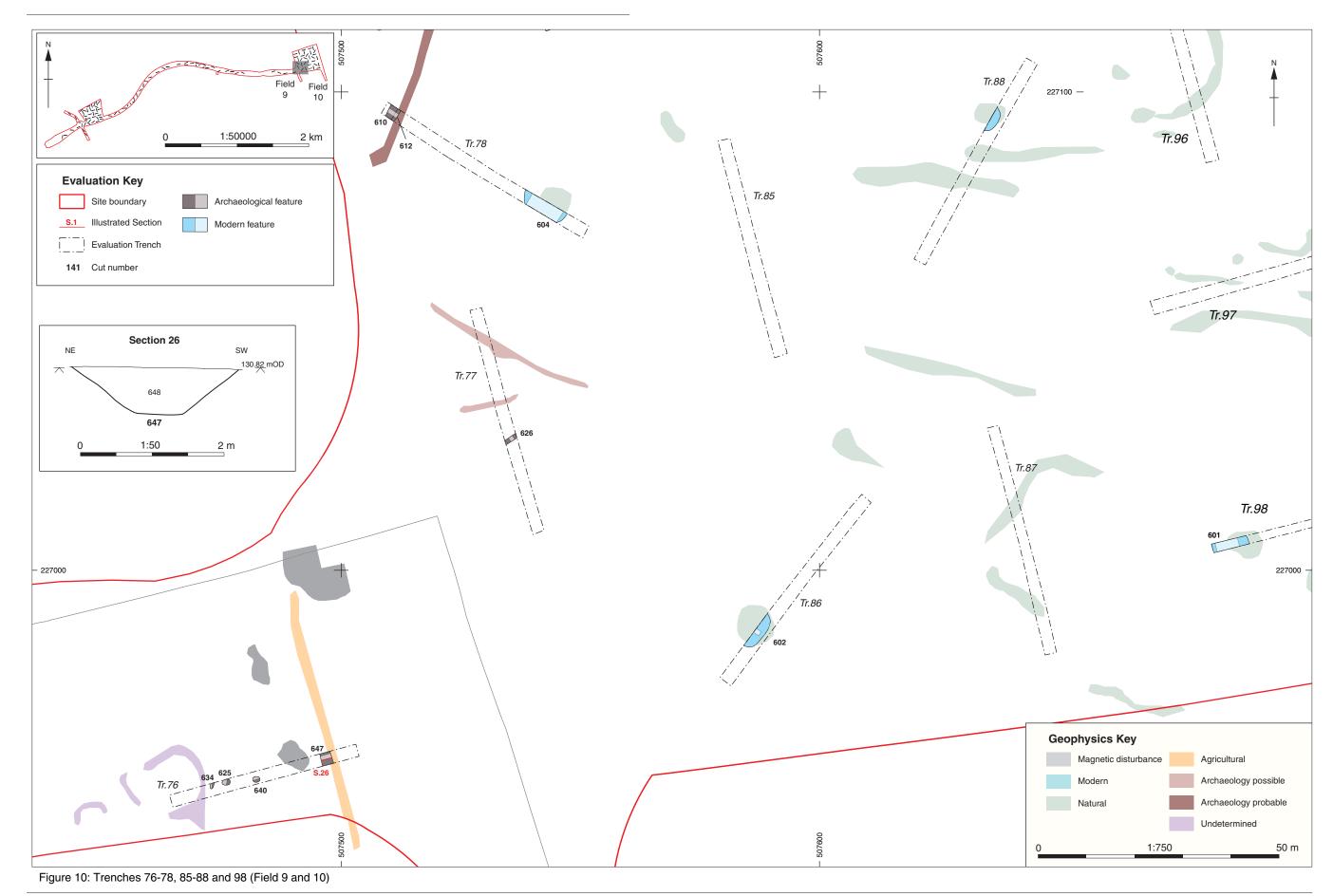






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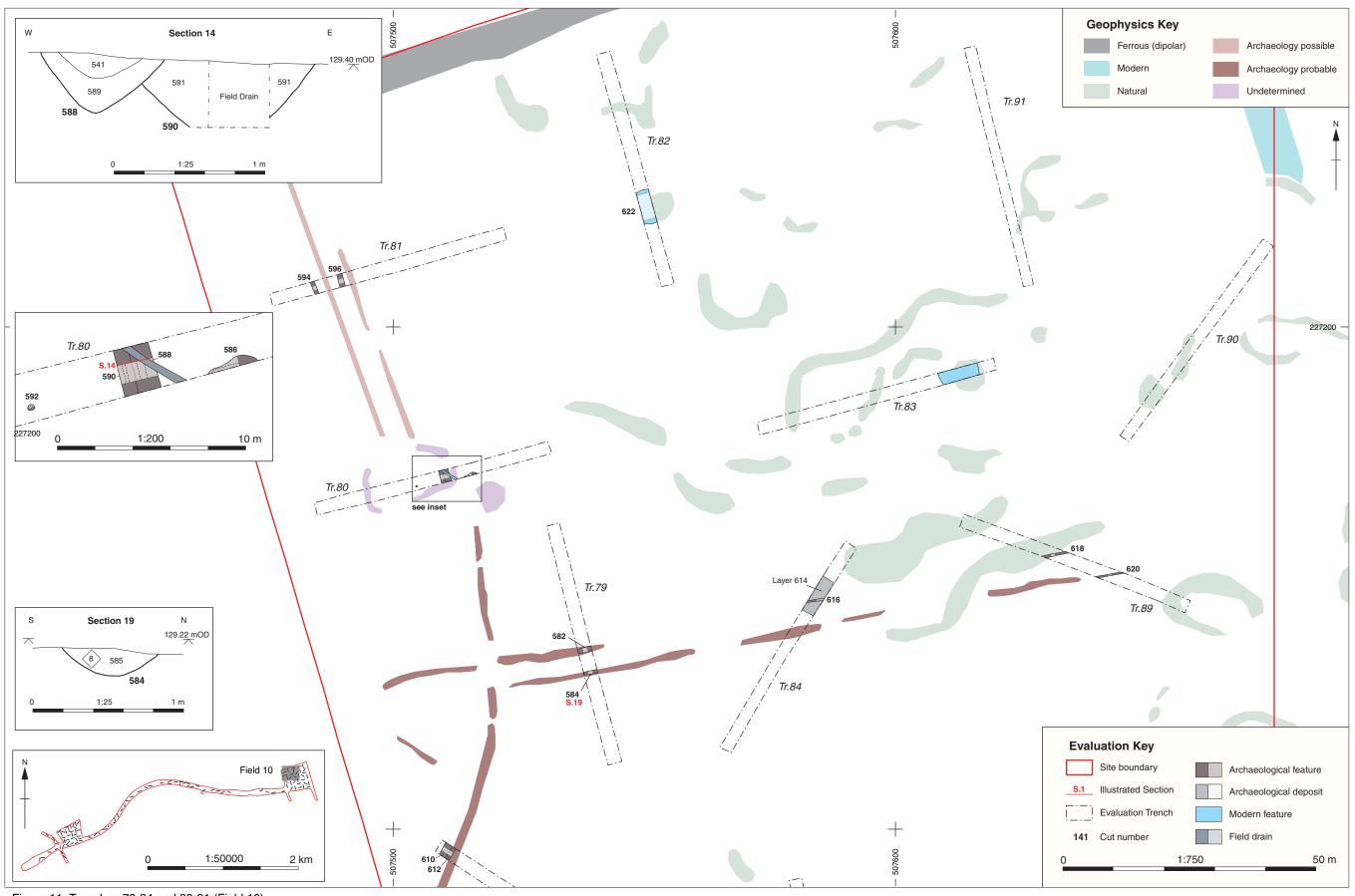


Figure 11: Trenches 79-84 and 89-91 (Field 10)



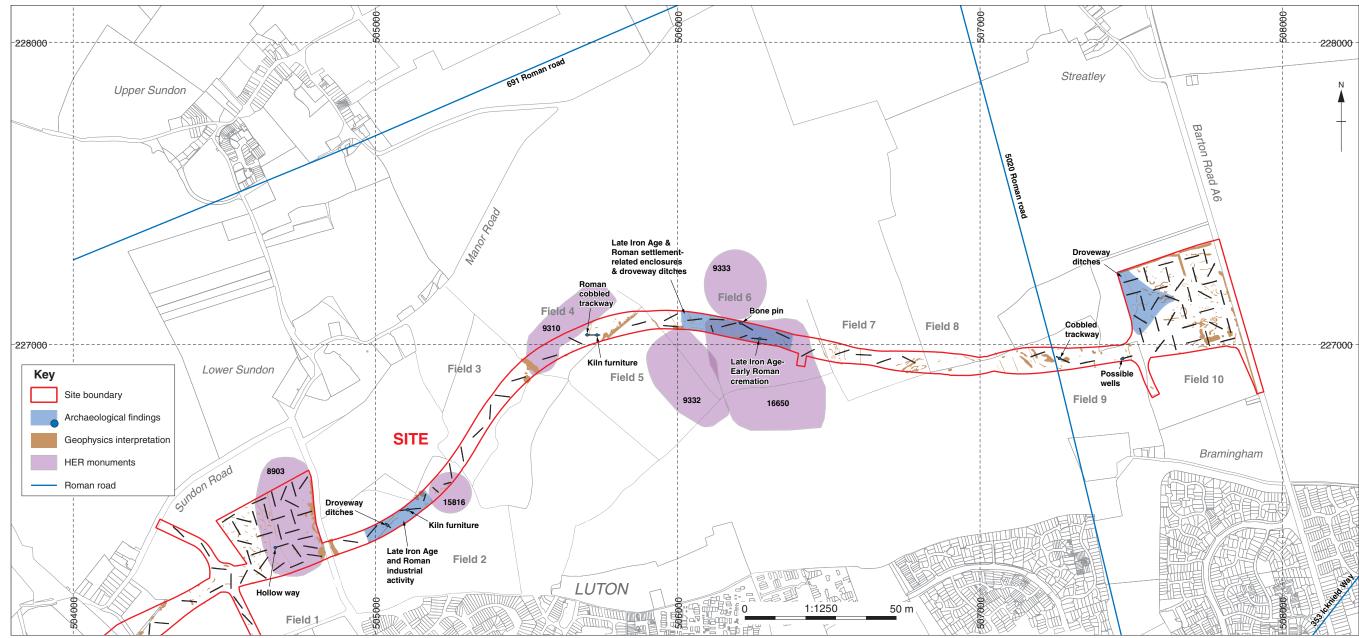


Figure 12: Overview of archaeological findings

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Plate 1: Trench 2, looking east-southeast



Plate 2: Ditch 5, (Trench 2), looking north-northwest





Plate 3: Ditches 19 and 21 (Trench 21), looking north-west



Plate 4: Trench 24, looking north-northwest



Plate 5: Ditches 13 and 15 (Trench 25), looking south-southeast





Plate 6: Trench 25, looking west-southwest



Plate 7: Trench 42, looking north-east



Plate 8: Trench 43, looking south-east





Plate 9: Ditch 41 (Trench 43), looking south-west



Plate 10: Trench 44, looking east





Plate 11: Trench 44, looking west



Plate 12: Pit 49 (Trench 44), looking south-east





Plate 13: Pit 73 (Trench 44), looking south-east



Plate 14: Trackway 535 and associated ditch 560 (Trench 56), looking north





Plate 15: Trench 60, looking east



Plate 16: Ditch 509 (Trench 61), looking south-west





Plate 17: Ditch 519 (Trench 61), looking south-west



Plate 18: Ditch 550 (Trench 63), looking north-west





Plate 19: Ditch 572 and pit 580 (Trench 66), looking south

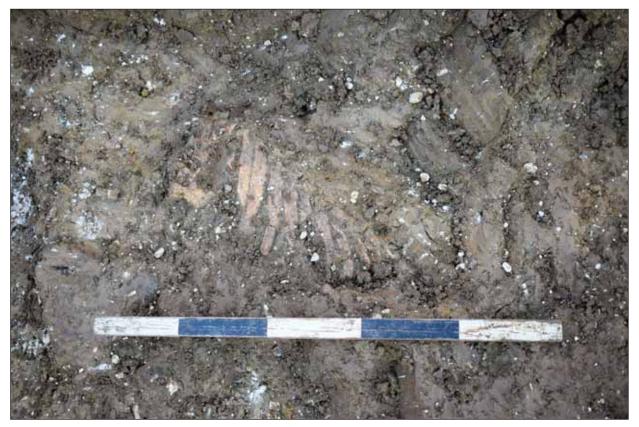


Plate 20: In situ pottery from pit 580 (Trench 66)





Plate 21: Articulated bone in pit 582 (Trench 66)



Plate 22: Ditch 558 (Trench 70), looking south





Plate 23: Pit 628 (Trench 74), looking north-west



Plate 24: Trackway 630 and roadside ditch 645 (Trench 72), looking west





Plate 25: Pit 625 (Trench 76), looking east



Plate 26: Ditches 610 and 612 (Trench 78), looking north-east





Plate 27: Ditch 598 (Trench 81), looking north-northwest



Plate 28: Bomb crater 601 (Trench 98), looking north-west





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