

**ARCHAEOLOGICAL EXCAVATIONS AT
LAND AT TODDINGTON LANE (AP6), LITTLEHAMPTON, WEST SUSSEX**

**A POST-EXCAVATION ASSESSMENT AND
UPDATED PROJECT DESIGN REPORT**

**NGR: 503876 104015
(TQ 03876 04015)**

**ASE Project No: 180315
Site Code: LNR16
ASE Report No: 2019066
OASIS ID: archaeol6-371803**

Planning Reference: LU/47/11



By Tom Munnery

**ARCHAEOLOGICAL EXCAVATIONS AT
LAND AT TODDINGTON LANE (AP6), LITTLEHAMPTON, WEST SUSSEX**

**A POST-EXCAVATION ASSESSMENT AND
UPDATED PROJECT DESIGN REPORT**

**NGR: 503876 104015
(TQ 03876 04015)**

**ASE Project No: 180315
Site Code: LNR16
ASE Report No: 2019066
OASIS ID: archaeol6-371803**

Planning Reference: LU/47/11

By Tom Munnery

With contributions by

Luke Barber, Isa Benedetti-Whitton, Anna Doherty, Alice Dowsett
Karine Le Hégaret, Emily Johnson, Elke Raemen,
Lucy Sibun, Mariangela Vitolo

Illustrations by Lauren Gibson

Prepared by:	Tom Munnery	Senior Archaeologist	
Reviewed and approved by:	Jim Stevenson	Project Manager	
Date of Issue:	October 2019		
Version:	2		

**Archaeology South-East
Units 1 & 2
2 Chapel Place
Portslade
East Sussex**



Abstract

This report presents the results of an archaeological excavation carried out by Archaeology South-East at Land at Toddington Lane, Littlehampton between June and August 2018. The fieldwork was commissioned by Armour Heritage on behalf of the developer in advance of a housing development, associated remediation and services.

A low 'background' of earlier prehistoric residual finds of Mesolithic date was recovered, suggesting that occupation of the Coastal Plain, albeit transient, occurred across this period. Later prehistoric and Roman archaeology provided the majority of findings from the site. There was no significant medieval or post-medieval archaeology.

The first cut features date from the Early Neolithic period and comprises four pits from which a reasonable assemblage of pottery and flintwork pushing the inception for placed and structured deposits noted across the site further back in time.

A Middle Bronze Age cremation and associated pyre-related deposits was revealed, similar to another group found previously. In addition to this was a Middle Bronze Age articulated partial adult inhumation which was apparently buried with a group of 12 loomweights. Much of the flintwork recovered from across the site within later features is considered to have derived from this period.

A Late Bronze Age to earliest Iron Age circular post-built structure was erected on top of the Middle Bronze Age inhumation and saw perhaps two additional rebuilds. A large assemblage of pottery was recovered from this and associated pits within and around the structure, indicating structured deposition from this period. Two wells perhaps dating to the earliest part of this period were found, with associated deposits of pollen to determine the local habitat and horse bones suggesting communal feasting possible structured deposits. Fragmented elements of field systems were recorded along with occasional dispersed pits.

A poorly dated Iron Age field system and possible routeway was partially exposed which likely relates to other portions previously identified on this site. The routeway appears to run eastwards from a concentration of activity to the west.

Two phases of Early Roman field systems were exposed with small numbers of associated pits and a possible post pad. A large assemblage of pottery was recovered from these features, but no obvious concentration of settlement was revealed during the excavation or evaluation. Several quarry pits were also excavated, perhaps providing the nearby pottery kiln at the former Horticulture Research International site with materials.

CONTENTS

- 1.0 INTRODUCTION**
- 2.0 ARCHAEOLOGICAL BACKGROUND**
- 3.0 ORIGINAL RESEARCH AIMS**
- 4.0 ARCHAEOLOGICAL RESULTS**
- 5.0 FINDS AND ENVIRONMENTAL MATERIAL: ASSESSMENT**
- 6.0 POTENTIAL & SIGNIFICANCE OF RESULTS**
- 7.0 PUBLICATION PROJECT**

BIBLIOGRAPHY

ACKNOWLEDGEMENTS

- Appendix 1: Context Register**
- Appendix 2: Finds Quantification**
- Appendix 3: Environmental Quantifications**
- Appendix 4: Taxa abundance per context by Number of Identifiable Specimens**
- Appendix 5: Geoarchaeological Logs**
- Appendix 6: Micromorphological Report**
- Appendix 7: Pollen Assessment**
- Appendix 8: Micropalaeontological Assessment**
- Appendix 9: HER Summary**
- Appendix 10: OASIS Summary sheet**

TABLES

Table 1:	Quantification of site paper archive
Table 2:	Quantification of artefact and environmental samples
Table 3:	Summary of the struck flint by provisional period
Table 4:	Summary of the burnt unworked flint
Table 5:	Summary of the struck flint from Early Neolithic pits
Table 6:	Summary of the struck flint from Late Bronze Age / earliest Iron Age features by area
Table 7:	Summary of the struck flint by category type from Roman (9) and post-medieval periods (10), and from unstratified and undated contexts
Table 8:	Summary of burnt unworked flint rich features
Table 9:	Quantification of prehistoric and Roman pottery by stratigraphic period and broad ceramic tradition
Table 10:	Quantification of Early Neolithic pottery fabrics in Period 5
Table 11:	Quantification of Middle Bronze Age pottery fabrics in Period 6
Table 12:	Quantification of pottery fabrics in Period 7
Table 13:	Quantification of pottery fabrics in Period 8
Table 14:	Quantification of pottery fabrics in Period 9
Table 15:	Quantification of CBM by form
Table 16:	Fabric descriptions for CBM
Table 17:	Summary of the Fired Clay Fabrics
Table 18:	Summary of stone assemblage by phase
Table 19:	Summary of 'slag' assemblage by period
Table 20:	Quantification of unidentifiable bone
Table 21:	Showing the summary of results on cremated human bone analysis
Table 22:	Zooarchaeological assemblage by period
Table 23:	Taxa abundance in the overall and phased assemblages by NISP
Table 24:	Summary of the Registered Finds

FIGURES

- Figure 1: Site location
Figure 2: All areas of archaeological mitigation
Figure 3: AP6 areas of excavation and evaluation
Figure 4: Period 5: Early Neolithic, Area D selected sections and photographs
Figure 5: Period 6: Middle Bronze Age, Area E selected sections and photographs
Figure 6: Period 6: Middle Bronze Age, Area G selected section and photograph
Figure 7: Period 7: Late Bronze Age to earliest Iron Age, Area G selected sections and photographs
Figure 8: Period 7: Late Bronze Age to earliest Iron Age, Area G selected photographs
Figure 9: Period 7: Late Bronze Age to earliest Iron Age, Area E and C plans
Figure 10: Period 8: Iron Age, Area E
Figure 11: Period 8.1: Late Iron Age, Area E, plan selected section and photograph
Figure 12: Period 9: Early Roman, Area E, plan and selected section
Figure 13: Period 9: Early Roman, Areas E and C, plan section and photograph
Figure 14: Period 9: Early Roman, Area A, plan selected section and photograph
Figure 15: Period 9: Early Roman Areas B plan and selected sections
Figure 16: Period 9.1 Early Roman, Area D plan
Figure 17: Period 10 Post-medieval, Area E plan
Figure 19: Unphased features, all areas

1.0 INTRODUCTION

Archaeology South-East (ASE) was commissioned by Armour Heritage to conduct archaeological investigations at Land at Toddington Lane, Littlehampton, West Sussex (NGR: 503876 104015; Figure 1) in advance of the redevelopment of the site. The site has been divided into several areas of archaeological interest, of which this is AP6. The fieldwork for this phase took place between June and August 2018.

1.1 Site Location

1.1.1 The site is situated on the northern edge of Littlehampton, on the flat and low-lying coastal plain. It consists of a large parcel of land previously occupied by nurseries and greenhouses, bounded to the south by the West Coastway Line and to the north by the Black Ditch, a tributary of the River Arun.

1.1.2 Archaeological mitigation has been carried out systematically across the wider site. The current archaeological works (Archaeology Phase 6, AP6) focussed on an area in the east of the site covering a total area of 20.8ha. This phase was divided into seven areas covering 3.6ha of AP6. AP6 is located to the east of all previous phases of archaeological investigations (Figure 2). For the purpose of this report AP6 will be considered and referred to as 'the site'. The wider development site measures approximately 85ha in total.

1.2 Geology and Topography

1.2.1 The site is situated on predominantly flat ground with a slight downward slope from south to north. Ground levels of c. 2.89m and 4.50m AOD were recorded in the northern and south-western limits of the site respectively.

1.2.2 According to the current data from the British Geological Survey, the natural geology in the north of the site comprises Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation, and Culver Chalk Formation, a sedimentary bedrock formed approximately 71 to 94 million years in the Cretaceous Period. This is overlain by superficial Raised Beach Deposits of sand and gravel which were formed up to 3 million years ago in the Quaternary Period. The geology in the south of the site comprises Pit Chalk Formation, a sedimentary bedrock formed approximately 89 to 94 million years ago in the Cretaceous Period, overlain by superficial river terrace deposits of sand, silt and clay (BGS 2019).

1.3 Scope of the Project

1.3.1 Outline planning consent (LU/47/11) has been granted by Arun District Council for mixed use development of the site with vehicular access from a new access from the A259 and with additional access from Mill Lane and Toddington Lane. The outline consent was granted on condition (conditions 40 & 41) that a programme of archaeological work be undertaken. The conditions state:

"(40) Archaeological investigations of the site shall be carried out for each phase or sub phase of the development at the expense of the developer in

accordance with a specification to be submitted to and agreed by the Local Planning Authority in writing. The archaeological investigations shall be carried out following the demolition of existing buildings and before the commencement of new building works in each phase or sub phase of the development. This shall include (as necessary): - Geophysical surveys, test pits and trenches in the areas currently occupied by existing structures, and, - Borehole surveys conducted within the grazing marshes to the south of the Black Ditch and to the north of the development area. Reason: In order to ensure that archaeological features on the site will be properly recorded before development”.

“(41) The Local Planning Authority shall be informed in writing immediately of any items of archaeological interest unearthed during the building operation and given a reasonable opportunity for an examination of the artefact and the site where it was found. Reason: To enable items of archaeological interest to be recorded in accordance with the policy AREA 17 of the Arun District Local Plan”.

- 1.3.2 A staged approach to assessing the potential of, and the mitigation of the archaeological remains within the development area was adopted. AP6 mitigation works follows the completion of a cultural heritage chapter in the Environmental Statement (WYG 2011), and seven phases of trial trenching (AP1-AP6, Allotments and Fairhaven Nursery; TVAS 2015b, 2016a, 2016b, ASE 2016a, 2018a, 2018b, 2018c). Subsequent archaeological mitigation was then undertaken in AP1-AP4, AP6 and Fairhaven Nursery and Allotments (TVAS forthcoming; ASE 2017, 2019, forthcoming).
- 1.3.3 Based on the results of the AP6 trial trenching, seven zones of archaeological potential were established. Following dialogue between Armour Heritage and James Kenny, the archaeological advisor to Arun District Council, it was agreed that these seven areas should be mitigated, AP6A through to AP6G (Figure 3).
- 1.3.4 A Written Scheme of Investigation was prepared by Armour Heritage (AH) (2018) outlining the methodology and requirements of the project. This report presents the findings of the excavation.

1.4 Archaeological methodology

- 1.4.1 All archaeological fieldwork was carried out to accepted professional standards in line with ClfA guidelines (ClfA 2014a; ClfA 2014b; ClfA 2014c); West Sussex Archaeological Standards (WSSCC 2017) and in accordance with the methodology set out in the relevant Written Scheme of Investigation (AH 2018). On-site meetings were held between ASE, Armour Heritage and James Kenny in order to monitor the progress of the work and modify the methodology as necessary.
- 1.4.2 All the excavation areas were excavated in their intended locations and to the intended extent, except for AP6E which had a live service running through the centre of it.
- 1.4.3 The excavation areas were machine-stripped under the supervision of experienced archaeologists using a tracked mechanical 360° excavator fitted

with a toothless ditching bucket. Spoil was removed from the excavation areas using a moxy dumper.

- 1.4.4 Overburden deposits (topsoil and subsoil) were removed in spits no greater than 0.2m in thickness and machine excavation was carried out to the surface of natural geology or archaeological deposits, whichever was higher. Care was taken not to machine off seemingly homogenous layers that might have been the upper parts of archaeological features. The resultant surfaces were cleaned as necessary and a pre-excavation plan prepared using Global Positioning System (GPS) planning technology.
- 1.4.5 Pre-excavation plans were made available in AutoCAD and PDF format and printed at a suitable scale for on-site use. The plan was updated regularly by Archaeology South-East's on-site surveyor who plotted excavated features and recorded levels in close consultation with the supervisor.
- 1.4.6 Ditches and gullies had all required relationships defined, investigated and recorded. All terminals were excavated. Sufficient of the feature lengths were excavated to determine the character of the features over their entire course; the possibility of recuts of parts, and not the whole, of the feature were considered. Discrete features were generally 50% excavated and, where rich finds or environmental remains were encountered or where part of a structure, 100% excavated.
- 1.4.7 Four sections were dug using a 360° mechanical excavator fitted with a toothless bucket because of their large scale.
- 1.4.8 All excavated deposits and features were recorded using standard ASE context record sheets and planned using GPS planning technology or hand planned using a geo-referenced grid. Sections were hand-drawn at a scale of 1:10 on plastic drafting film. A limited number of sections through large features were drawn at a scale of 1:20 where a smaller scale was more appropriate.
- 1.4.9 A full digital photographic record of all features was maintained. This illustrates the principal features and finds both in detail and in a general context. The photographic record also includes working shots to represent more generally the nature of the fieldwork.
- 1.4.10 All finds recovered from excavated deposits were collected and retained in line with the ASE artefacts collection policy.
- 1.4.11 The excavation area and spoil heaps were metal detected for artefact recovery.
- 1.4.12 Samples were collected from suitable excavated contexts, including well-sealed slowly silted features.
- 1.4.13 A standard bulk sample size of 40 litres (or 100% of small features) was taken from dated/datable sealed contexts to recover environmental remains such as fish, small mammals, molluscs and botanicals

1.5 Organisation of the Report

- 1.5.1 This post-excavation assessment (PXA) and updated project design (UPD) has been prepared in accordance with the guidelines laid out in Management of Research Projects in the Historic Environment (MoRPHE), Project Planning Notes 3 (PPN3): Archaeological Excavation (English Heritage 2008).
- 1.5.2 The report seeks to place the results from the site within the local archaeological and historical setting; to quantify and summarise the results; specify their significance and potential, including any capacity to address the original research aims, listing any new research criteria; and to lay out what further analysis work is required to enable their final dissemination, and what form the latter should take.
- 1.5.3 Following on from a previous archaeological evaluation conducted by Archaeology South-East (ASE 2018a) (Figure 3) work at the site ran as a single excavation, with the finds and environmental archives all recorded under a single site code: LNR16.
- 1.5.4 Where possible the results from the evaluation have been integrated and assessed with the results from the main excavation.

2.0 ARCHAEOLOGICAL BACKGROUND

2.1 Palaeolithic c.500,000 BC - c.10,000 BC

2.1.1 Most archaeological deposits of this age are usually associated with disturbed geological contexts, most especially along the coastal plain, and from buried river terrace gravels. Sussex has a number of sites where relatively large areas of undisturbed Palaeolithic land-surfaces have been preserved. The oldest and most important of these is the Goodwood-Slindon Raised Beach. This geological sequence of glacial and interglacial deposits has been partially exposed, excavated and recorded at Boxgrove near Chichester. Boxgrove is a site which provides clear evidence of Hominid activity, with undisturbed Palaeolithic floor surfaces, and a large number of in situ Palaeolithic finds, up to 500,000 years old (Roberts & Parfitt 1999).

2.1.2 The West Sussex HER holds no records relating to Palaeolithic activity on or near the site.

2.2 Mesolithic c.10, 000 BC - c.4, 300 BC

2.2.1 Many Mesolithic sites in Sussex are identified through concentrations of flintwork and isolated pits, rather than by a series of diagnostic archaeological features relating to an inferred settlement site. These flint scatters are found in all parts of the county, forming clusters, which may represent activity zones. The clusters predominate in the river valleys, with other sizeable concentrations on the High Weald and along the Coastal Plain where they are considered to represent exploitation of coastal lowlands following the inundation of the English Channel in c.6000BC (ASE 2002).

2.2.2 Early Mesolithic sites are, however, rare and where they exist, are situated predominantly on the Lower Greensand belts. Late Mesolithic sites are more frequent in Sussex, and along with open-air sites, a number of rock shelters have been discovered in the High Weald such as at Hermitage Rocks, High Hurstwood. Many of these sites have been interpreted as temporary hunting camps indicative of a broad spectrum subsistence strategy (Holgate 2003).

2.2.3 Locally, Segment 33 of the Bognor Regis and Littlehampton Transfer Pipeline work, located 3.2km south-west of the site, revealed 93 flakes with a high proportion showing evidence of retouch and use. The majority were hard hammer struck and many were primary flakes. Several soft hammer flakes of probable Mesolithic date and a small Mesolithic pick were also recorded (MWS6779, West Sussex HER, Heritage Gateway).

2.2.4 Residual Mesolithic flint was also recovered during excavations of a multi-period site on land formerly occupied by Toddington Nurseries (Dinwiddy 2012), situated to the south of the site. A possible Mesolithic bladelet was identified 1.8km east of the site on the Rustington Bypass works (Rudling & Gilkes 2000) along with a Mesolithic adze from an adjacent site at Roundstone Lane (ASE 2016b).

2.3 Neolithic c.4, 300 BC – c.2, 300 BC

- 2.3.1 The advent of the Neolithic in Sussex is marked by upland monuments including flint mines, oval and long barrows and causewayed and other enclosures, largely confined to the South Downs. Neolithic activity on the Coastal Plain has tended to be less visible due to the impact of arable farming on vulnerable archaeological deposits (ASE 2002).
- 2.3.2 No clear evidence of Early Neolithic settlement has been recorded either on the Sussex Downs or the Coastal Plain. However, evidence of a Neolithic presence is provided by flint scatters, marking a broad Late Mesolithic - Early Neolithic horizon and pottery and flints found within isolated pits. Notable Early Neolithic pottery assemblages were identified at Drayton Quarry along with Middle Neolithic Peterborough ware, also identified at Chantry Farm, Westbourne (Seager-Thomas 2010). Discoveries at Drayton Quarry included two c.0.5km long parallel ditches identified as a Neolithic cursus (ibid). Pits dated to both the Early and Late Neolithic have been identified at Westhamptnett (Allen & Fitzpatrick 2008, 91; Chadwick 2006), and further evidence of Early Neolithic pits was identified at St Richards Hospital, Chichester (King & King 2010).
- 2.3.3 Recent excavations have demonstrated that there was a Neolithic presence in the vicinity, with Neolithic axes recovered at the multi-period site at Toddington Nurseries (Dinwiddy 2012), and on excavations on the A259 Rustington bypass (Rudling & Gilkes 2000).

2.4 Bronze Age c.2, 300 BC - c.600 BC

- 2.4.1 The Late Neolithic - Early Bronze Age period forms a distinct chronological boundary, with technological progress marked by the appearance of metalwork and textile production. Increasing contact between Britain and the continent is also evident in this era as is the rise of funerary monuments. Bronze Age burials are usually found in barrow monuments concentrated locally on the South Downs (Grinsell 1934; Garwood 2003; Hart 2015), although evidence of their existence further afield is coming to light (Munnery 2017). Evidence of barrows on the coastal plain is limited to the 'Hove' barrow excavated in the 19th century, recently complemented by the discovery of possible barrow-related ring ditch evidence at Westhamptnett (Chadwick 2006). Settlement evidence for the period remains rare, with notable local exceptions including the Downs chalkland site of Belle Tout in East Sussex (Bradley 1982), with further evidence from pottery assemblages within downland dry valley colluvial sequences (Hart 2015).
- 2.4.2 Other evidence for the period is confined to artefact scatters characterised by flintwork, pottery and metalwork finds. Beaker pottery has been found on the Coastal Plain at North Bersted. It is suggested that Early Bronze Age pits and the structured deposits they contain may reflect formative processes of land-tenure materialisation (Dunkin & Yates 2008, 25; Hart 2015, 84).
- 2.4.3 Locally, Middle and Late Bronze Age occupation was recorded on land formerly occupied by Toddington Nurseries, comprising a hollow way, waterholes/wells and a possible roundhouse with associated spreads of

domestic rubbish. Two Neolithic axes deposited in the terminal of a Bronze Age ditch may have been curated (Dinwiddy 2012).

- 2.4.4 Excavations by both Thames Valley Archaeological Services (Weaver 1995) and Wessex Archaeology (Lovell 2002) at the former Horticultural Research International establishment, south-east of the site discovered evidence for activity during the Middle to Late Bronze Age including pottery and a cremation burial. Finds suggested the presence of a settlement in the vicinity. Furthermore, an urned cremation recovered during works on the Rustington Bypass was thought to be of Bronze Age date (Rudling & Gilkes 2000). An additional Middle Bronze Age cremation was exposed during excavations at Toddington Lane (ASE 2017; 2019).
- 2.4.5 Excavations south of the A259 New Road identified a Middle Bronze Age enclosure, field boundary ditch and a burnt mound with associated hearth, trough and waterhole (ASE 2016c). Slightly further afield, a Middle Bronze Age cremation cemetery was also identified west of Angmering, with an associated well, postholes and a curvilinear feature (ASE 2003). Adjacent to this site, on Roundstone Lane, a portion of a rectangular enclosure of Late Bronze Age to Early Iron Age date was revealed (ASE 2016b).

2.5 Iron Age 600 BC to c.43 AD

- 2.5.1 Social and economic growth was very rapid during this period leading to an expanding population and increasing exploitation of what had previously been more marginal environments. Therefore, this period is characterised by changes in the entire archaeological record from pottery types to settlement and funerary practices. The most typical type of monument for this period is the hillfort, a number of which are located in prominent locations across the South Downs. By the Middle Iron Age strong regionalisation can be demonstrated and by the Late Iron Age the production of coins had developed along with the rapidly growing influence of the 'Roman World' (Stephenson & Krawiec 2019).
- 2.5.2 Settlements became larger and more varied throughout the period. A number of sites are recorded on the Coastal Plain, most of which have been discovered since Bedwin's survey which highlighted the lack of evidence from the area (Bedwin 1978). Chronologically, the settlement evidence from the area fluctuates, with fairly extensive settlement in the Late Bronze Age/Early Iron Age transitional period decreasing until c.400BC, after which there is evidence of increasing settlement (Stephenson & Krawiec 2019).
- 2.5.3 A portion of an enclosure occupied continuously or repeatedly throughout the Iron Age period was revealed during an earlier phase of works at Toddington Lane which demonstrated a high degree of grain storage (ASE 2017), whilst another of early Iron Age date was uncovered in another phase of works (ASE 2019).
- 2.5.4 A small amount of residual Middle Iron Age pottery was found during the Watermead development, roughly 500m south-south-east of the site (Gilkes & Hammond 1991). Some Late Iron Age pottery was also found during the Rustington Bypass works, approximately 2.5km east of the site (Rudling & Gilkes 2000). The site at Roundstone Lane, Angmering revealed a

concentration of activity dating to the Middle to Late Iron Age period with evidence of grain and possible alcohol production and elements of a pastoral society (ASE 2016b).

2.6 Roman / Romano British (43 AD to c.450 AD)

- 2.6.1 A range of archaeological sites from this period are recorded locally including two Roman villas, corn-drying kilns recorded at Belloc Road to the south-west of the site (Gilkes 1993), and a pottery production site recorded to the south of the area on the former Horticulture Research International (HRI) site (Lovell 2002).
- 2.6.2 Angmering Roman villa was one of the first elaborate early Roman villas of Sussex to be excavated. The 1st- and 2nd-century winged main house with its architecturally elaborate bath-house is situated 2km west of Angmering, and approximately 2km east of the site, built alongside the Black Ditch (Gilkes 1993). A cemetery was also associated with the villa.
- 2.6.3 The Gosden Road, Littlehampton villa was bulldozed before archaeologists could begin work, removing all but intrusive features and wall foundations. However, it was possible to determine that a small masonry building was constructed, consisting of a range of four rooms running north to south with a corridor running across the north and west side of the building, and potentially the south. A wing room was located at the north-east corner of the building, and potentially a second wing was situated at the south-east corner but this had been removed by later rebuilding. A mid to late 2nd century date for the villa has been suggested. Two Roman cremations was associated with the villa site (Gilkes 1993).
- 2.6.4 The multi-period site on land formerly occupied by Toddington Nurseries demonstrated intensive cereal production during the Romano-British period indicated by environmental remains recovered from a double-ditched field system and pits. It is suggested that the field system was part of a wider agricultural complex associated with the estate of the nearby Angmering Roman villa (Dinwiddy 2012).
- 2.6.5 Large amounts of pottery and metalwork of 1st and 2nd century AD date, recovered on the Rustington bypass excavations probably indicate settlement activity, whilst the many fragments of quern stones and millstones imply that milling was one function of the site, perhaps water milling, given the site's proximity to the 'Black Ditch' watercourse. The fieldwork also included excavation and recording of various features, including three ditches, a possible granary, and a timber building with a chalk-and-clay floor (Rudling & Gilkes 2000).
- 2.6.6 Several sites containing evidence of occupation have also been encountered across the area, with examples coming from the Horticulture Research International (HRI) site and its environs (Lovell 2002; ASE 2007)
- 2.6.7 Recent excavations as a part of this development have yielded evidence from the Roman period within AP1-AP5, some of which comprised the re-excavation of an earlier Iron Age enclosure and its subsequent delineation with postholes and possible use as a stockade for livestock (ASE 2017), while

an urned cremation was revealed during one of the evaluations (TVAS 2015b).

2.7 The Early Medieval Period (c.450 AD to 1066 AD)

2.7.1 Other than the built heritage associated with churches in both Lyminster and Poling, evidence for early medieval activity is scarce. A limited amount of re-deposited Saxon pottery was noted at the multi-period site at Toddington Nursery, and some was recovered from the Courtwick Lane site to the west (TVAS 2015a).

2.8 Medieval Period (1066 AD to c.1540 AD)

2.8.1 Evidence for medieval activity in and around the study area can be seen from a general scatter of 14th century and later medieval pottery found during a watching brief on a warehouse construction site on the Watersmead Industrial Estate in 1990 (Gilkes & Hammond 1991) and from the observation of a number of chalk quarrying pits found during a phase of excavation for the current development, most likely for use in liming fields (ASE 2017). At Poling there is evidence for a deserted medieval village and possible moated site.

2.9 Post Medieval (c.1540 AD to 1900 AD)

2.9.1 Other than scattered ceramic evidence throughout the development area there is negligible evidence of post-medieval activity. The site is thought to have been in agricultural use in this period.

2.10 Previous archaeological work at the site

2.10.1 The following is drawn from the WSI for AP6 with due acknowledgement (AH 2018), with additional results from evaluations undertaken after the above document.

2.10.2 Phased evaluations and mitigation within the AP1 area (TVAS 2015b), and areas to the south and west of the site, APs2 - 6 and Fairhaven Nursey and Allotments (TVAS 2016a, 2016b; ASE 2016a, 2018a, 2018b, 2018c), have confirmed extensive prehistoric and Romano-British activity within the area.

Archaeological evaluation (Phase 1)

2.10.3 An archaeological evaluation was completed by Thames Valley Archaeological Services (TVAS) in the AP1 area in December 2015 (TVAS 2015b), and comprised the excavation of 50 trenches, the majority measuring 25m x 1.8m. The AP1 area is positioned in the southwest corner of the site, between AP2 to the north and west, and AP3 to the east.

2.10.4 Disturbance caused by former buildings on the site was minimal, and the evaluation results confirmed the demolished nursery buildings had been constructed on made ground deposits overlying the earlier topsoil, which had provided a buffer serving to inadvertently protect the extensive archaeological features recorded.

- 2.10.5 Broadly the results indicated a shift in settlement and related activity across the area, with features recorded in the north dating from the Middle to Late Bronze Age or Early Iron Age, and features recorded elsewhere in AP1 broadly dating from the Late Iron Age to Romano-British periods. Features of Romano-British date were concentrated in the south west corner, and indicated continuous occupation from the Late Iron Age until the 2nd century AD.
- 2.10.6 The Romano-British activity indicated pits, postholes and ditches containing pottery, fired clay, burnt flint and residual worked flint in Trenches 1-8 in the southwest corner, and represented an area of intensive occupation close to the present Toddington Lane. Elsewhere ditches were recorded further to the south in Trenches 17-20 and the truncated remains of a single, probable urned cremation burial was recorded in Trench 33 in the east of the area. Iron Age features were more widely distributed across the area, with linear ditches and/or gullies recorded in Trenches 8, 9, 16, 23, 29, 39, 41 and 50. An assemblage of sixty struck flints were also recovered from the site, the majority representing broad flakes, although a retouched thumbnail scraper, a hollow scraper and possible broken hammerstone were also recorded. Although not chronologically distinctive, they were thought to date to the Neolithic or Bronze Age.
- 2.10.7 It was agreed further mitigation would comprise the excavation of 1.06ha across the area of Romano-British activity, along with investigations to the east. The mitigation work by TVAS is complete, but the results have not yet been disseminated. Further mitigation by Archaeology South-East uncovered a Late Neolithic pit and a stock management area of Middle to Late Bronze Age date along with cremations and other pits. Also found were an enclosure of Early Iron Age date with an associated trackway. This trackway was repurposed until the middle Roman period (ASE 2019).

Archaeological evaluation (Phase 2)

- 2.10.8 The AP2 area was located immediately to the south and east of AP1 and proposed the excavation of 36 trenches of the same dimensions as the AP1 area (TVAS 2016a). The results similarly confirmed that the former nursery buildings had not impacted heavily on the buried archaeology, which had been in part protected by made ground deposits overlying the original soil horizons. Overall the results indicated a reduction in the activity across the area, with only 12 of the 36 trenches containing archaeological features. Nevertheless, evidence of Bronze Age occupation was more widespread, and confirmed in the north-east, central and south-east parts of the AP2 area.
- 2.10.9 Abraded sherds of Bronze Age pottery and worked flint in a number of the ditches, gullies and pits excavated, followed a pattern of loosely clustered or isolated areas of Bronze Age activity seen more widely across the extensive South Coast Plain landscape. The results also confirmed a notable reduction in the later prehistoric and Romano-British activity. Indeed, only two ditches were confirmed to date to this period and were broadly located in the east of the AP2 area.

- 2.10.10 Mitigation in this area proposed the excavation of four separate areas covering a total of c. 5,580 sq.m. The works are complete but the results have not yet been issued.

Archaeological evaluation (Phase 3)

- 2.10.11 Seventeen trenches were investigated in the AP3 area, of which ten positioned along the northern and eastern half of the area contained archaeological features (TVAS 2016b).
- 2.10.12 The results confirmed the area had been subject to significant ground levelling to provide a level surface for the greenhouses formerly occupying the site. This resulted in deep made ground deposits in the north and eastern parts of the area preserving the archaeology. By contrast, in the southeast corner of the AP3 area, significant truncation was noted, effectively removing any archaeology during the landscaping operation.
- 2.10.13 Despite the presence of services preventing full excavation of features in Trench 89, extensive archaeology was recorded. Postholes, one containing worked flint and Late Bronze Age or Early Iron Age pottery sherds were recorded, along with a number of further ditches containing quantities of Late Bronze Age or Early Iron Age pottery. Similarly dated features comprising gullies, pits and ditches were investigated in Trenches 90, 91, 92, 94, 95, 97 and 102. A further feature containing Roman pottery was also recorded in Trench 90.
- 2.10.14 Mitigation in this area proposed the excavation of an area. The mitigation is complete, but results are yet to be disseminated.

Archaeological evaluation (Phase 4)

- 2.10.15 Sixty-six trenches were excavated across the AP4 area, and the results confirmed 11 (Trenches 134, 135, 137, 147, 154, 162, 163, 164, 165, 172 and 174) contained archaeological features of prehistoric, Romano-British or medieval date (ASE 2016).
- 2.10.16 Prehistoric pottery was recorded from a ditch and gully in Trench 164. Late Bronze Age sherds were retrieved from the basal ditch fill, but Iron Age pottery was collected from its upper fill, and may indicate the finds are residual, or that the upper fill represented an Iron Age recut of an earlier Bronze Age ditch. In total, 13 features were Iron Age in date, and comprised eight ditches, a ditch terminus, gully, two pits and a pit/posthole, and were principally located in the southeast corner of the AP4 area. The curvilinear form of the ditches recorded in three of the trenches (Trenches 154, 165 and 174) suggested they are likely to have formed part of an enclosure relating to settlement activity, and likely represent a continuation of the activity recorded during excavation in the northeast corner of the AP3 area. Only one ditch was securely dated to the Romano-British period (recorded in Trench 164), although its alignment suggested it represented a continuation of an Iron Age ditch recorded in Trench 154. Medieval quarry pits were recorded in the east of the site in Trenches 162, 163 and 172.

Archaeological excavation (Phase 4)

- 2.10.17 Full archaeological excavation was completed in 2016 and 2017 in Areas AP4A to AP4E (ASE 2017). The post-excavation assessment report for these areas has been completed and issued (ASE 2017). The results of this assessment results indicate multiple phases of activity beginning with an intensive phase in the Early Iron Age.
- 2.10.18 Within Area AP4A an Early to Mid/Late Iron Age enclosed settlement was recorded and contained a concentration of large vertical sided probable storage pits in the northwest corner of the enclosure. The activity, albeit reduced, continued into the Middle to Late Iron Age with evidence of a further enclosure on a similar alignment with a west facing entrance. Early Roman activity was represented by two phases of a large sub-rectangular enclosure, with the latest phase characterised by small enclosures of flint packed postholes, flanked by a series of external parallel ditches.

Archaeological evaluation (Phase 5)

- 2.10.19 Seven trenches were excavated within AP5 (ASE 2018b). No archaeological features were encountered within any of the trenches and it is believed that the buildings that previously occupied the area and the activities undertaken there are likely to have caused a degree of truncation across the investigated portion.

Archaeological evaluation (Phase 6)

- 2.10.20 The evaluation of AP6 comprised the excavation of 210 trenches across the site (ASE 2018a). The results demonstrated the presence of Bronze Age archaeological remains across parts of the site, along with a likely cremation vessel and large pit containing faunal remains. Evidence of Late Iron Age and Early Roman activity was also encountered.

Archaeological excavation (Phase 6)

- 2.10.21 Mitigation in the form of archaeological excavation of seven areas; AP6A to AP6G was proposed. This was undertaken ASE and this report presents the results of the mitigation.

Archaeological evaluation (Fairhaven Nursery and Allotments)

- 2.10.22 An evaluation comprising the excavation of 37 trenches was undertaken to investigate the archaeological potential for the site (ASE 2018c). The trenching yielded evidence of Late Bronze Age activity across two portions of the site in the form of possible pits and ditches.

Archaeological excavation (Fairhaven Nursery and Allotments)

- 2.10.23 The excavation of two separate areas was proposed to mitigate the loss of archaeological evidence within the Fairhaven Nursery and Allotment site. This was undertaken by Archaeology South-East but the post-excavation assessment is still ongoing and the results not yet available for dissemination.

3.0 ORIGINAL RESEARCH AIMS

3.1 The original research aims (ORAs) for this archaeological work were as follows:

- ORA 1: Can the Early Neolithic evidence encountered extend our understanding of how the Neolithic population was utilising the landscape, especially that of the Coastal Plains (Garwood 2008, 9; Healy 2008, 13)
- ORA 2: A Middle Bronze Age cremation was recorded, but it is unclear how it fits in with other examples noted in the recent work undertaken on the Toddington Lane site such as the possible cremation cemetery and barrow. Additionally, how might this Middle Bronze Age funerary activity relate to any settlement evidence in the area (Hamilton 2008, 12)?
- ORA 3: A number of possible Middle to Late Bronze Age ditches were recorded. Are these elements of Middle to Late Bronze Age land division, and if so, how do they fit into their chronological and spatial settings both in a local and wider perspective? (Champion 2008, 10)
- ORA 4: Few Bronze Age faunal remains exist, and the example uncovered during this evaluation might provide an opportunity for further research into the field, especially if it is an example among other similar features.
- ORA 5: The Late Iron Age/Early Roman evidence uncovered indicates the presence of a field system or set of boundary ditches of that date. The Toddington Lane site has revealed significant evidence of occupation from this period, as have investigations in the vicinity. How might the results from this phase of work relate spatially and chronologically to those found nearby?
- ORA 6: The evidence revealed suggests a hiatus in activity between the Late Bronze Age and Late Iron Age. To what extent can the origins of the Late Iron Age evidence be established, and does it have any Middle Iron Age precursor activity (Champion 2008, 10; Hamilton 2008, 13)?
- ORA 7: Can this site further our understanding of the chronological range of non-villa settlements, particularly when taken into account continuity from the Late Iron Age (Booth 2008, 18)?

4.0 ARCHAEOLOGICAL RESULTS

4.1 Introduction

- 4.1.1 As part of the initial post-excavation stratigraphic analysis, individual contexts, referred to thus [***] not (***) , have been sub-grouped and/or grouped together during post-excavation analysis and features are generally referred to by their sub-group (SG**) or group label (G **). In this way, linear features, such as ditches which may have numerous individual slots and context numbers, are discussed as single entities, and other cut features such as ring gullies, pits and postholes are grouped together by structure, common date and/or type. Environmental samples are listed within triangular brackets <*>, and registered finds thus: RF<*>. References to sections within this report are referred to thus (3.7). A complete context register for the project can be found in Appendix 1.
- 4.1.2 Based on initial interpretations of stratigraphic and spatial relationships and spot-dating of finds assemblages, a provisional structure of dated periods and tentatively dated phases has been devised, as follows. The phasing starts from Period 5 to avoid confusion with previous elements of fieldwork undertaken in AP1 (ASE 2019) and AP4 (ASE 2017) and numbering of groups of features has continued from this.

Period 5: Early Neolithic

Period 6: Middle Bronze Age

Period 7: Late Bronze Age to earliest Iron Age

Period 8: Iron Age

- Phase 8.1 – Late Iron Age

Period 9 Early Roman (AD50-100)

- Phase 9.1 – First of two phases of ditches dated to AD50-100
- Phase 9.2 – Second of two phases of ditches dated to AD50-100

Period 10: Post Medieval (?C19th)

4.2 Summary

- 4.2.1 The archaeological remains are discussed under provisional date-phased headings determined primarily through assessment of the dateable artefacts, predominantly the pottery, and secondarily through the creation of relative chronologies where stratigraphic relationships exist. It is the eventual aim that these phases will be rationalised and conjoined with those from the previous and subsequent phases of excavation at Toddington Lane with the aim of forming dateable phases of activity within the greater period headings such as Iron Age, Saxon etc.

- 4.2.2 There are a small number of Mesolithic residual finds which suggests that occupation of the site, albeit transient, occurred across this time.
- 4.2.3 The first cut features date from the Early Neolithic period and comprises a group of at least four pits. A reasonable assemblage of pottery and flintwork was recovered from them. Much of the pottery is decorated, an unusual assemblage for a site which is not a causewayed enclosure. The pits may be suggestive of structured deposition.
- 4.2.4 A Middle Bronze Age cremation and associated pyre-like deposits were revealed, similar to a group in AP1. A Middle Bronze Age inhumation was also recovered with an associated assemblage of pottery and 13 loomweights. Burials of this date are uncommon in the Coastal Plain and evidence hints towards structured deposition occurring alongside it.
- 4.2.5 Perhaps the most interesting feature from the Later Bronze Age to earliest Iron Age was a circular post-built structure which overlaid the Middle Bronze Age inhumation. The postholes numbered 80 suggesting perhaps three iterations of the structure. Recovered from pits within and around the structure was a reasonable assemblage of pottery, indicating some longevity of use and structured deposition within them. A number of ditches and boundaries some of which were aligned with wells were also excavated. The wells contained environmental evidence of the period, but demonstrated some evidence of having been excavated slightly earlier, perhaps during the Middle Bronze Age. Horse remains were encountered within one well, perhaps indicating communal feasting. Small numbers of additional pits were revealed across the site.
- 4.2.6 During the Iron Age a number of boundary ditches and possible routeways were excavated. These were poorly dated, but were similar in form to others found in previous phases of excavation. A small number of pits were also revealed from this period, indicating relatively low-level intrusive use of the landscape. The routeway leads away from more intensive Iron Age activity revealed in excavations to the west.
- 4.2.7 One ditch more closely dateable to the Late Iron Age was recorded, but it is unclear how this relates to other contemporary features.
- 4.2.8 A separate area of Early Roman activity was also noted towards the centre of AP6. This predominantly comprised elements of a series of field boundaries the functions of which are unclear but which contained large assemblages of ceramics, indicating a reasonably high level of activity in the near vicinity, although where this occurred is not clear from the excavation or evaluation. Two phases of this Early Roman field system were recorded, one overlying the other.
- 4.2.9 Five quarry pits were revealed across the site, possibly for the extraction of clay for use in the pottery kiln excavated to the east.
- 4.2.10 A single post-medieval ditch was recorded. The same ditch was observed on the earliest OS map.
- 4.2.11 The finds and environmental samples ultimately deposited as part of the archive are dependent on specialist recommendations and regional archive

requirements.

Context sheets	786
Section sheets	19
Plans sheets	2
Colour photographs	0
B&W photos	0
Digital photos	977
Context register	23
Drawing register	21
Watching brief forms	0
Trench Record forms	0

Table 1: Quantification of site paper archive

Bulk finds (quantity e.g. 1 bag, 1 box, 0.5 box 0.5 of a box)	7 boxes
Registered finds (number of)	0
Flots and environmental remains from bulk samples	0.5 boxes
Palaeoenvironmental specialists sample samples (e.g. columns, prepared slides)	2 boxes
Waterlogged wood	0
Wet sieved environmental remains from bulk samples	2 boxes

Table 2: Quantification of artefact and environmental samples

4.3 Natural Deposits

- 4.3.1 Excavations in all parts of the site revealed a typical stratigraphic sequence of 0.40-0.45m of top and subsoil overlying the predominantly brickearth natural geology. Patches of undulating chalk were revealed in the surface of the natural in the southeast corner of the site. The brickearth itself is a variable deposit of orangey-brown colour consisting of areas of almost pure clay, to areas of silty-clay.
- 4.3.2 The site was generally very flat with a slight natural slope down from south to north. At the southern portion of the site natural is recorded at a height of up to 5.40m OD while the northern part of the site at 3.55m OD.

4.4 Truncation

- 4.4.1 The evaluation (ASE 2018a) revealed that terracing and ground reduction had negatively impacted the natural geology during the construction of the glass houses that stood on the site prior to development. Areas B, C & D of this phase of mitigation had all been impacted to some degree by these previous works, but not enough to preclude the recording of archaeological remains.
- 4.4.2 No archaeological features were visible in the top or subsoils during the closely monitored machining.

4.5 Residual Earlier Prehistoric Material

4.5.1 Mesolithic

4.5.1.1 A small number of residual flint pieces of Mesolithic date were recovered from across the site, including a pick from Area A and a hammerstone on a blade core.

4.6 Period 5: Early Neolithic (Figure 4)

4.6.1 Four shallow pits, G110, in Area D have been dated to the Early Neolithic period by a small quantity of pottery and lithics. The pits are comparatively closely grouped and contained similar fills and assemblages of finds. Pit or treethrow [371/005] revealed during the evaluation within Area D also contained two sherds of Early Neolithic pottery.

4.6.2 A number of additional similarly proportioned features to the dated pits were noted within Area D. These might be of comparable age and function to the Early Neolithic pits.

4.7 Period 6: Middle Bronze Age (Figures 5 & 6)

4.7.1 Two areas of Middle Bronze Age activity were noted within the AP6 site. The first of these, in Area E, comprised a group of urned cremations and associated pyre-related remains. One feature containing identifiable human bone was noted; G113. The remains were of an adult and contained within an urn that had been heavily truncated. Several other features interpreted as pyre-related deposits or 'cenotaphs' were observed in the vicinity of G113. This group, G114, contained either charcoal or both charcoal and small unidentifiable fragments of burnt bone within their fills, but no ceramics to aid dating. Their inclusion within this period is done so on a typological basis, where they show similarities to other examples seen in AP1. Most were formally excavated while one or two of these features may represent the movement of charcoal via rooting activity.

4.7.2 The other zone of activity was in Area G, where a single feature was recorded, G111. G111 was a large, shallow pit-like feature which contained the articulated partial remains of a probable adult female. The only skeletal elements surviving were from the torso and lower limbs, including vertebrae, ribs, pelvis and femurs. Also buried within the pit were 13 cylindrical loomweights, including four complete or near complete examples, most of which were located near to the inhumation. On the opposite, western, side of the pit most of the c3kg of Middle Bronze Age pottery recovered from the pit was found. Micromorphology samples undertaken on the fills of the pit indicate that it was excavated and rapidly backfilled, but not compacted.

4.8 Period 7: Late Bronze Age to earliest Iron Age

Area G (Figure 7 & 8)

4.8.1 The most significant remains relating to this period were located in Area G, where circular post-built structure G115 and associated internal features G116

and external pits G117 were revealed. Structure G115 was approximately 6m in diameter with 80 postholes forming the building, suggesting at least two or three phases of construction and reconstruction. This proliferation of postholes meant making inferences of entrance locations unfeasible at this stage in the post-excavation process. Within the structure were a number of shallow pits G116, one of which contained a quantity of Post-Deverel Rimbury ware. Outside the structure was a group pits of varying sizes, G117 and small number of postholes G118. Many of these were undated, but their proximity to the structure and similar form to those with dating material allowed for placing them within Period 7.

- 4.8.2 Also within Area G were a series of ditches, G119, G120, G121 and G123. The former likely formed a boundary for structure G115. Parallel ditches G120 and G121 were quite substantial and contained little dating evidence so are only tentatively placed within this period. Their orientation with other, better dated features might go some way to aiding their phasing as they point towards and could form a routeway to segmented ditch G123.
- 4.8.3 Sited centrally to the parallel ditches and adjacent to G123 was one of two wells in group G122. This was hand excavated to 2.25m in depth, but was demonstrated to be c6.00m in depth. Radiocarbon dated peat deposits place the basal fills of the well to the Middle to Late Bronze Age (SUERC-83942; 2862 ± 31 BP; 1121-928 cal BC (95.4%) and humin: SUERC-83943; 2913 ± 31 BP; 1210-1013 cal BC (95.4%)), perhaps pushing its inception into Period 6.
- 4.8.4 Augering demonstrated that the second well attained a depth of 4.50m, although this was hand dug to only c1.90m. Disarticulated remains of at least two horse were found in the upper half of the well. The well itself is poorly dated, but is considered to be broadly contemporary with the other.
- 4.8.5 Two additional small pits, G124, were also located within Area G, one of which contained a fragment of saddle quern along with a few fragments of Late Bronze Age to earliest Iron Age pottery.

Area E (Figure 9)

- 4.8.6 Five small pits in Area E were assigned to Period 7, G126. Only two of these contained dateable artefacts and only proximity and similarities in form date the remaining examples.

Area C (Figure 9)

- 4.8.7 Two Late Bronze Age to earliest Iron Age pits were revealed within Area C. Between them they contained a reasonable assemblage of ceramic and burnt flint, along with smaller quantities of baked clay/daub.

4.9 Period 8: Iron Age (Figure 10)

- 4.9.1 A series of ditches forming field boundaries and possible routeways were broadly and poorly dated to the Iron Age by a few sherds of pottery and their typological similarity to Iron Age ditches encountered within AP1. Relative stratigraphic relationships were also difficult to establish.

4.9.2 A small number of pits were also recorded within Area E. These suffered similar issues of a paucity of dating.

4.10 Period 8.1: Late Iron Age (Figure 11)

4.10.1 A single ditch, G127, could be more confidently assigned to the Late Iron Age. This was more substantial than its Iron Age predecessors on site but still contained few artefacts.

4.11 Period 9: Early Roman AD50-100

4.11.1 This period had a number of features assigned to it which are considered first. In Area B, however, two overlying field systems were observed which were distinguishable stratigraphically, but which could not be assigned more accurate phasing.

4.11.2 A single Early Roman ditch, G160, was recorded in Area E, this was poorly dated and could be later (Figure 12).

4.11.3 Five quarry pits G154 were noted in Areas A, C and E (Figures 12 - 14). These attained depths of up to c1.70m and contained little dating evidence. Quarry pit [5748] contained dark, relatively organic material towards its base suggesting a degree of ponding occurred after its excavation.

4.11.4 Several groups of pits (Figure 13 and 15), G153, G155, G156, G157 and G159 were recorded within Areas B and C. They varied in size and shape and between them contained a reasonable assemblage of artefacts. One notable example was pit G153, which was clay-lined. However, their lack of stratigraphic relationship with any of the ditches in the area means it is not yet possible to determine whether they should belong in Phase 9.1 or 9.2.

4.11.5 Also only placed broadly within Period 9 are posthole G162 and possible post pad G158. The latter was broad and shallow, containing a basal layer of compacted flint pebbles. No features were obviously directly associated with either feature.

4.12 Phase 9.1: Early Roman (Figure 13, 15 and 16)

4.12.1 A series of shallow ditches were present across Areas B, C and D; G142, G143, G144, G145, G146, G147, G148, G149, G165, G166 and G167. Their phasing has been achieved through either stratigraphic relationships, morphology or alignment with better dated features. They were generally comparatively sterile, except for a cluster (G146, G147 and G148) where concentrations of charcoal were encountered along with larger diagnostic assemblages of ceramics.

4.13 Phase 9.2: Early Roman (Figure 15)

4.13.1 Areas B and C contained a group of ditches stratigraphically later than those in Phase 9.1. These comprised ditches G150, G151, G152. They were larger than those encountered in Phase 9.1 and contained reasonable quantities of pottery and burnt flint. It is possible that G151 and G152 together form a routeway.

4.14 Period 10: Post medieval (Figure 17)

4.14.1 Ditch G161 was the only feature assigned to the post-medieval period. It comprised a ditch with a dogleg that is visible on the first available OS Map.

4.15 Unphased and undated features (Figure 18)

4.15.1 Many features did not contain any dating material and have not been provisionally phased at this stage but will be during further analysis.

5.0 FINDS

5.1 Summary

5.1.1 A small assemblage of finds was recovered during the evaluation and excavation of Area AP6 at Toddington Lane, Littlehampton. All finds were washed and dried or air dried as appropriate. They were subsequently quantified by count and weight and bagged by material and context. The hand-collected bulk finds are quantified in Appendix 2; material recovered from the residues of environmental samples is quantified in Appendix 3. The finds from the evaluation are reported on in the evaluation report (ASE 2018a). In addition to the excavation material, the current report incorporates only the evaluation material that is considered relevant. Nineteen finds were assigned unique registered finds numbers, detailed in section 5.15. All finds have been packed and stored following ClfA guidelines (2014).

5.2 The Flintwork by Karine Le Hégaret

Introduction

5.2.1 The evaluation and excavation of area AP6 resulted in the recovery of 610 pieces of struck flint (including 95 chips) weighing 9356g and three flint hammerstones (713g) (Table 3). A substantial assemblage of burnt unworked flint fragments weighing just over 96kg was also recovered (Table 4). It should be noted that the assemblage is slightly biased because it represents mainly worked flint from features and provides no indications about the worked flints present as surface finds. Much of the flintwork can be broadly placed within the Middle Neolithic to Late Bronze Age / Early Iron Age period - with the later prehistoric (Middle Bronze Age to Late Bronze Age / Early Iron Age) being best represented. A very small Mesolithic / Early Neolithic element was also present. Although some mixing was noted, it is possible that some of the flints are contemporary with the features they derived from. This report characterises the nature of the flint assemblage and assesses its potential for further analyses in relation to the results from the other Toddington sites.

Methodology

5.2.2 The pieces of struck flint were individually examined and classified using standard set of codes and morphological descriptions (Butler 2005, Ford 1987 and Inizan et al 1999). Basic technological details were noted in order to aid characterising the material, and further information regarding the condition of the artefacts (evidence of burning or breakage, degree of cortication and degree of edge damage) were recorded. Dating was attempted where possible. The assemblage was catalogued directly onto a Microsoft Excel spreadsheet. A breakdown of the composition of the assemblage by phase is provided in Table 3.

5.2.3 The fragments of hand-collected burnt unworked flint were rinsed, scanned for worked pieces and quantified by piece and by weight. The burnt unworked flint from the sample residues were scanned for worked material and quantified by weight. The assemblage is summarised in Table 4.

Provisional phases	Flakes*	Blades, bladelets, blade-like-flakes	Chips	Irregular waste pieces	Cores, core fragments	Retouched forms	Hammerstones	Total	%
5 - EN	25	-	2	-	1	1	-	29	4.7%
6 - MBA	14	2	1	-	-	2	-	19	3.1%
7 - LBA earliest IA	156	17	14	23	3	4	-	217	35.4%
8 - IA	30	8	-	-	-	1	1	40	6.5%
Remaining assemblage (9 and 10, unstratified and currently undated)	181	13	78	3	12	19	2	308	50.2%
Total	406	40	95	26	16	27	2	612	100.0%
%	66.2%	6.5%	15.5%	4.2%	2.6%	4.4%	0.5%	100.0%	

Table 3: Summary of the struck flint by provisional period (* includes two core preparation flakes, a Janus flake and a flake from a polished tool)

Provisional phases	Burnt unworked flint - Hand collected - weight (g)	Burnt unworked flint - From sample residues - weight (g)	Total	%
5 - EN	185	12	197	0.2%
6 - MBA	6398	663	7061	7.3%
7 - LBA earliest IA	44907	16613	61520	63.7%
8 - IA	3172	-	3172	3.3%
9 Roman and later, U/s, undated	24480	139	24619	25.5%
Total	79142	17427	96569	100.0%
%	82.0%	18.0%	100.0%	

Table 4: Summary of the burnt unworked flint (this represents only a sample of the burnt flint present on site)

Provenance

5.2.4 Half of the assemblage of struck flint derives from features and deposits that are currently undated, unstratified or currently dated to the Roman or later periods; 308 pieces or 50.2% of the total assemblage (Table 3). Amongst the 305 remaining pieces, 217 came from Period 7 (Late Bronze Age / Earlier Iron Age) features. They came mainly from Area G. Most features produced small quantity of material, except for well G122 that contained 101 pieces. Three pits currently dated to Period 5 (Early Neolithic) produced just 27 pieces,

Middle Bronze Age features produced 19 pieces and 40 pieces were found from Iron Age features.

- 5.2.5 Overall, 64.0% of the total assemblage of unworked burnt flint fragments came from Late Bronze / earliest Iron Age features (Period 7). In comparison, features currently dated to Periods 5 (Early Neolithic), 6 (Middle Bronze Age) and 8 (Iron Age) produced only small quantity of burnt flints (Table 4). This should however be interpreted with care, as only a sample of the unworked burnt flint present on site was collected, and the final weight is often bulked up when bulk samples are extracted (and not all features are sampled).

Raw material and condition

- 5.2.6 A large quantity of pieces were natural fragments that became accidentally detached. They seem to display a distinctive orange stained outer surface. These have been discarded. The pieces of struck flint were made from the same types of raw material noticed in the AP4 and the AP1 assemblages. Most of the pieces were made from a light to dark grey flint with occasional inclusions. The cortex indicates two main raw material; chalk-derived flint from superficial deposits and cobble / pebble flint collected either from a beach or from a riverine source. The later, with their smooth to slightly pitted cortex, were less numerous than the pieces with a stained chalky cortex. A flake from well [5676], fill [5677] G122 was manufactured from a dark grey flint with red veins. The flake displays thin flake removal scars on the dorsal face and a prepared platform; and it is likely to be Mesolithic or Neolithic in date. The flake stands out, and the nodule may have been selected because of the occurrence of the reddish veins. Pebbles were also present amongst the burnt unworked flint fragments.
- 5.2.7 The condition of the flints varies, but the majority display only slight to moderate edge damage, implying minimum degree of post deposition disturbance. Occasional pieces were more weathered. These were often mixed with pieces that were slightly to moderately damage. This indicates a certain degree of mixing. A total of 21 pieces were recorded as burnt, and 231 were broken. Only 28 pieces were re-corticated to varying degrees. The majority displayed only incipient traces of light blue or white surface discoloration.

The assemblage of struck flint

Period 5 – Early Neolithic pits (Area D)

- 5.2.8 A total of 29 pieces came from three pits (G110), in the east of the site (Table 5). Pits [5512] and [5526] contained some Early Neolithic pottery, and pit [5518] contained some probable Early Neolithic pottery. The flint assemblage present in the pits is small. Pit [5512] produced 17 pieces, pit [5518] produced 7 pieces and pit [5526] produced only 5 pieces. The condition of the flints varies, but overall the pieces display only minimal signs of weathering. This suggests that the material has undergone minimum post-depositional disturbance. It is also possibly that the material was part of a midden-like deposit prior to being deposited in the pits. A single tool was present; a serrated piece made on a blade. The tool displays worn serration on the left distal end together with some gloss. It is possibly contemporary with the

pottery and the features. The other pieces are more difficult to date precisely. Several flakes display thin removal scars. The fragmentary core (94g) was also used to remove thin blades and flakes. Based on technological traits, the pieces are likely to pre-date the Middle Bronze Age, and a few pieces would not be out of place in an Early Neolithic context.

	Pit [5512] fill [5513] G110	Pit [5518] fill [5519] G110	Pit [5527] fill [5526] G110	Total
Flake	16	5	4	25
Chips	1	-	1	2
Core fragment	-	1	-	1
Serrated piece	-	1	-	1
<i>Total</i>	17	7	5	29

Table 5: Summary of the struck flint from Early Neolithic pits [5512], [5519] and [5527]

Period 6 – Middle Bronze Age (Area G)

5.2.9 Shallow depression [5658] and [6220] G111 and a pit [5643] G112, located in the south-east of the site and currently dated to the Middle Bronze Age, produced just 19 pieces of struck flint. Only two pieces came from the pit. The small assemblage comprises 14 flakes, two blade-like flakes, a chip, a piercer and a retouched flake. Several pieces display moderate to extensive edge damage indicating successive depositions, but other pieces are relatively fresh. The material appears of a mixed date, but the bulk displays late prehistoric characteristics. Saying that, a blade-like flake from context [6130] G111 is likely to be earlier. Based on its condition and technological attributes, the piece is likely to be earlier (Upper Palaeolithic to the Early Bronze Age). A flake from context [5727] G111 displays some possible evidence of usewear.

Period 7 – Late Bronze Age (Area G, Area E and Area C)

5.2.10 A total of 217 pieces of struck flint were recovered from features currently dated to the Late Bronze Age / earliest Iron Age (Table 6). Except for six pieces found in Areas C and E, the flintwork came mainly from Area G. Most features produced small quantities of flints; surprisingly, postholes from possible roundhouse structure G115 and associated features (pit G116, pits G117 and ditch G119) produced only between one and ten pieces each. In fact, the largest quantity of flint came from well [5676] G122 (101 pieces). A second smaller well ([5789]), located close-by, produced only seven pieces. Two parallel ditches (G120 and G121) to the west of the wells produced 25 pieces and 10 pieces each respectively.

	Area G								Area C	Area E	Total
	2 wells G122	Ditch G123 (2 interventions)	Pit G124	Ditches G120 and G121 (6 interventions)	Ditch G119	5 pits G117	1 pit G116	17 postholes G115	1 pit G125	Ditch G127	
Flake	74*	2	-	24**	1	19*	5	23	4	1	153
Blade	1	-	-	-	1	-	-	-	-	-	2
Bladelet	-	-	-	1	-	-	-	1	-	-	2
Blade-like flake	2	-	-	6	2	1	-	1	1	-	13
Core face/edge rejuvenation flake	1	-	-	-	-	1	-	-	-	-	2
Flake from ground implement	-	-	-	1	-	-	-	-	-	-	1
Irregular waste	19	1	1	-	-	1	-	1	-	-	23
Chip	7	-	-	-	-	-	6	1	-	-	14
Multiplatform flake core	2	-	-	-	-	-	-	-	-	-	2
Unclassifiable/fragmentary core	1	-	-	-	-	-	-	-	-	-	1
End scraper	-	-	-	1	-	-	-	-	-	-	1
Side scraper	-	-	-	1	-	-	-	-	-	-	1
Notched piece	1	-	-	-	-	-	-	-	-	-	1
Polished axe	-	-	-	1	-	-	-	-	-	-	1
Total	108	3	1	35	4	22	11	27	5	1	217

Table 6: Summary of the struck flint from Late Bronze Age / earliest Iron Age features by area (* includes a core face / edge rejuvenation flake; ** includes a flake from a polished tool)

5.2.11 The overall dominance of flakes (153 pieces) in these features indicate a late prehistoric flake-orientated industry. The flakes display varied morphologies and mixed hammer modes. But overall a large proportion appear to have been produced in an expedient manner, and these flakes could easily be contemporary with the features. Nonetheless, a few flakes struck more carefully are likely to be earlier (Neolithic or Early Bronze Age). These are often mixed with later material. Two diagnostic pieces are clearly Neolithic or Early Bronze Age; they came from the parallel ditches (G120 and G121). A flake from a polished tool recovered from ditch G121 indicates a Neolithic date, and a polished axe from ditch G120 indicates a Late Neolithic or Early Bronze Age date. The axe morphology is reminiscent of a Late Neolithic / Early Bronze Age metal axe. It is likely to represent an extensively reworked Neolithic polished axe. The tool is broken and displays heavy edge damage, that indicates that it has been subject to successive depositions. It displays very small areas with fine striations. Two core face / edge rejuvenations flakes were also recovered (one came from well [5780] G122, and one from pit [5635] G117). These indicates some concerns with controlled and predictable

removal of flakes. They are likely to be Neolithic. Two blades, two bladelets and 13 blade-like flakes were present, but none of the blade components are products of a blade-industry. Overall the flints recovered from Period 7 features are likely to be later prehistoric, with a few pieces (including diagnostic ones) belonging to the Neolithic / Early Bronze Age period. The flints from well [5676] G122 (101 pieces) exhibited only slight to moderate edge damage, suggesting that they were not exposed for a long period prior to burial, and that they may be contemporary with the large feature.

Period 8 – Iron Age (Area E)

- 5.2.12 A small assemblage of struck flint (40 pieces) was recovered from nine ditch interventions and a pit in Area E. Except for ditch G127 that is likely to be Late Iron Age, the dating of the remaining features is less secured, and they could be Roman. The pit and the ditches produced only between one and eight pieces each. Flakes are again the main removal type. While a few flakes display characteristics of flake-based industry dating from the Neolithic to the Early Bronze Age, several flakes are likely to be later. A Janus flake from Late Iron Age ditch [5954] G127 provides evidence that large flakes were used as core. It could be Late Neolithic to Early Iron Age in date. None of the blade components can be confidently dated to the early prehistoric date. They display plain unprepared platform. A single tool was present; the end scraper from pit [5897] is likely to be Middle Neolithic to Early Iron Age in date. A flint hammerstone (89g) from ditch intervention G140 was made on a core used to remove flakes. The flintwork from Period 8 features appear mixed. It is likely to be residual.

The remaining material

- 5.2.13 A further 308 pieces of struck flint representing 50.2% of the total assemblage were recovered as residual finds from Roman (63 pieces) and post-medieval (2 pieces) contexts, and from unstratified (16 pieces) and undated contexts (227 pieces) (Table 7). This assemblage comprises a large quantity of chips (78 pieces). It is dominated by flakes, but a blade, a bladelet and 11 blade-like flakes were also present. The blade from ditch [329/003] and the bladelet from [338/003] display characteristics of a blade-orientated industry. They indicate a Mesolithic or Early Neolithic date. Some of the blade-like flakes are likely to pre-date the Middle Bronze Age, but the remaining ones could be later. The variation in the flakes' technology and morphology is comparable to that observed in the earlier periods. Flakes crudely made, with unprepared platform and struck with a hard percussor dominate. This suggests a late prehistoric date. But a fair amount of more carefully struck flakes with thin flake removal scars on the dorsal face and minimum preparation were also present. These are likely to belong to a flake-orientated industry of Neolithic / Early Bronze Age date.
- 5.2.14 Two fragmentary cores and ten multiplatform flake cores were present. Several examples display multiple points of percussion, indicating mis-hits and suggesting a late prehistoric date, but the multiplatform flake core from pit [6228] G155 is likely to predate the Middle Bronze Age. The chips came from tree-throw [6222]. The upper fill also contained a fragmentary core (49g). The core was used to remove flakes, and no evidence of platform preparation were noted. Overall, the flints from tree-throw [6222] display minimal signs of

weathering, but several raw material are likely to be represented, and no obvious refits were noticed. A hammerstone (118g) found unstratified was made on a blade core, and a second hammerstone (506g) found in Roman boundary ditch [6278] G147 displays clear facets. The core itself provides evidence for activity during the Mesolithic or Early Neolithic period, but it is difficult to know when it was reused as a hammerstone.

	Remaining assemblage: 9 and 10, unstratified and currently undated
Flake	181
Blade	1
Bladelet	1
Blade-like flake	11
Irregular waste	3
Chip	78
Multiplatform flake core	10
Core fragment	2
End scraper	3
Piercer	2
Denticulated piece	1
Serrated piece	2
Unclassified knife	1
Pick	1
Retouched flake	9
Hammerstone	1
<i>Total</i>	307

Table 7: Summary of the struck flint by category type from Roman (9) and post-medieval periods (10), and from unstratified and undated contexts

5.2.15 A total of 19 tools were recovered. A wide array was represented (Table 7). A pick found from the subsoil (context [6025]) in Area A provides evidence for Mesolithic / Early Neolithic presence. Two serrated pieces are likely to be Neolithic. One was found unstratified and one was recovered from pit [5720]. Scrapers are difficult to date, but based on technological grounds, two end scrapers (found from pond/quarry [5748] and unstratified) are likely to pre-date the Middle Bronze Age. The remaining tools are more difficult to date.

The assemblage of burnt unworked flint

5.2.16 The excavations have produced a large quantity of unworked burnt flint totalling just over 96kg (Table 4). The fragments were found in features dating from the Neolithic to the post-medieval, but 64.0% of the unworked burnt flint came from Late Bronze Age / earliest Iron Age features. This result may change because 12.1% of the total assemblage of unworked burnt flint currently come from undated features. For the most part, burnt flint fragments were recovered in small quantities, but several features produced moderate to large assemblages (Table 8).

Provisional phases	Group	Feature type	Parent context	Fill (s)	Origin	Weight (g)
6.1 - MBA	111	Hollow / spread	5658	5646, 5727, 6074, 6130	samples <145-8, 150> plus hand collection	4716
7 - LBA / earliest IA	115	Posthole	5588	5589	samples <107> and <124> plus hand collection	4677
7 - LBA / earliest IA	124	Pit - basal fill	5722	5723	<117> plus hand collection	7306
7 - LBA / earliest IA	122	Well	5676	5677, 5678, 5679, 5680	<115, 129, 130> and hand collection	21625
7 - LBA / earliest IA	117	Pit	5604	5605	<109> and hand collection	5301
9 - Roman	158	Pit - basal fill	6247	6248	hand collection	6946

Table 8: Summary of burnt unworked flint rich features

5.3 The Prehistoric and Roman Pottery by Anna Doherty

5.3.1 A large assemblage of prehistoric and Roman pottery was recovered during evaluation and excavation in AP6, quantified by stratigraphic period and broad ceramic tradition in Table 9. The earliest material comprises a small assemblage of Early Neolithic (Whitehawk style) Plain/Decorated Bowl pottery from pits in Area D. There is a small quantity of Middle Bronze Age Deverel-Rimbury (DR) pottery, including a few partially-complete vessels, predominantly found in Area G. The same area produced a moderately large assemblage of Late Bronze Age/earliest Iron Age Post Deverel-Rimbury (PDR) pottery. The largest part of the assemblage is of later Iron Age/earlier Roman date. It includes a very fragmentary assemblage of probable pre-Conquest date, assigned to stratigraphic Period 8, from Area E. More generally, it comprises much more clearly 'Romanised' material, predominantly of 1st century AD date, largely recovered from boundary and enclosure ditches in Area B

Perio	Period description	Ceramic tradition	Sherd	Weight (g)	ENV	EV
5	Early Neolithic	Plain/ Decorated Bowl	100	370	50	
6	Middle Bronze Age	DR	301	3619	57	
7	LBA/earliest Iron Age	PDR	608	4411	247	
8	Later Iron Age	?Southern Atrebat c	80	434	24	0.1
9	Early Roman		1401	9838	602	7.3
Unstratified, unphased, residual in later deposits			259	2119	154	1.1
Total			2749	20791	113	8.6

Table 9: Quantification of prehistoric and Roman pottery by stratigraphic period and broad ceramic tradition.

Methodology

5.3.2 The pottery was recorded and analysed in line with the national Standard for Pottery Studies in Archaeology (PCRG 2016 et al). It was examined using a x20 binocular microscope and quantified by sherd count, weight, estimated vessel number (ENV) and, for the Roman pottery, by estimated vessel equivalent on *pro forma* records and in an Excel spreadsheet. Prehistoric tempered wares were recorded according to site-specific fabric codes, formulated in accordance with the guidelines of the Prehistoric Ceramics Research Group (PCRG 2010). In order to facilitate future integration and analysis of data from the Toddington Lane site as a whole, the current analysis used common fabric codes with those employed for material previously recorded in areas AP1 and AP4 (ASE 2017; ASE 2019), with the addition of new fabric definitions where appropriate. At present, prehistoric forms have been sketched and described in broad descriptive terms; further organisation of typology will be required at the analysis stage. Roman fabrics were recorded using an adapted version of the Southwark/London typology (with some additional codes for local types) which will be published in a forthcoming summary of Roman pottery from the West Sussex coastal plain (Marsh & Tyers 1978; Davies et al 1994; Doherty in prep). Reference is made in the text to the Camulodunum and Fishbourne form typologies (Hawkes & Hull 1947; Cunliffe 1971).

Site-specific fabric definitions

- FLAR1 Sparse/moderate, moderately-sorted flint of 0.5-2.5mm with rare sparse argillaceous rock inclusions of 0.5-2.5mm
- FLGL2 Sparse/moderate, moderately-sorted flint of 0.5-2.5mm; sparse/moderate glauconite of 0.2-0.3mm
- FLIN1 Sparse/moderate, moderately-sorted flint of 0.5-2.5mm in a slightly silty matrix
- FLIN2 Sparse/moderate flint of 0.5-1mm in a slightly silty matrix
- FLIN3 Moderate, ill-sorted flint of 0.2-5mm in a slightly silty matrix
- FLIN4 Very common to abundant, well sorted flint of 0.5-1.5mm in a silty matrix
- FLIN5 Common to very common well-sorted flint of 1-2.5mm in a silty matrix
- FLIN6 Moderate to common, fairly ill-sorted flint of 0.5-3.5mm in a slightly silty matrix
- FLIN7 Sparse to moderate, extremely ill-sorted flint mostly of 0.5-5mm with examples up to 8mm, in a slightly silty matrix
- FLIN8 Common to very common, ill-sorted flint of 0.5-3.5mm in a dense quartz-free matrix
- FLIN9 Common, moderately-sorted flint of 0.5-2.5mm in a dense quartz-free matrix
- FLIN10 Abundant, ill-sorted flint of 0.5-4.5mm in a dense quartz-free matrix
- FLIN12 (Early Neo) Sparse moderate ill-sorted flint ranging from 0.5-4.5mm in a dense low-

fired matrix

FLIN13 (Early Neo) Moderate to common, moderately sorted flint of 0.5-3.5mm in a dense low-fired matrix

FLIN14 Sparse/moderate, extremely ill-sorted flint of 1-6mm in a dense low-fired matrix

FLIN15 On a continuum with FLIN7 Sparse to moderate, extremely ill-sorted flint mostly of 0.5-8mm, in a slightly silty matrix, Differs from FLIN7 in having more examples at the finer end of the range

FLQU1 Sparse/moderate, moderately-sorted flint of 0.5-2.5mm with common quartz of silt-sized to 0.1mm

FLQU2 Sparse/moderate flint of 0.5-1mm with common quartz of silt-sized to 0.1mm (often quite hard-fired, some examples may be of early Roman date)

FLQU3 Rare flint of 0.5-1mm with common quartz of silt-sized to 0.1mm

FLQU4 Moderate, moderately-sorted flint of 0.5-3.5mm with common quartz of silt-sized to 0.1mm

FLQU5 Moderate flint of 0.5-1.5mm and sparse/moderate quartz grains of 0.2-0.5mm

FLQU6 (E Neo) Moderate ill-sorted flint mostly of 1-3mm (but ranging from 0.5-4.5mm) in a dense matrix with common quartz of silt-sized to 0.1mm

FLQU7 Rare/sparse flint of 1-3mm a dense matrix with common quartz of silt-sized to 0.1mm

GROG1 Moderate to common grog of 1-2mm

GROG3 Low-fired oxidised ware with moderate rounded grog of 0.5-2.5mm in a dense matrix

GRFL1 Low-fired, frequently oxidised ware with moderate rounded grog of 0.5-2.5mm and rare ill-sorted flint of 1-3mm in a dense matrix

GRFL2 Low-fired, frequently oxidised ware with moderate rounded grog of 0.5-1.5mm and rare ill-sorted flint of <1mm in a dense matrix

GRFL3 (LIA/early Roman) Moderate grog of 1-2mm and moderate flint in a similar size range or occasionally up to 3.5mm

GRQU1 Rounded grog of 1-2mm and moderate to common quartz of 0.5-0.6mm (dating uncertain could be LIA/early Roman)

ROCK1 Moderate soft argillaceous rock inclusions of yellowish orange colour (c.1-2mm in size) often partially leached

ROCK2 Moderate soft sedimentary rock inclusions of 0.5-2.5mm, some may be of similar type in ROCK1 but tend to be more whiteish-grey in colour and seem less likely to be leached

ROCK4 Sparse white ?sandstone of 0.5-1.5mm and moderate quartz of 0.4-0.5mm

ROCK5 Sparse to moderate white ?sandstone of 1-4mm and moderate quartz of 0.4-0.5mm

QUAR3 Common quartz of silt-sized to 0.1mm (individual grains just visible at x20 magnification)

QUAR4 Common quartz of 0.5-0.8mm very well fire; may be a precursor to Arun Valley Roman coarse wares

Period 5 Early Neolithic

5.3.3 A small assemblage of Early Neolithic (Whitehawk style) Plain/Decorated Bowl pottery was recovered from five pits in Area D (G110). These include moderate-sized groups of more than 30 sherds from two pits [5512] and [5518]. As shown in Table 10, all of the sherds are flint-tempered. The majority of the assemblage is made up two fabric types: one with sparse very ill-sorted flint up to 4.5mm (FLIN12) and another slightly finer and less ill-sorted fabric with moderate to common frequencies of flint (FLIN13). Extremely coarse flint-tempered fabrics (FLIN14) are much less well represented. All of the above mentioned fabrics are characterised by dense, quartz-free matrixes, though a few sherds of similar character contain quartz sand (FLQU6, FLQU7).

Fabric	Sherds	Weight (g)	ENV
FLIN12	43	185	19
FLIN13	39	101	20
FLIN14	8	52	4
FLQU6	3	20	2
FLQU7	7	12	5
Total	100	370	50

Table 10: Quantification of Early Neolithic pottery fabrics in Period 5

5.3.4 Five diagnostic rimsherds were found in pit group G110, one with a plain neutral profile and the others with simple out-turning necked profiles. Four of the rims feature decoration and just one appears undecorated. Three of the decorated vessels include fingernail or simple tooled slashes across the rim. In one case, these occur with longer incised/impressed lines on the upper exterior of the vessel and in another, with rows of fingernail impressions on the upper interior. On a third example, a vessel with slashes on the rim also features finger indents on a hollow neck area. Another tiny, partial rim sherd has a single simple tool impression on the rim top.

Period 6 Middle Bronze Age

5.3.5 A small pottery assemblage was recovered in from features assigned to Period 6, quantified by fabric in Table 11. Within this period, two stratigraphic phases were defined; however nearly all of the pottery came from first of these, making it difficult to define any clear chronological variation in ceramics from Phases 6.1 and 6.2. The pottery was predominantly found in hollow/spread G111, with just a few fragmentary sherds recorded from stratigraphically later pits in G112 (Area G). A single heavily truncated cremation urn was also identified in Area E, (G113).

Fabric	Sherds	Weight (g)	ENV
FLIN1	12	59	6
FLIN3	10	163	6
FLIN5	12	107	9

Fabric	Sherds	Weight (g)	ENV
FLIN6	30	163	21
FLIN7	172	2745	10
FLIN8	3	45	2
FLIN15	56	320	2
FLQU4	6	17	1
Total	301	3619	57

Table 11: Quantification of Middle Bronze Age pottery fabrics in Period 6

5.3.6 In terms of sherd count, the assemblage is dominated by very typical very coarsely flint-tempered Deverel-Rimbury fabrics (FLIN7, FLIN15) with inclusions often exceeding 5-6mm. However, these represent several fragmented but partially complete vessels and overall they constitute just 18% of estimated vessels. More generally the assemblage is made up by coarse to moderately coarse flint-tempered wares (FLIN1, FLIN3, FLIN 6, FLIN8, FLQU4). The very common occurrence of fabrics with finer grades of flint (mostly below 3.5mm) and the presence of some thinner walled vessel profiles suggests the possibility that some Period 6 features may have been sealed into the Late Bronze Age (or that they are contaminated by intrusive later material). Overall, the less coarsely tempered material is very fragmentary, comprising just 61 sherds, weighing 0.45kg. Also identified was a very common well-sorted flint-tempered ware (FLIN5) which may represent a DR fine ware fabric - in one case it was associated with a diagnostic DR pierced lug handle and incised decoration – though it is also possible that some of these sherds represent intrusive later prehistoric fabrics.

Form

5.3.7 A number of diagnostic Deverel-Rimbury forms were recorded, including a straight sided urn with a pronounced external bead, from hollow/spread deposit [6130] (G111), which is fragmented but probably more than a quarter complete (amounting to 1.3kg in weight). Also represented in a different context [5727] within the same group, are large rim sherds from a vessel, again with a slightly beaded rim profile and a row of fingernail impressions on the rim exterior. A third vessel in G111 (context [5646]), associated with a typical DR fabric and thick-walled profile, was also represented by a large number of sherds although unfortunately, no diagnostic features were present. Highly fragmentary sherds in coarsely flint-tempered fabric FLIN7, representing a cremation urn, were also noted in cut [6021] (G113) in Area E. Photographs of the vessel in situ suggest it was probably placed upright and heavily truncated, surviving to a height of less than 100mm. The very low-fired nature of the ceramic caused it to fragment severely on excavation and no form elements could be discerned amongst the recovered sherds.

5.3.8 The remaining diagnostic material, again mostly from G111, mainly comprises more fragmentary plain thick-walled DR rim sherds, a plain applied cordon and a fine ware sherd with a pierced lug and incised horizontal line decoration.

Period 7 Late Bronze Age/earliest Iron Age

5.3.9 A moderate-sized post-Deverel-Rimbury (PDR) pottery assemblage was

recovered from features assigned to Period 7, quantified by fabric in Table 12. It was largely recovered from the Area G post-built house structure G115 and associated pits G116 and G117. A smaller quantity of pottery was found in ditches in the same area, with some very fragmentary assemblages also recovered in Areas C and E.

Fabrics

- 5.3.10 A few highly fragmented and featureless grog-tempered sherds were recovered in this phase including grog-with flint fabrics GFRL1 and GRFL2 and purely grog-tempered ware GROG1. Grog-tempering is not widely associated with the Post-Deverel-Rimbury (PDR) tradition in West Sussex and it is possible that these represent residual Late Neolithic/early Bronze Age fabrics. Also possibly redeposited in this phase, are a few thick-walled sherds in very coarsely flint-tempered wares more typical of the preceding Middle Bronze Age DR tradition (FLIN7, FLIN15), or moderately-thick-walled sherds in fairly coarse fabrics (FLIN3, FLIN10, FLIN12) which seem unlikely to date much beyond the 2nd millennium BC. Interestingly though, the truncated base/lower wall of a moderately thick-walled vessel associated with fabric FLIN15 did appear to be *in situ* in pit [5592] (G116). The dating implications of this vessel are discussed in more detail in the significance and potential section.

Fabric	Sherds	Weight (g)	ENV
FLIN1	158	921	48
FLIN2	10	11	4
FLIN3	45	467	13
FLIN4	7	28	7
FLIN5	205	1736	81
FLIN6	101	599	51
FLIN7	4	44	4
FLIN8	22	183	15
FLIN9	1	1	1
FLIN10	8	153	6
FLIN12	10	17	3
FLIN15	9	193	3
FLQU1	9	4	1
FLQU2	1	1	1
FLQU3	1	1	1
FLQU4	1	10	1
FLQU5	1	2	1
FLQU6	1	6	1
GRFL1	9	23	1
GRFL2	1	4	1
GROG3	1	1	1
Total	605	4405	245

Table 12: Quantification of pottery fabrics in Period 7 (excluding a few intrusive Roman

sherds)

- 5.3.11 More generally, the assemblage is characterised by moderately coarse flint-tempered wares, with inclusion sizes predominantly below c. 3.5mm. Nearly half of the assemblage is made up by fabrics of this type, which are moderately to ill-sorted (FLIN1, FLIN6 and FLIN8, FLIN9). However, perhaps significantly, there is also a strong component – just over a third of the assemblage - of fabrics which are commonly to abundantly tempered with well-sorted flint (FLIN4, FLIN5). A move towards better sorted flint tempered wares appears to be a key chronological trend in PDR and Iron Age pottery assemblages from the coastal plain and the large number of these fabrics provides some evidence that these features may fall relatively late in the PDR tradition, perhaps into the earliest Iron Age (c.800BC+). This is also perhaps suggested by a small component of quartz-rich sandy wares (FLQU1-5). Nevertheless, the assemblage notably lacks the glauconitic, shelly and non-flint-tempered sandy wares which were represented in the Early Iron Age (c.600-400/300BC) assemblage from Area AP1 (ASE 2019).

Forms

- 5.3.12 Unfortunately, very few form elements were recorded in the PDR assemblage. As already noted, a truncated *in situ* vessel was recorded in pit [5592] (G116), associated with a moderately thick-walled profile and a coarse flint-tempered fabric. A single small rimsherd, suggests this might represent an early plain ware PDR hook-rim jar. Several other rims may be from similar forms, including an example from [5594] in the same pit group. The remainder of the diagnostic forms, notably examples from post-holes within the structure itself (G115) appear more likely to belong to the developed plain ware or decorated phases of the PDR tradition. These include a jar with long neck and somewhat flattened rim, from posthole [5622], and partial flaring rim and another strongly recurving rim from posthole [5738]. Nearby in pit [5637] (G117) a strongly everted rim jar and recurving rim with an internal bevel were recorded.

Period 8 Late Iron Age

- 5.3.13 A very small assemblage of apparently pre-Conquest character was excavated in Area E, quantified by fabric type in Table 13. Although a broad range of features were assigned to this phase, most of them only produced one or two sherds of pottery. For the most part, these features were phased on the basis of stratigraphy rather than confident dating of the pottery, many of them producing very broad later prehistoric spot-dates and, in two cases, intrusive Roman sherds. A single feature, ditch G127 produced 63 of the 80 sherds and the pottery here can probably be dated more confidently to the Late Iron Age, though just 11 estimated vessels are represented. This material includes a jar with a simple out-turning profile and slight foot-ring base in a flint-and-argillaceous rock-tempered ware (FLAR1), a slightly beaded rim jar in a dark surfaced quartz-rich fabric (QUAR4) which appears similar to Roman Arun Valley wares, if lower fired and handmade, as well as another burnished small beaded rim in a well sorted flint-tempered ware (FLIN4). The remaining bodysherds in this group are predominantly flint-tempered (fabrics FLIN1, FLIN4, FLIN6, FLQU1, FLQU2) with one other quartz-rich fabric (QUAR3).

Fabric	Sherds	Weight (g)	ENV
AVGW*	1	4	1
AVOX*	3	12	2
FLAR1	35	194	1
FLGL2	2	3	1
FLIN1	2	11	2
FLIN2	1	0	1
FLIN4	3	7	2
FLIN6	1	4	1
FLQU1	11	43	3
FLQU2	2	3	2
FLQU5	2	11	1
GRFL1	2	2	1
GRQU1	1	4	1
QUAR3	1	2	1
QUAR4	11	125	2
ROCK1	1	1	1
SAND*	1	8	1
Total	80	434	24

Table 13: Quantification of pottery fabrics in Period 8 (* indicate probably intrusive Roman fabrics)

Period 9 Early Roman

5.3.14 A moderately large assemblage of pottery was recovered from features assigned to Period 9, dating broadly to AD50-100. The assemblage was almost entirely found in Area B with fewer than 20 sherds each recovered from Areas A, C and E. Large aggregate assemblages of 100-400 sherds were recovered from a number of the boundary/enclosure ditches, including G144, G145, G146, G147, G150. Some of these ditches include examples of fragmented but partially complete vessels. These were all from coarse ware forms and were always found in association with other large assemblages of broken mixed sherds. There is therefore no clear evidence that these represent structured deposits. More likely, they indicate that at least some of the pottery was used, broken and originally deposited in the immediate vicinity, though such vessels may well have been mixed with older midden material, prior to their final deposition.

5.3.15 Stratigraphic Phases 9.1 and 9.2 have been defined within this period but there is limited evidence for chronological differentiation in the pottery assemblages. Overall, each phase contained similar ratios of Late Iron Age/early Roman tempered wares to Roman sandy fabrics, for example. This suggests that both phases may be contemporary within a few decades. Having said this, ditches G142 and G144 from Phase 2.1 have fairly low quantities of 'Romanised' fabrics compared to other features (42% and 20% respectively, vs the average of 78% in Phase 2.1 as a whole). This may hint that these ditches went out use a little earlier than others assigned to this phase.

5.3.16 As shown in Table 14, the assemblage contained a fairly substantial proportion of tempered fabrics, together comprising just over a quarter of the assemblage. Of these, nearly half are flint-tempered wares. Although they include a small component of fairly coarse fabrics like FLIN3, FLIN6 and FLIN8, which are likely residual Late Bronze Age/Early Iron Age fabrics, the fact that most flint-tempered wares tend to have fairly fine grades of flint and well-sorted inclusions suggest that the majority of these sherds are probably contemporary in this period. Just over a third of the remaining tempered wares are clearly contemporary grog-tempered fabrics (GROG1), including one minor fabric variant containing both grog and flint (GRFL3). Also represented are lower fired, possibly hand-made sandy wares (QUAR4) and fabrics with argillaceous rock (ROCK1, ROCK2), in one case associated with flint temper (FLAR1). Fabrics of this type may be of Wealden origin and probably appeared in the later Middle Iron Age on the coastal plain; however, there is evidence that they remained current in the early Roman period (Doherty 2010). Also represented are a few sherds tempered with possible sandstone (ROCK4, ROCK5). These are unsourced but probably originate from sandstone geology of the Lower Greensand group, to the north of the coastal plain.

Fabric	Description	Sherds	Weight (g)	ENV
AVBF	Arun Valley black surfaced fine ware	57	225	19
AVBW	Arun Valley black surfaced coarse ware	431	3120	202
AVGF	Arun Valley fine grey ware	4	7	3
AVOF	Arun Valley fine (orange) oxidised ware	7	56	4
AVWH	Arun Valley white ware	12	57	5
FLAR1	Flint/argillaceous rock tempered (site specific)	13	63	4
FLIN1	Flint-tempered (site specific)	18	118	13
FLIN2	Flint-tempered (site specific)	5	10	5
FLIN3	Flint-tempered (site specific)	1	10	1
FLIN4	Flint-tempered (site specific)	121	374	22
FLIN5	Flint-tempered (site specific)	23	65	19
FLIN6	Flint-tempered (site specific)	2	19	2
FLIN8	Flint-tempered (site specific)	7	22	7
FLQU1	Flint tempered, quartz rich (site specific)	2	10	2
FLQU3	Flint tempered, quartz rich (site specific)	1	0	1
FLQU4	Flint tempered, quartz rich (site specific)	1	4	1
FLQU5	Flint tempered, quartz rich (site specific)	1	5	1
GRFL3	Grog and flint tempered (site specific)	3	45	1
GROG1	Grog-tempered (site specific)	141	874	17
OXID	Unsourced oxidised ware	2	13	2
OXIDF	Unsourced fine oxidised ware	1	1	1
QUAR4	Quartz rich (site specific)	15	62	1
ROCK1	Rock-tempered (site specific)	19	49	5
ROCK2	Rock-tempered (site specific)	6	28	3
ROCK4	Rock-tempered (site specific)	1	5	1

Fabric	Description	Sherds	Weight (g)	ENV
ROCK5	Rock-tempered (site specific)	2	41	1
RWCG	Rowlands Castle grey ware	15	82	2
RWCGB	Rowlands Castle black-surfaced ware	1	5	1
RWCGF	Rowlands Castle grey ware (flint-tempered variant)	1	29	1
RWS	Un sourced white-slipped red ware	1	7	1
SAMAP	Aldgate-Pulborough samian ware	1	5	1
SAMLG	La Graufesenque samian ware	6	93	2
TN	Terra Nigra	2	25	1
Total		923	5529	352

Table 14: Quantification of pottery fabrics in Period 9 (probably including some residual pre-LIA/early Roman material)

- 5.3.17 The remainder of the assemblage is made up by Roman fabrics which are dominated by coarse wares from the Arun Valley industry. These are predominantly black surfaced coarse wares (making up 31% of the assemblage), followed by grey and oxidised variants (making up 15% and 19% respectively). The later fabrics are more similar to kiln products from the local Worthing Road kilns (Lovell 2002). A few sherds of Arun white ware fabrics were also noted. Coarse wares from the Rowlands Castle industry – the principle coarse ware industry supplying Chichester and its immediate hinterland – are very poorly represented, suggesting that the market for coarse wares was dominated by more local kilns in this period.
- 5.3.18 Fine wares are generally fairly poorly represented and also predominantly made up by Arun Valley fabrics including fine black-surfaced, grey and oxidised variants. Imported wares are confined to a very small number of Terra Nigra and south Gaulish samian ware sherds. A single example of Aldgate-Pulborough samian ware was noted.

Forms

- 5.3.19 In keeping with the site's early date and rural setting, the assemblage is dominated by jar forms, making up 73% of ENV and 74% of EVE. These are predominately of simple necked profile, but include a few examples with cordoned or rippled shoulders, as well as examples of bead rim or simple everted rim jars. Lids are also well represented amongst the coarse ware fabrics, making up 9% of ENV, though only 2% of EVE. Bowls are confined to a single example of a flat rim form in an Arun Valley oxidised ware.
- 5.3.20 Table ware forms are largely made up by platters and beakers. The former are all Gallo-Belgic style platter forms, loosely imitating Cam.14/16, and predominantly in coarse Arun Valley fabrics. One early example imitating Cam. 5 was associated with a flint-tempered ware. Beakers are predominantly associated with Arun Valley fine wares and are mostly globular forms. Two examples of a slightly unusual butt-beaker/carinated beaker/girth beaker hybrid, comparable to Fishbourne type 62, were also noted. Just one other fine ware form was recorded, a single example of a Dragendorff 27 cup in south Gaulish samian ware.

5.4 The Post-Roman Pottery by Luke Barber

- 5.4.1 This phase of archaeological work at the site recovered just three pieces of post-Roman pottery. The earliest appears to be of Late Saxon or Saxo-Norman date though the sherd is admittedly not particularly diagnostic (ditch [6069], fill [6069], SG 924, G 139). It consists of a quite fresh 10g reduced bodysherd tempered with moderate fine/medium quartz and moderate fine alluvial flint grits to 1mm that can only generally be placed between c. 900 and 1100. The piece may be intrusive in this period 8 feature but could hint at the trackway route being a long-lasting element of the landscape.
- 5.4.2 The second sherd (12g) is from a slightly concave flaring rim of an oxidised cooking pot tempered with moderate alluvial flint grits (ditch 5968], fill [5969], SG 927, G 140). This piece, which is quite abraded, is probably of c. 1075 to 1175 date range and its presence associated with the trackway is noteworthy.
- 5.4.3 The final sherd consists of part of an English stoneware water closet (46g) from subsoil [5668].

5.5 The Ceramic Building Material by Isa Benedetti-Whitton

Introduction

- 5.5.1 Fifteen pieces of ceramic building material (CBM) weighing 1301g were collected during this phase of work. The assemblage included Roman, post-medieval and modern material, of which post-medieval and recent material made up the bulk. The nature of the material suggests building debris deposited over a long period of time rather than CBM associated with a particular structure. A summary of form types hand-collected from site is shown below in Table 15.

Form	Fragment count	% of total	Weight (g)	% of total
Roof tile	9	60	156	12.0
Brick	3	20	1007	77.4
Glazed tile	2	13.3	18	1.4
Tegula	1	6.7	120	9.2
Total:	15	100%	1301	100%

Table 15: Quantification of CBM by form

Methodology

- 5.5.2 All the material was quantified by form, weight and fabric and recorded on standard recording forms. This information was entered into a digital Excel table. Fabrics were identified with the aid of a x20 binocular microscope and where possible catalogued using Museum of London Archaeology's (MOLA) fabric reference codes. In those instances the MOLA equivalent was unknown site specific codes have been applied and use the following conventions: frequency of inclusions (sparse, moderate, common, abundant); the size of inclusions: fine (up to 0.25mm), medium (0.25-0.5mm), coarse (0.5-1.0mm)

and very coarse (larger than 1.0mm). Fabric descriptions are provided in Table 16.

The assemblage

- 5.5.3 A single piece of Roman tegula roof tile was collected from the upper fill of pond [5748]. This was the only Roman CBM found.
- 5.5.4 Roof tile made up most of the rest of the assemblage. Tile pieces all in the same fabric, T1, were recovered from ditches [5778], [5785], and [5868]. Roof tile such as this is difficult to date closely and this fabric in particular was not possible to date any more specifically than broadly post-medieval.
- 5.5.5 The brick collected from site was slightly more dateable. A fragment of MOLA 3038 was also found in ditch [5868], which demonstrates a date of 1890s-1970s. The modernity of this context is further indicated by the presence of fragments of modern white glazed wall tile also present in this ditch group.
- 5.5.6 A completely vitrified brick that appeared early-mid post-medieval in date (although vitrification made it difficult to be sure) was retrieved from [6080], and a large piece of brick made from very late 19th-20th century looking fabric B1 was collected from the upper layers of unexcavated ditch [6286]. Further fragments of modern white-glazed wall tile were also collected from ditch [5880].
- 5.5.7 Select examples of fabrics and forms have been retained and the rest of the material discarded as it is not considered to be of any further archaeological value.

Fabric	Description
R1	Generic orange fabric with minimal quartz and no other apparent inclusions.
T1	Orange sandy (moderate) fabric with sparse cream marbling and red iron-rich inclusions
B1	Hard orange fabric with orange clay linear inclusions and red iron rich inclusions.
MOLA 3038	Very hard and distinctive granular fabric with numerous small white inclusions

Table 16: Fabric descriptions for CBM

5.6 The Fired Clay by Elke Raemen

- 5.6.1 A medium-sized assemblage comprising 536 fragments of fired clay weighing 8636g was recovered from 84 individually numbered contexts. Pieces were counted and weighed by fabric and form. Fragments were all examined with the aid of a x20 binocular microscope. A total of seven different fabrics were encountered (Table 17). Fabric 1 was the most commonly encountered fabric with 145 fragments, closely followed by fabric 3 with 143 fragments and fabric 2 with 104 pieces. Fabric 6 was limited to Period 7 whereas fabric 7 only occurs in Period 6. Other fabrics occur across all periods ranging from period 6 to period 10. Phases 8 and 9.2 are best represented with 143 and 133 fragments respectively.

Fabric	Description
F1	Silty orange fabric with common medium quartz, moderate very coarse quartz to 1.5mm, rare iron oxides to 1mm and rare flint to 1.5mm
F2	Silty orange fabric
F3	Crumbly orange fabric with common coarse quartz
F4	Silty orange fabric with moderate voids, rare crushed flint to 8mm, rare chalk to 2mm and common fine to medium quartz
F5	Silty orange fabric with rare fine to medium quartz
F6	Silty pale orange fabric with common voids/organics
F7	Reduced fabric with common very coarse crushed flint to 2mm

Table 17: Summary of the Fired Clay Fabrics

5.6.2 The silty nature of the fabrics meant that a lot of pieces were abraded, resulting in a total of 393 fragments which were amorphous. A total of 64 pieces retained one flat surface. Wattle impressions were noted in 62 fragments, ranging in diameter between 7 and 27 mm. Small quantities of fragments with corners, rounded surfaces etc. were also found. It is likely that most of the other fired clay also represents daub.

5.7 The Glass by Elke Raemen

5.7.1 A single piece of window glass weighing 72g was recovered during the excavations. The fragment, which is green tinged, was found in ditch [5824] (fill [5825]) and consists of the 'bullseye' centre with pontil mark of a crown glass sheet. It dates to the 18th to mid 19th century.

5.8 The Geological Material by Luke Barber

Introduction

5.8.1 This phase of excavations at the site produced 69 pieces of stone, weighing 12,741g, from 28 individually numbered contexts. These totals include 16 pieces, weighing 1603g, recovered from six environmental residues. There is also a scatter of worked fragments that have yet to be allocated Registered Finds numbers. The assemblage has been fully listed on geological record sheets for the archive, with the resultant information being used to create an excel database as part of the current assessment. The assemblage is characterised in Table 18 by type and main site periods.

Type/Period	Phase 6.1 MBA	Phase 7.1 LBA-EIA	Phase 9.1 ERB	Phase 10 PM	Unphased & other
<i>Number of contexts</i>	1	13	8	1	5
Chalk	-	2/1124g	-	-	-
Hythe Beds sandstone (Lower Greensand)	6/310g	16/396g	1/176g	-	-
Hythe Beds sandstone (Lodsworth type)	-	5/3964g	8/2900g	-	-
Chert	-	-	2/160g	-	3/470g

Type/Period	Phase 6.1 <i>MBA</i>	Phase 7.1 <i>LBA-EIA</i>	Phase 9.1 <i>ERB</i>	Phase 10 <i>PM</i>	Unphased & other
Ferruginous carstone (fine)	-	1/16g	4/976g	-	4/22g
Medium-grained Tertiary siltstone	-	2/2g	-	-	-
Ferruginous breccia	-	2/278g	-	-	-
Ferruginous concretion	-	-	1/1290g	-	-
Quartzite	-	1/36g	-	-	3/30g
Basalt	-	2/66g	-	-	-
Purbeck Marble	-	-	-	1/436g	-
Hard grey siltstone/ fine siltstone	-	-	1/86g	-	-
Coal	-	-	-	-	4/3g
<i>Totals</i>	<i>6/310g</i>	<i>31/5882g</i>	<i>17/5588g</i>	<i>1/436g</i>	<i>14/525g</i>

Table 18: Summary of stone assemblage by phase

Period 6.1: Middle Bronze Age

- 5.8.2 All of the stone from this period was recovered from hollow/spread [6130] (SG 714, G 111) and consists of weathered cobbles of Hythe Beds sandstone. None of these appear to derive from querns and may simply have been the result of natural transport and deposition in the locality.

Period 7: Late Bronze Age to Early Iron Age

- 5.8.3 This period produced the largest quantity of stone and includes a number of worked pieces. The material can be divided into three loose groups. The first of these consists of stone types that are of Sussex origin but which may have been naturally transported onto the coastal plain and which show no obvious signs of utilisation. These include the chalk, the ferruginous breccia (probably from solution hollows within the chalk), the Tertiary sandstone and the carstone (from the Lower Greensand beds). The second consists of more exotic types that have been transported further, probably by longshore drift along the coast (the quartzite and basalt). These only appear as pebble/cobble fragments that would be in keeping with this interpretation. It is quite possible they were deliberately selected by the site's occupants from the beach for their hardness and suitability for polishing and sharpening though none of the current pieces show any sign of definite use-wear.
- 5.8.4 The final group consists of stone that appears to have been deliberately brought to the site by man for a specific use. All of this material is of Hythe Beds Sandstone (Lower Greensand) and relates to querns. Five pieces are of the type normally associated with the Lodsworth Quarry (Peacock 1987). Of these only one is large enough to discern any morphological details (pit [5722], fill [5723], SG 859, G 124) – a 3524g fragment from a 130mm thick saddle quern with a little part of the grinding face still intact. The remaining pieces do not have any full dimensions surviving though all but one have parts of the grinding face surviving (e.g. pit [6018] SG 864, G 125 and post-hole [6048] SG 742, G 115). Considering the period, these are also all likely to be from saddle querns. The other 16 pieces of Hythe Beds Sandstone are not

typical of the Lodsworth Quarry and could derive from other locations. Most of these examples are amorphous, often showing signs of having been burnt but two of the fragments from post-hole [5588] (SG 777, G 15) have parts of the grinding face surviving suggesting all probably derived from saddle querns.

Period 9.1: Early Roman

- 5.8.5 This period produced the second largest assemblage of stone (Table 18). There is again a background scatter of unworked stone types from Sussex that were probably naturally transported to the site and an elongated tabular cobble of non-local origin that could easily have been a beach-selected piece (ditch [6242], fill [6243], SG 978, G 150). The hardness and general form of the stone (84mm long with a tapering rectangular cross section 32x17mm > 30x10mm) would make it very suitable as a hone stone. Although no visible signs of use-wear are present, this may well be due to the hardness of the stone. Although there are a number of pieces of Hythe Beds Sandstone present in deposits of this period, including examples of Lodsworth type, they are much harder to interpret due to the clear presence of residual material. Pit [6228], fill [6231], SG 1025, G 155) produced eight fragments of Lodsworth type quern, the largest of which is clearly from the end of a saddle quern, while the remaining pieces only have parts of grinding faces surviving. No definite rotary quern fragments are present in the whole Roman assemblage – all pieces could easily derive from residual period 7 activity.

Period 10: Post-medieval

- 5.8.6 The only stone from this period consists of a worn cobble fragment of Purbeck Marble (ditch [5778], SG 1046, G 161). Whether this derived from natural transportation or from ship's ballast is impossible to say.

Unphased (currently)

- 5.8.7 The only stone of note grouped here consists of the flecks of late post-medieval coal that are likely to be intrusive in their contexts. The remainder of the assemblage consists of types that could be expected to naturally occur in the general vicinity and on the beach to the south.

5.9 The Metallurgical Remains/Magnetic Material by Luke Barber

- 5.9.1 The excavations recovered just 1291g of material initially classified as slag from 70 individually numbered contexts. This total includes 1061g (12 pieces) of hand-collected material, with the remaining 230g being recovered from 63 different environmental samples (mainly from the magnetic fractions). The assemblage has been fully listed by context and type on metallurgical pro forma sheets, which are housed with the archive. The information from these has been used to create an Excel spreadsheet for the digital archive. Although many residues produced under 1g of material, 1g was the minimum weight entered into the Excel table. As such the total weight is higher than was actually the case.
- 5.9.2 The current assessment represents an overview of the material by type and provisional phase, the latter drawing on ceramic dating, stratigraphy and

association. Although some deposits could chronologically shift a little during final analysis this is considered unlikely at the present site. As such the current overview is considered to be a reliable guide to the main trends and allows an informed assessment of potential for further analysis. To that end the assemblage is summarised in Table 19.

Type/Phase	Period 6.1 MBA	Period 7 LBA/EIA	Period 8 IA	Period 9 RB	Period 10 PM	Unphased
<i>Number of contexts</i>	1	2	4	4	1	5
Iron concretion	96g	-	-	-	-	16g
Fuel ash slag	-	2g	178g	-	-	24g
Hammerscale	-	-	-	3g	-	
Forge Bottom (Smithing)	-	-	-	396g	-	
Undiagnostic iron slag	-	-	-	-	-	376g
Bitumen	-	-	13g	-	-	-
Clinker	-	-	-	-	2g	1g-
<i>Totals</i>	<i>96g</i>	<i>2g</i>	<i>191g</i>	<i>399g</i>	<i>2g</i>	<i>417g</i>

Table 19: Summary of 'slag' assemblage by period (excluding 'magnetic fines')

Magnetic Fines

- 5.9.3 The most consistent material to be recovered from the environmental residues was 'magnetic fines'. These consist of well-worn granules of ferruginous siltstone (though occasionally sandstone or burnt clay are also present) whose magnetic properties have been enhanced through burning. This magnetic material can be formed by any high temperature event, including domestic hearths, bonfires and stubble burning, and its presence is not an indicator of metalworking or any other industrial process. The 184g present in the overall assemblage was recovered from deposits of all periods but has not been included in Table 19 due to the nature of its formation

Fuel Ash Slag

- 5.9.4 At the current site this consists of a grey, sometimes with vitrified patches well aerated slag. A few pieces have adhering red fine sandy clay hearth lining. All dated material was recovered from period 7 and 8 deposits. This type of slag is not diagnostic of process and can be derived from any number of high temperature activities, including domestic hearths. Unsurprisingly it is represented in small quantities at the current site (Table 19).

Iron-working Slag

- 5.9.5 Negligible quantities of definite iron-working slag were recovered. With the exception of the one currently unphased piece all was recovered from deposits of early Roman date. These produced a single forge bottom (ditch [6175], SG 898, G 150) and very small quantities of hammerscale (pits [6092] SG 1029, G156 and [6230], SG 1025, G 155 and ditch [6278], SG 964, G 147). The latter never exceed five flakes per context sample. Although some low-level iron smithing was obviously occurring at this time it does not appear to have been close to the currently excavated area.

Other Material

- 5.9.6 The other material consists of a sparse scatter of natural ferruginous concretion and a little late post-medieval/modern clinker (from coal burning) and bitumen. These types are represented by small pieces that could easily be modern intrusion in these deposits.

5.10 The Bulk Metalwork by Elke Raemen

- 5.10.1 A total of 55 fragments of ironwork (weight 983g) was recovered from five different contexts. In addition, a single iron strip fragment (18g; 90+ by 18mm; 2mm thick) of 18th- or 19th-century date was recovered from the topsoil.
- 5.10.2 The majority was found in post-medieval ditch [5778] (fill [5779]) which contained 50 fragments from a rectangular or square tin, e.g. for food or petrol, dating to the 19th to mid-20th century. Included are also adhering corrosion products and soil, accounting for the weight.
- 5.10.3 Other material comprises a probable sheet fragment ([6221]). Probable general purpose nail fragments were found in [5869], [6199] and [6280].

5.11 The Human Bone by Lucy Sibun

Introduction

- 5.11.1 The human bone assemblage from Littlehampton comprised the partial remains of single individual. The skeletal remains were recovered from spread/hollow [6074] dated to the Middle Bronze Age (Phase 6).

Methodology

- 5.11.2 The assessment of the human skeletal remains comprised sex and age estimation as well as the recording of pathologies. Due to fragmentation and poor preservation of the remains, no bones were suitable for osteometric analysis.
- 5.11.3 Age-at-death was estimated using the standard osteological techniques available, which included the morphological changes observed in the pelvis following Lovejoy et al (1985). An assessment of the biological sex of the skeleton was made by examining the dimorphic traits of the pelvis following Buikstra and Ubelaker (1994) and Bass (2005).
- 5.11.4 The post-excavation assessment included the provisional recording and diagnosis of the basic nature of gross pathology on all bones present. This was carried out following Ortner (2003) and Aufderheide and Rodríguez-Martín (1998).

Results

- 5.11.5 Skeleton [3017] - The poorly preserved remains of a single adult individual were recovered during the excavation. The individual was recovered from spread [6074] and was only partially articulated.

5.11.6 The only skeletal elements present were from the torso and lower limbs and included vertebrae, ribs, pelvis and femurs. The results of the assessment suggest that the human remains belong to an older, probable female individual. Stature estimation was not possible as no complete bones were present.

5.11.7 The only evidence for pathology consisted of mild osteophytes and porosity on two adjacent cervical vertebrae.

5.12 The Cremated Bone by Lucy Sibun

Introduction

5.12.1 Five cremation related contexts were recorded on site; [5982-5983], [5924], [6021-6022]. Of these, human bone was identified in two of them; [6021-6022].

Methodology

5.12.2 These contexts were processed as environmental samples and bone fragments were collected and subjected to careful recording and separated in sieve fractions of 2-4mm, 4-8mm and >8mm.

5.12.3 The assessment of this material was undertaken according to standard guidelines (McKinley 2004b). The total of weight of the cremation deposit was established and the assemblage then examined to record the degree of fragmentation and fragment colour. All recognisable finds were removed during the processing stage but the material was scanned for the presence of possible staining on bone or for animal bone. The presence and weight of fragments from all skeletal areas (skull, axial skeleton, upper limb, and lower limb) was noted. The potential of the assemblage to yield demographic or other information was then considered.

Results

5.12.4 One further context interpreted as a cremation burial [5924] and a pit containing possible redeposited pyre material [5982-5983] only produced small amounts of unidentifiable cremated bone, which are tabulated below but will not be discussed further.

Context	Sample Number	Weight (grams)
5924	136	3.82
5982	144	1.49
5983	167	1.44

Table 20: Quantification of unidentifiable bone

Bone fragmentation and weight of cremated materials

5.12.5 The remaining two contexts are both from the same feature and are quantified in the table below. The totals include both identifiable and unidentifiable material.

Contex	Sampl	WEIGHT (grams)				AG	SE	IDENTIFIABLE			
		2-4mm	4-8mm	>8mm	Total			S	A	U	L
6021	166	32.12	72.16	36.63	141.9	A		✓		✓	✓
	170	25.1	206.2	120.2	351.5			✓	✓	✓	✓
6022	141	8.74	16.08	14.9	39.72	?		✓			✓

Table 21: Showing the summary of results on cremated human bone analysis. Note: (S= skull, A = axial, U= upper limb, L = lower limb)

5.12.6 Table 21 summarises the results of the analysis and fragment size totals include both identifiable and unidentifiable material. The total weight of cremated bone from [6021-6022] was 532.18 grams. The division of fragments according to size revealed that the majority of the assemblage was recovered from the 4-8mm fraction (55%). Diagnostic fragments that allowed for identification of bone areas such as the skull, axial, upper limb and lower limbs were present in both assemblages. No animal bone was present in the cremated bone assemblages and no areas of staining were recorded on bone fragments.

Demographic data

5.12.7 Both contexts produced bone that appears to represent a single individual, with no repeated elements noted. Fused sutures were recorded on a skull fragment from [6021], indicative of an adult individual. Unfortunately, the fragmentation of the remains meant that it was not possible to make an assessment of sex.

Pathological data

5.12.8 No evident pathology was observed in the cremated bone assemblage.

Bone colour

5.12.9 With regards to the degree of oxidation of the organic component of bone, it was noted that 99-100% of the assemblage was fully oxidised white (>c. 600° C) which suggests a highly efficient cremation process (Holden et al. 1995a, b, McKinley 1993).

5.13 The Animal Bone by Emily Johnson

5.13.1 An assemblage of 909 animal bones weighing approximately 2865g in total was analysed from the evaluation and excavation. Material derived from both hand-collected and bulk-sampled contexts and showed mixed states of preservation, with the majority being poorly preserved (Table 22). From the environmental bulk samples only identifiable material was recorded, and only from samples taken during the excavation phase. Environmental material from the evaluation was not recorded at this point. Weights are given in table 22. Burnt bone from environmental bulk samples is described in section 5.12

Period		N	HC	ENV	NISP	Preservation %			
						Poor	Moderate	Good	
0	Undated	68	68	0	0	100	0	0	
6	Middle Bronze Age		Only indeterminate environmental material.						
6.1	Middle Bronze Age	19	19	0	4	100	0	0	
7	Late Bronze Age – Earliest Iron Age	390	335	55	239	82.8	9	8.2	
8	Iron Age	19	19	0	9	94.7	5.3	0	
8.1	Late Iron Age	8	8	0	2	100	0	0	
9	Early Roman	333	329	4	157	15.9	47.4	36.6	
9.1	Early Roman AD50-100	57	51	6	53	40.4	38.6	21.1	
9.2	Early Roman AD50-100	14	14	0	2	100	0	0	
10	Post-Med ?C19th	1	1	0	1	100	0	0	
Total		909	844	65	467	58.0	23.8	18.3	

Table 22: Zooarchaeological assemblage by period showing total fragment count (N), the number of hand-collected (HC) and bulk-sampled (ENV) specimens, the number of identifiable specimens (NISP) and the proportion of bones displaying varying preservation levels.

Method

5.13.2 The assemblage has been recorded onto an Excel spreadsheet. Where possible, bones were identified to species and element (Schmid 1972; Hillson 1999) and the bone zones present noted (Serjeantson 1996). Determination of sheep and goat specimens used criteria outlined in Halstead and Collins (2002), Zeder and Lapham (2010) and Boessneck (1969); where this was not possible a combined ovicaprid class was used. Elements that could not be confidently identified to species, such as long bone, rib, cranial and vertebral fragments, have been categorised by taxa size (large/ medium/ small) and type (mammal/ bird/ fish). From the environmental samples, only identifiable material was included. The remainder was quantified by weight only (Table 22).

5.13.3 Mammalian age-at-death data was collected where possible. The state of epiphyseal bone was recorded as fused, unfused and fusing, and any determinations of age made using Silver (1969). No dentitions were suitable for age-at-death analysis of eruption and attrition. Specimens have been studied for signs of butchery, burning, gnawing, non-metric traits and pathology, although poor preservation of cortical surfaces hampered attempts to record these factors. The assemblage contained no measurable long bones of domestic mammals.

Results

5.13.4 A total of 298 specimens were identifiable to taxa, and 169 to taxa size or type (Table 23). Domestic mammals dominated the assemblage but microfauna were also particularly prevalent in the environmental samples. Given the large number of contexts with very small sample sizes the material is discussed below by period and group.

Taxa	NISP	Period									
		6	6.1	7	8	8.1	9	9.1	9.2	10	0
Cattle	200		3	22	9	2	149	15			
Ovicaprid	9		1	3			3	2			
Pig	5							5			
Horse	67			60				6		1	
Common Shrew	1			1							
Shrew sp.	4			4							
Vole sp.	6			6							
Mouse/ vole sp.	6			6							
Anuran	8			7			1				
Small rodent	2			2							
Small bird	2			2							
Large mammal	139			115			1	21	2		
Medium mammal	7			1			2	4			
Microfauna	10			10							
Bird	1						1				
Indeterminate	442		15	151	10	6	176	4	12		68

Table 23: Taxa abundance in the overall and phased assemblages by NISP. A full itemisation of taxa per context can be found in Appendix 4.

Period 6: Middle Bronze Age

5.13.5 The Middle Bronze Age was represented largely by indeterminate fragments. Pit fill [5953] <137> contained <1g of indeterminate fragments. A number of contexts and samples were taken from fills of hollow/ spread GR111. Fill [6238] contained cattle scapula fragments, an ovicaprid mandibular molar and indeterminate fragments. Fill [6074] samples <145> <146> and <147> contained a further 68g of indeterminate fragments.

Period 7: Late Bronze Age – Earliest Iron Age

5.13.6 Structure GR115, possibly a roundhouse, was made up of posthole fills [5623] <111>, [5638] and [6115] contained horse teeth, indeterminate teeth and wholly indeterminate fragments.

5.13.7 GR117, comprising pit fills [5605] <109> and [5637] <112> outside the structure, similarly contained cattle and large mammal teeth and indeterminate fragments.

5.13.8 Wells GR122 was by far the group with the most abundant animal bone assemblage in this phase, comprising intermediate well fills [5677] <130> and [5780] <129> and additionally fill [415/008] from the evaluation. This group of contexts may actually be Middle Bronze Age in origin. Both contained a diverse taxa representation, including cattle and ovicaprids, but also abundant microfauna such as species of shrew (including common shrew), vole, mouse/ vole, anurans and small birds. While some of this context may represent refuse deposition it is likely that the microfauna represents accidental inclusions of wild species falling into well shafts.

5.13.9 Fill [451/008] contained skeletal material from at least two horses based on the presence of three patellae. Two of the patellae were from opposite sides and symmetrical in gross dimensions, suggesting they were from the same individual. These patellae were clearly larger than the third, presenting a greatest length of 68.7mm as opposed to 57.9mm, suggesting the two animals were different sizes. However, aside from patellae, no other bones

indicated more than one individual, although many bones were very fragmented.

- 5.13.10 It is possible that the majority of at least one horse skeleton is present in this context, based on the number of fragmented partially identifiable long bone, rib, cranial and vertebral fragments. One individual was likely male, based on the presence of mandibular canines. However, rather than an animal 'burial', the evidence for carcass processing on these horse remains could suggest its deposition was as food waste following communal consumption, as discussed below.
- 5.13.11 In terms of age-at-death, both epiphyseal fusion and dental eruption/attrition data was collected for the horse(s) in context [451/008]. All horse bones were fused (n=26), suggesting that the animal(s) was at least 3.5 years old at death, at which point a horse skeleton reaches fusion maturity (Silver 1969). The dental analysis suggests that the individual(s) were in far advance of the age of fusion maturity. Attrition of mandibular incisors gave an age range of 10-12 years, in addition to measurements of the crown-height wear on the P2 within the same mandible, which gave a corroborating age range of 9.72-12.25 years (Levine 1982). In terms of the maxilla, refitted maxillary teeth P2, P3, P4, M2 and M3 gave a combined age range of 11-15.5+ years based on measurements of the wear (*ibid.*). While it is possible that these dentitions came from different aged animals, the age ranges agree fairly well and suggest an individual with a combined age range of around or older than 11 years of age.
- 5.13.12 Some pathological changes were detected on the dentition. One of the canines had probable periodontal disease on the root. The second premolar in the same mandible possibly showed very minor ambiguous bit wear. No postcranial pathology was identified for horses although material was very fragmentary.
- 5.13.13 Aside from horse, ovicaprids were represented by one humerus diaphyseal fragment in this context, and cattle by a fragment of maxillary molar.
- 5.13.14 Butchery marks were observed on 16 large mammal bone fragments in context [451/008]. The majority (n=13) were cut-marks caused by butchery with a smaller blade likely related to skinning or filleting, yet it is possible that large chopping tools such as cleavers were also used to disarticulate carcasses on the proximal tibia (n=1) and in splitting vertebrae axially (n=2). Interestingly, the majority of the bones affected by butchery were horse (n=7) or probable horse (n=6). This indicates that the horse remains in context [451/008] were processed after death, including probable skinning (evidenced in cut marks on cranial and mandibular fragments and on a first phalanx), carcass portioning (axial chopping of the vertebrae and proximal tibia) and filleting (cut marks on rib fragments).
- 5.13.15 Two bone fragments were affected by exposure to heat. One large mammal long bone fragment showed evidence of roasting, and one fragment of cranium, possibly identified as horse, had been scorched by proximity to a fire. This could be further evidence that the horse bones were at least partially domestic food waste.

5.13.16 One large mammal vertebral fragment in context [451/008] showed evidence of canid gnawing. This, combined with the heavily fragmented nature of this context, could indicate pre- or post-depositional disturbance of the bones. The poor preservation of the assemblage also likely led to high levels of fragmentation.

Period 8: Iron Age

5.13.17 All material from the Iron Age (Period 8) and Late Iron Age (Period 8.1) derived from ditch contexts in GR127, GR129 and GR131 and included poorly preserved cattle mandibular fragments and teeth and indeterminate fragments.

Period 9: Early Roman

5.13.18 GR145 (Boundary/ field ditch) comprised of fill [356/004]. Specimens represented included cattle, including two bones viable for fusion analysis. One pelvis and one scapula were fused, indicating the animal was over 1 year old at death. Aside from cattle, partially identifiable medium and large mammal diaphyseal fragments were recovered.

5.13.19 GR154 (Quarry Pit) from period 9 comprised of two fills containing animal bone – [5740] and [5746]. The latter contained a large amount of animal bone, likely representing a single cattle cranium that may have been smashed to remove the brain. There was no evidence of horn core fragments in the contexts, so they might have been removed for horn-working before burial in this context. The upper fill [5740] contained one fused distal cattle metapodia and three cattle tooth fragments.

5.13.20 GR156 (Pit) from period 9 was represented by three fills – [6082], basal fill [6093] and upper fill [6094]. These contexts contained cattle, ovicaprid, anuran and bird specimens, in addition to medium mammal ribs and indeterminate fragments.

5.13.21 GR162 (Pit) from period 9 contained a cattle metatarsal diaphysis, fragments of large mammal scapula and indeterminate fragments from posthole fill [6174].

5.13.22 Material from period 9.1 all derived from ditch context groups. GR144 ditch fill [6160] dated to period 9.1 and contained only indeterminate fragments. GR145 ditch fills [6068] and [6133] contained mostly cattle and large mammal dentition fragments, in addition to one fully fused ovicaprid radius refitted from two fragments broken during excavation or curation. Possible cleaver butchery was used to split one cattle mandibular symphysis in context [6086]. The ditch of GR146 was represented by faunal material from upper fill [6171] <152>, including cattle and pig teeth and a horse distal metapod, as well as indeterminate fragments. A further ditch dated to this period (GR 147) also contained only indeterminate bone from upper ditch fill [6280] <156>.

5.13.23 Ditch GR150 dating to period 9.2 contained only two large mammal long bone fragments and indeterminate specimens.

5.13.24 Pit GR153 dating to period 9.2 contained only indeterminate fragments.

Period 10: Post-Medieval

5.13.25 Just one specimen was dated to the post-medieval period – a horse second phalanx from ditch fill [5869]. This specimen was affected by severe erosion.

Period 0: Undated

5.13.26 Only indeterminate fragments derived from undated ditch fills [5525] and [5561].

5.14 The Shell by Elke Raemen

5.14.1 A small assemblage of shell comprising 11 fragments with a combined weight of 59g was recovered from three different contexts, all dated to period 9. The majority derives from pond/quarry [5748]. Fill [5740] contained small oyster shell (*Ostrea edulis*) fragments representing a minimum of one valve. A complete right valve was recovered from fill [5746]. The latter is an abraded, mature example with signs of parasitic activity.

5.14.2 Finally, ditch [6208] (fill [6209]) contained a whelk (*Buccinum undatum*) fragment.

5.15 The Registered Finds by Elke Raemen

5.15.1 A small assemblage comprising 19 artefacts (Table 24) was recovered during the excavations. The hammerstone has been discussed with the other flintwork.

Context	Parent	RF No	MATERIAL	OBJECT	Wt (g)	Period	Notes
5727	5658	1	CERA	LOOM	261	6	Short Cylindrical
5646	5658	2	CERA	LOOM	1004	6	Cylindrical
6074	5658	3	CERA	LOOM	1030	6	Cylindrical
6074	5658	4	CERA	LOOM	83	6	Cylindrical
6074	5658	5	CERA	LOOM	58	6	Cylindrical
6280	6278	6	FLINT	TOOL	506	9.1	Hammerstone
6130	5658	7	CERA	LOOM	230	6	Cylindrical
6130	5658	8	CERA	LOOM	202	6	Short Cylindrical
6130	5658	9	CERA	LOOM	487	6	Cylindrical
6130	5658	10	CERA	LOOM	193	6	Short Cylindrical
6130	5658	11	CERA	LOOM	229	6	Cylindrical
6130	5658	12	CERA	LOOM	781	6	Cylindrical
6267	6266	13	CERA	BAR	16	9.2	
5589	5588	14	CERA	LOOM	63	7	Cylindrical
5623	5622	15	CERA	LOOM	712	7	Cylindrical
5727	5658	16	CERA	LOOM	429	6	Cylindrical
6130	5658	17	CERA	LOOM	611	6	Cylindrical
5815	5814	18	CERA	LOOM	120	8.1	Cylindrical
6171	6170	19	CERA	LOOM	249	9.1	Pyramidal

Table 24: Summary of the Registered Finds

- 5.15.2 The assemblage consists almost entirely of cylindrical loomweights, of which a total of 16 were recovered. They are generally dated to the Middle and Late Bronze Age. Nearly all were recovered from hollow or spread [5658] (fills [5646], [5727], [6074] and [6130]) which contained a total of 13 loomweights, including four complete or near complete examples. Potentially, these loomweights are associated with the partial remains of an inhumation also found within [5658].
- 5.15.3 In addition, a residual fragment from a pyramidal loomweight (RF <19>) was found in ditch [6170] (fill [6171]), which is of Early Roman date. Pyramidal loomweights are usually dated to the Late Bronze Age although they can occur in Early Iron Age features too, although from then on they were generally replaced by triangular loomweights.
- 5.15.4 A well-made rectangular-sectioned bar fragment in a Roman pottery fabric was recovered from ditch [6266] (fill [6267]). The fragment is very small, with the section measuring 15.8 by 10.7mm. It is too well-made and small to represent kiln furniture and as yet the identification of the fragment is unclear.

5.16 Geoarchaeological Report by Alice Dowsett

Methodology

- 5.16.1 Well features [5789] and [5676] were both sampled using a Russian auger and were dated using radiocarbon dating and assessed for pollen. Well [5676] was also assessed for plant macros. An anomalous 'spread' or 'hollow' [5658] was sampled for micromorphological analysis. Finally, a quarry pit [5748] was recorded and sampled using Kubiena tins. These samples were assessed for micropalaeontological remains and pollen. The lithostratigraphy of the sediment sequences was recorded noting physical properties, composition, and inclusions and using the Troels-Smith (1955) scheme of sediment classification (Appendix 5).
- 5.16.2 The specialist reports for the micromorphological analysis, pollen assessment and micropalaeontological assessment can be found in Appendices 6, 7 and 8. The results of the plant macro assessment can be found in Appendix 3.

Summary

Bronze Age

Well [5676]

- 5.16.3 The well feature [5789] was sampled using a hand auger and the sediments were assessed for dating, pollen and plant macros. The deepest Quaternary sediment was a wet silt [138/011], one pollen sample from this unit exhibited herb taxa such as Poaceae and Asteraceae but was overall low in pollen abundance. Overlying this was a peat unit [138/010], which was radiocarbon dated to the Middle to Late Bronze Age (humic: SUERC-83942; 2862 ± 31 BP; 1121-928 cal BC (95.4%) and humin: SUERC-83943; 2913 ± 31 BP; 1210-1013 cal BC (95.4%)). One pollen sample was taken from this unit, which contained abundant pollen grains. Here, herb taxa dominated and

Asteraceae and Chenopodiaceae were encountered in relative abundance. In addition, *Malva* type (tentatively identified at *Malva parviflora* [cheeseweed or small-flowered mallow] or *Malva sylvestris* [high mallow]) is very abundant, as well as *Cirsium* type (thistles). Trees, shrubs, spores and aquatics are absent. This unit also contained abundant plant macrofossils of *Malva* (mallow), as well as *Carduus/Cirsium* (thistle), *Urtica* (nettle), *Chenopodium* (goosefoot) and *Stellaria media* (chickweed). While the background pollen is typical of grassland/disturbed wildflowers, the high abundance of mallow pollen as well as high numbers of mallow seeds may indicate the plant itself makes up some of the peat's composition, rather than being blown into the well.

- 5.16.4 Overlying the peat was a series of organic silts [138/006] to [138/009]. Pollen was encountered in very low abundances in these units. Of the samples with limited pollen presence, herbaceous taxa dominated, typified by Lactuceae and Asteraceae, with occasional grans of Chenopodiaceae (goosefoot), Poaceae and Cyperaceae. Tree pollen was absent, and shrub pollen was limited to isolated *Corylus-Myrica* type (hazel or sweet gale). Spore content varied, but some samples containing a large volume of *Pteridium* (bracken). Units [138/007] and [138/009] contained moderate assemblages of plant macros, though in less abundance than in [138/010]. Plant macros included *Malva* (mallow), *Stellaria media* (chickweed), *Persicaria* (knotweed), *Urtica dioica* (common nettle), *Rubus* (brambles) and Apiaceae (carrot family). The palaeoenvironmental signal suggests an open landscape with traditional wildflowers, some associated with grassland and others with disturbed ground. The almost total absence of tree and shrub pollen may relate to the lack of woodland proximal to the site, or the relatively 'closed' nature of the archaeological well feature limiting pollen source to the immediate locale.
- 5.16.5 The sediments from within the well feature have provided well-dated palaeoenvironmental data, likely relating to the immediate vicinity of the well from the Middle to Late Bronze Age and later. This level of palaeoenvironmental detail and preservation is particularly rare on sites such as Littlehampton, which have very little chance of waterlogging across the site. This data can be used to help place the site of Littlehampton into its Bronze Age environmental context.
- 5.16.6 A Chi Squared test should however be performed on the two radiocarbon dates to test their relationship.

Well feature [5789]

- 5.16.7 The well feature [5789], dating to the Middle Bronze Age, was sampled using a hand auger. Samples were assessed from <149> for dating, plant macro fossils and pollen. The results showed that palaeoenvironmental preservation was poor and that there was insufficient carbon in the sediment for dating.

Spread/ Hollow [5658]

- 5.16.8 The large spread/ hollow feature [5658] dating to the Middle Bronze Age was analysed using micromorphology. The analysis determined that the fill (5646) was composed of quartz, mudstone and flint. Burnt bone and charcoal fragments were also found within this context, suggesting that there had been some form of anthropogenic activity in the surrounding environment, with the

bone and charcoal fragments either being washed or swept into the area (Adderley et al. 2010).

- 5.16.9 The most notable feature in the sample was the abrupt delineation between the fill and the natural chalk. The boundary between the lower chalk and the upper silty/clay showed no signs of weathering suggesting that the fill (5646) had been laid into the chalk material before weathering could occur, furthermore, it could, therefore, be hypothesised that the chalk was exposed and the fill had been purposely placed over the chalk. There are, however, no visible compaction features within (5646), if these features had been evident it would clearly have indicated that this upper unit had been placed on the chalk and 'tapped-down' to form a waterproofing layer; as such, this is not the case. The formation of ponding in the location may also be disregarded as there is no evidence of lamination deposits from the deposition of sediments into a pond or pool. There is, however, evidence for wetting and drying events (Lindbo et al. 2010; Dalrymple and Jim 1984).
- 5.16.10 Laminated clay infillings and coatings were also found in (5646), which may be due to disturbance, normally occurring through trampling or the removal of a covering layer over the soil; such as grass (Macphail et al. 1990; Usai 2001). The presence of these features, however may relate to exposure of the area when dry. The lamination of the infilling and coating pedofeatures points to disturbance events occurring numerous times. The pedofeatures identified suggest the area did become wet and then dry, with the area being disturbed providing loose clays that could be moved down the soil profile in the next precipitation event. It could tentatively be hypothesised that 'puddling' had occurred in the area, however there is no evidence of ponding.

Roman

Quarry pit [5748]

- 5.16.11 The large Early Roman quarry pit [5748], was assessed for palaeoenvironmental material from the possible pond deposit (5746) <126>. No foraminifera or ostracods were found to be preserved. However, some pollen grains survived within the sediment. Herb pollen dominated, with Poaceae (wild grasses) and Cyperaceae (sedges) being most abundant, supported by Asteraceae (asters), Lactuceae (dandelion) and Caryophyllaceae (Pink Family). Tree pollen was restricted to single grains of *Quercus* (oak) in each sample. Quaternary spores were almost wholly absent, whilst aquatic taxa were restricted to occasional grains of *Typha* sp. (bulrush). The presence of sedges and bulrush within the theorised Roman pond could point to an aquatic setting, but few other aquatic taxa identifiable at assessment level were encountered to reinforce this.

5.17 The Environmental Samples by Mariangela Vitolo

Introduction

- 5.17.1 Forty eight bulk soil samples were taken during excavation in area AP6 at Toddington Lane in order to recover environmental remains such as plant macrofossils, wood charcoal, faunal remains and Mollusca, as well as to assist finds recovery. Sampled features ranged from Early Neolithic pits, a series of

Bronze Age features, including Middle Bronze cremations and Late Bronze Age posthole structures and a well, as well as Early Roman pit clusters and enclosure ditches. The following report assesses the significance and potential of the plant macrofossils and wood charcoal to inform on diet, arable economy, fuel use and selection and the local environment.

Methodology

- 5.17.2 Samples ranged in volume between 10L and 40L and were processed in their entirety by flotation using a 500µm mesh for the heavy residue and a 250µm mesh for the retention of the flot before being air dried. The residues were passed through 8, 4 and 2mm sieves and each fraction sorted for environmental and artefactual remains (Appendix 3, Table 1). Artefacts recovered from the samples were distributed to specialists, and are incorporated in the relevant sections of this volume where they add further information to the existing finds assemblage.
- 5.17.3 The flots were scanned under a stereozoom microscope at 7-45x magnifications and their contents recorded (Appendix 3, Table 2). Provisional identification of the charred plant remains was based on observations of gross morphology and surface structure and relevant reference material was consulted where necessary (Cappers *et al*, 2006; Jacomet, 2006). Quantification was based on approximate number of individuals. Nomenclature follows Stace (1997) for the wild plants and Zohary and Hopf (1994) for the crops.
- 5.17.4 Charcoal fragments were fractured by hand along three planes (transverse, radial and tangential) according to standardised procedures (Gale & Cutler, 2000; Hather, 2000, Leney and Casteel 1975). Specimens were viewed under a stereozoom microscope for initial grouping, and an incident light microscope at magnifications up to 500x to facilitate identification of the woody taxa present. Taxonomic identifications were assigned by comparing suites of anatomical characteristics visible with those documented in reference atlases (Schoch *et al*, 2004; Hather, 2000; Schweingruber, 1990). Quantification and taxonomic identifications of charcoal are recorded in Appendix 3, Table 1 and nomenclature follows Stace (1997).

Results

- 5.17.5 Early Neolithic pits yielded no archaeobotanical remains. Charred plant macrofossils were recovered from a range of period 7 features, particularly pits and postholes and to a lesser extent the well and cremations. These included remains of glume wheats (*Triticum dicoccum/spelta*) hulled barley (*Hordeum vulgare*) and occasional Celtic beans (*Vicia faba*). All features contained less than fifty crop items per sample. The cremations contained sparse remains of cereal caryopses, as well as occasional tubers of false oat-grass (*Arrhenatherum elatius*), a common find in this type of feature. Several Early Roman features also produced charred remains of crops, including spelt (*Triticum spelta*) and hulled barley. Crop weeds indicative of arable or other waste ground were noted in all phases.
- 5.17.6 Charcoal in general preserved in small amounts and in a fragmentary state. Additionally, as the majority of features did not present signs of *in situ* burning,

the charcoal assemblages likely derived from a mixture of sources. As such, they were not deemed to be informative on fuel selection and use for specific purposes. Identification was only carried out on fragments from selected deposits of intrinsic interest. Charcoal from Neolithic pit [5512] was submitted for identification in order to assess its potential for C14 dating. The feature yielded fragments of hazel/alder (*Corylus/Alnus* sp.) and Maloideae, which could be submitted for radiocarbon dating. In addition, identification work was carried out on fragments from one cremation feature, where securely identified human bone had been recovered from (see Sibun, this report). Cremation [6021] produced an assemblage entirely dominated by oak (*Quercus* sp.).

6.0 POTENTIAL & SIGNIFICANCE OF RESULTS

6.1 Realisation of the original research aims

ORA 1: Can the Early Neolithic evidence encountered extend our understanding of how the Neolithic population was utilising the landscape, especially that of the Coastal Plains (Garwood 2008, 9; Healy 2008, 13)

- 6.1.1 A relatively limited and isolated quantity of Early Neolithic evidence was recovered from this phase of investigation. Early Neolithic assemblages of this nature are rare in this part of the Coastal Plain, those that do exist outside of this area are more frequently associated with Causewayed Enclosure sites and pitting sites to the west. Scope for extending our understanding of the utilisation of the landscape during this time is limited, but this new data set will improve it to some degree.

ORA 2: A Middle Bronze Age cremation was recorded, but it is unclear how it fits in with other examples noted in the recent work undertaken on the Toddington Lane site such as the possible cremation cemetery and barrow. Additionally, how might this Middle Bronze Age funerary activity relate to any settlement evidence in the area (Hamilton 2008, 12)?

- 6.1.2 A single cremation was uncovered, along with a number of possible associated pyre-type deposits. Their grouping was similar to that encountered in AP1, suggesting a continuation of this style of interment in the wider landscape. With a paucity of Middle Bronze Age settlement evidence, it is unclear how the two might relate.
- 6.1.3 In addition to the cremations, a Middle Bronze Age articulated partial skeleton was excavated. It is also unclear how this might relate to contemporary settlement evidence, but overlying the burial and concentrating on this area was a Late Bronze Age/Earliest Iron Age structure perhaps indicating a memory of place and importance, a practice that might be inferred for the Middle Bronze Age period.

ORA 3: A number of possible Middle to Late Bronze Age ditches were recorded. Are these elements of Middle to Late Bronze Age land division, and if so, how do they fit into their chronological and spatial settings both in a local and wider perspective? (Champion 2008, 10)

- 6.1.4 The ditches assigned to the Middle to Late Bronze Age have subsequently been reinterpreted as Early Roman and are consequently unable to inform further on their chronological and spatial settings. However, some Late Bronze Age to earlier Iron Age element were encountered during the excavation. These were minimal, but may also possibly stretch back into the Middle Bronze Age, and might go some way to determining how perspectives of landscape might have changed over this period.

ORA 4: Few Bronze Age faunal remains exist, and the example uncovered during this evaluation might provide an opportunity for further research into the field, especially if it is an example among other similar features.

- 6.1.5 No additional significant Bronze Age faunal remains were recovered. However, the horse remains found during the evaluation may still provide a significant insight into horse use and consumption.

ORA 5: The Late Iron Age/Early Roman evidence uncovered indicates the presence of a field system or set of boundary ditches of that date. The Toddington Lane site has revealed significant evidence of occupation from this period, as have investigations in the vicinity. How might the results from this phase of work relate spatially and chronologically to those found nearby?

- 6.1.6 Further Iron Age and Early Roman ditches were uncovered during the excavation. Some have relatively tight date ranges of AD50-100 and their contemporaneity with elements uncovered in AP1 and AP4 can be fairly confidently stated. Further work would be required to understand how the features might relate in terms of function.

ORA 6: The evidence revealed suggests a hiatus in activity between the Late Bronze Age and Late Iron Age. To what extent can the origins of the Late Iron Age evidence be established, and does it have any Middle Iron Age precursor activity (Champion 2008, 10; Hamilton 2008, 13)?

- 6.1.7 No obvious Middle Iron Age element was uncovered during this phase of excavation.

ORA 7: Can this site further our understanding of the chronological range of non-villa settlements, particularly when taken into account continuity from the Late Iron Age (Booth 2008, 18)?

- 6.1.8 This phase did not reveal any extension of chronological range for non-villa settlements that were not established during excavations of AP1 and AP4.

6.2 Significance and potential of the individual datasets

The Stratigraphic Sequence

Period 5: Early Neolithic

- 6.2.1 The earliest cut features dated from this period and comprised at least four pits with small assemblages of decorated Early Neolithic pottery and flintwork. The function of the pits and how they might relate to other aspects of archaeology from this period both on an inter- and intra-site basis is unclear.
- 6.2.2 Despite the relatively limited and isolated nature of the Early Neolithic evidence from this phase of investigation there is some significance and potential for the remains. Pitting is not common in the central Coastal Plain (Munnery 2013) and the high proportion of decorated pottery noted within these pits is more akin to assemblages recovered from causewayed enclosures, suggesting some significance in their deposition.

Period 6: Middle Bronze Age

- 6.2.3 The Middle Bronze Age saw the excavation of two wells and the nearby interment of an articulated partial skeleton. A cremation and probable associated pyre-like deposits were also uncovered.
- 6.2.4 The cremation and associated deposits are similar to a group revealed in AP1. Isolated cremations of Middle to Late Bronze Age date are not uncommon on the Coastal Plain with examples noted on nearby sites including the Rustington Bypass and Horticultural Research International sites (Rudling & Gilkes 2000; Lovell 2002) and the previous phases of work on this site (ASE 2017; 2019). It is considered that the cremation remains derived from a single individual. No evident pathology was observed on the cremated bone and no sex could be assigned to the remains. Some remains were identifiable as being from an adult. This means that the remains hamper the potential of further cremation analysis and its ability to inform on the local Bronze Age population.
- 6.2.5 Despite the paucity of data on the population, the addition of finds and features surrounding the cremation might be able to extend our knowledge and understanding of their funerary rites, especially when combined with observations from other phases of work undertaken at Toddington Lane, thus increasing the local and regional significance of the dataset.
- 6.2.6 The inclusion of an articulated partial skeleton and associated loomweights and assemblage of partially complete ceramic weights is regionally significant. Inhumations of this date are uncommon in South East England and this individual although incomplete and poorly preserved is significant. This combined with the associated finds represents a regionally significant group and can contribute to a discussion on funerary rites and structured deposition of this date. In particular, understanding whether these are the remnants of a funerary monument (barrow) will be particularly important.

Period 7: Late Bronze Age to earliest Iron Age

- 6.2.7 A small number of pits scattered around the site were present, but the foremost evidence came in the form of a circular post-built structure which was placed over the Middle Bronze Age inhumation. The horse recovered from the upper fills of the Middle Bronze Age well, more likely derived from this period.
- 6.2.8 Late Bronze Age structures are uncommon on the Coastal Plains and parallels are rare (such as Chalkers Lane, Hurstpierpoint). This combined with the relatively large ceramic assemblage associated with it forms a locally significant find. If understanding of its chronology and interrelation the Middle Bronze Age inhumation, inception and construction, and additional parallels can be sought then this could form a regionally significant assemblage.
- 6.2.9 Structured deposits at the construction, use and abandonment of the structure may have been identified. The horse remains found in nearby well group G122 might also date from this period and might hint at structured deposition or communal feasting. Evidence of these activities are becoming more apparent from the Coastal Plain, but the publication of these findings would be useful in providing comparative data.

Period 8: Iron Age

6.2.10 The Iron Age saw the excavation of number of field boundaries towards the east of the site. In isolation these would be of local significance, but when combined with the evidence found in previous phases of excavation at Littlehampton, they form part of a much larger landscape. This shifts the site into one of more regional significance, especially with apparent continuity throughout the Iron Age and into the Roman period. The orientation of some ditches towards what became an important Roman pottery production site might be of some importance, suggesting the continuation of the use of landscape and its extant alignments.

Period 9: Early Roman

6.2.11 The Early Roman period saw the excavation of a number of probable quarry pits and a series ditches forming two overlying field systems with occasional pitting and a single possible post-pad within. These form parts of a larger landscape that is becoming evident as the Toddington Lane excavations continue, forming a locally, if not regionally significant site. Additional research and sourcing of comparative sites will likely increase the significance and potential of the site.

6.2.12 The quarrying might be associated with the pottery kiln discovered at the Former Horticulture Research International site and may add further detail to the significance of that site.

6.2.12 The quantity of pottery recovered from the entire Toddington Lane site will form one of the largest non-kiln assemblages from the Coastal Plain and will be of regional significance.

Period 10: Post-medieval

6.2.13 A single ditch was assigned to this date. Its significance is of a limited nature, although its orientation with Iron Age ditches than might have been in use during the Roman period and aligned with a pottery kiln might be of some interest.

The Flintwork: Significance and Potential*The assemblage of struck flint*

6.2.14 The assemblage is of local significance. It provides evidence for prehistoric presence at the site. The flint assemblage is much like the assemblages from the other Toddington Lane excavations, with the bulk of the material representing a late-prehistoric (Middle Neolithic to Late Bronze / Early Iron Age) flake-based industry (most of it belonging to the later Middle Bronze Age to Late Bronze Age / Early Iron Age phase). A few earlier pieces (Mesolithic and Early Neolithic) were also represented including some diagnostic pieces.

6.2.15 Although mixing was noted, it is possible that some of the flints are contemporary with the features they derived from. For example, Late Bronze

Age well [5676] G122 produced 101 pieces that exhibited only slight to moderate edge damage, suggesting that the pieces were not exposed for a long period prior to burial, and that they may be contemporary with the large feature.

Mesolithic / Early Neolithic

- 6.2.16 The assemblage contained few pieces that indicate a Mesolithic or Early Neolithic date. A pick was found from the subsoil in Area A. A hammerstone found unstratified was made from a blade core. A blade and two bladelets that are products of a blade-orientated industry, were found as residual finds. The pick could have been used as a digging tool. It is also possible that it was curated and brought to the site from elsewhere.
- 6.2.17 Three pits that contained some Early Neolithic pottery produced a small quantity of struck flint, including a serrated piece. Except for the serrated piece that was manufactured on a blade, no other blade components were present. The assemblage is small and difficult to date precisely, but it could be contemporary with the pits.
- 6.2.18 Overall, the assemblage of Mesolithic and / or Early Neolithic is small, and the material has no potential to increase our understanding of the early occupation of the site.

Neolithic – Early Bronze Age

- 6.2.19 No large groups were found, but carefully worked flakes and tools were found either as residual finds in later contexts or unstratified. Two serrated pieces are likely to be Neolithic. One was found unstratified and one was recovered from undated pit [5720]. Late Bronze Age ditch G120 produced a Neolithic polished axe likely to have been reworked during the Late Neolithic or Early Bronze Age. The tool is in a poor condition. Neolithic / Early Bronze Age core tools are often found in later prehistoric or Roman features. The reworked polished axe could have accumulated into ditch G120 accidentally, but it could also have been intentionally deposited. During the excavation of Area AP1(ASE 2019), a polished chisel was recovered from early Roman ditch [4378] G101. And close to the site, a polished axe was found from a Middle Iron Age ditch during the excavation on Land West of Westergate (Le Hégarat 2017), and an axe and an axe fragment were found from a Middle Bronze Age ditch at Eden Park, Littlehampton (Bradley and Leivers 2012). The tool has some potential to characterize depositional practices during the later prehistoric period.

Middle Bronze Age - Late Bronze Age

- 6.2.20 The bulk of the assemblage exhibit traits that are characteristic of a later prehistoric (Middle to Late Bronze Age / Early Iron Age) date, with the presence of crudely made pieces and a small range of tools. The pieces were often found mixed with earlier material and most contexts produced only small quantities of material, except for Late Bronze Age well [5676] G122 that produced 101 pieces. The flints from the well are relatively well preserved and may be contemporary with the feature.

The assemblage of unworked burnt flint

- 6.2.21 Excavation of area AP6 produced a large assemblage of unworked burnt flint fragments (just over 96kg). For the most part, the fragments were recovered in small quantities, but several features produced large assemblages. As expected these came from Bronze Age features, but also from Late Bronze Age / earliest Iron Age features and of interest is the fact that one of the large group came from a Roman pit (basal fill [6248] G158).
- 6.2.22 Burnt unworked flint fragments are frequently recorded on the Coastal Plain, but plotting the distribution of the large assemblages over a large area - all the Toddington sites - may be interesting. The assemblages may provide evidence for the location and the extent of burnt flint related activities during the prehistoric and Roman periods. Some of the burnt unworked flint fragments may be contemporary with the features they came from; and they may provide evidence for domestic, agricultural or industrial activities. Although it might be difficult to determine exactly which type of activities they were used for.

The Prehistoric and Roman Pottery: Significance and Potential

- 6.2.23 Early Neolithic pottery was not previously identified in the wider Toddington Lane project and in general, Plain/Decorated Bowl is relatively rare in Sussex. Where Early Neolithic pottery has been identified in the region, it has mostly been found at Causewayed Enclosure sites and on pit sites at the western extremes of the Coastal Plain, as well as at the edges of the Downs in East Sussex (e.g. Bedwin & Holgate 1985; Chadwick 2006; Fitzpatrick et al 2008; Dunkin et al in prep; ASE 2015; Bell 1977; Doherty 2015; Curwen 1931; 1934; 1936; Williamson 1930). Almost no pottery of this tradition has been identified from the central part of the Coastal Plain. Detailed comparison with the assemblages mentioned above presents some scope for further analysis. For example, the fairly high proportion of decorated sherds is rather unusual for a non Causewayed Enclosure site. Nevertheless, given the fairly small size of the assemblage, there is only limited potential for further analysis.
- 6.2.24 The Middle Bronze Age assemblage is small and mostly fairly undiagnostic. The occurrence of partially complete vessels in non-funerary contexts is of interest, similar evidence having been found in Area AP1 (ASE 2019). The material could therefore contribute to a discussion about structured deposition.
- 6.2.25 The Late Bronze Age/earliest Iron Age PDR assemblage is of a period not previously identified in any quantity within the wider Toddington Lane project. Although it is only of moderate size and rather broadly dated, due to a lack of large stratified groups and diagnostic feature sherds, it does largely originate from closely associated features around the post-built house structure (G115 and nearby pits G116, G117). There is a suggestion that this group of features contains pottery spanning a broad period of time, with some evidence of early plain ware PDR fabrics and forms (probably dating to c. 1150-950BC) especially in pit group G116. Conversely there are other possible indications of dating later into the PDR tradition, perhaps even as late as the earliest Iron Age (c. 800BC+), particularly from the postholes making up G115.
- 6.2.26 The fact that the partially complete vessel in pit [5592], part of the central pit group (G116) within roundhouse G115, appears to be amongst the earliest

material, is of interest and suggests that the apparently broad span of dating evidence in and around this feature may not result entirely from residuality. It has been noted that complete or partially complete domestic objects, including pottery, can be associated with important points in the lifecycle of houses and, in some cases, may represent foundation deposits (e.g. Brück 1999, 2006a; Hart et al 2015, 140-141). It seems possible that this vessel is either curated, hinting at the possibility that this feature could be significantly earlier than the structure itself or that the house itself was centred on an area of prior significant deposition. If suitable dating samples are available in environmental sample <108>, radiocarbon dating of material from this feature and from others in G115, especially those with seemingly later pottery like [5623] <111> may help to elucidate the timeframe and sequence of deposition and construction. This would aid in interpreting this probable structured deposit as well as providing a firmer chronological framework for the rather undiagnostic pottery assemblage.

6.2.27 More generally, post Deverel-Rimbury is a ceramic tradition that is fairly well-represented in the published record from the Coastal Plain. The current assemblage is therefore probably only of local significance; however, its publication would be useful in providing comparative data and tracing chronological developments in fabric and (to a lesser extent) form within the site. It also provides evidence of continuing structured deposition involving pottery. There is however, limited scope for further analysis beyond further reading and comparison with other local assemblages.

6.2.28 The Roman assemblage from this specific area is of moderate size but when aggregated with that from other excavation areas will form one of the largest non-kiln assemblages from the Coastal Plain. It is therefore of regional significance. It will be particularly useful in demonstrating the dominance of Arun Valley fabrics vs Rowlands Castle wares in the western central part of the plain. In general though, the range of fabrics and forms appear in keeping with a lower status rural site.

The Post-Roman Pottery: Significance and Potential

6.2.29 The post-Roman pottery assemblage hints at some usage of the earlier routeways during the Late Saxon/Early Medieval period but occupation or significant manuring does not appear to have been taking place. The assemblage has no potential for further analysis.

The Ceramic Building Material: Significance and Potential

6.2.30 The CBM collected is of no archaeological significance being the kind of miscellaneous building material that often becomes deposited across the landscape. Furthermore, much of the assemblage is of clear recent date and its modernity limits its value in this instance. There is no potential for further work.

The Fired Clay: Significance and Potential

6.2.31 The assemblage is abraded and most pieces are undiagnostic. It is not considered to be of significance and is of no potential for further analysis.

The Glass: Significance and Potential

- 6.2.32 The glass comprises a single fragment and is not considered to be of significance beyond its contribution to the dating evidence. It is not of potential for further analysis.

The Geological Material: Significance and Potential

- 6.2.33 The stone assemblage is relatively small and is very much dominated by stone types that could be expected to occur naturally on or very close to the current site. The vast majority of this material shows no modification at the hand of man beyond some occasional accidental burning. The exception to this is the sparse scattering of quern fragments that all derived from the Hythe Beds Sandstone, some certainly from the Lodsworth quarry. These are relatively few in number but most, where discernable, appear to derive from the Late Bronze Age/Early Iron Age occupation. No definite Roman rotary querns are present though this may be due to the small size of the Roman stone assemblage. However, by this date it would appear querns were not present or not common on the site – something noted in the AP1 assemblage from the same site.
- 6.2.34 Overall the assemblage is not unusual for the area and lacks any significant pieces of interest. The assemblage from AP1 phase of excavations at the site has already produced two much more complete examples of Bronze Age saddle quern in Lodsworth-type stone. The current small fragments add nothing new beyond confirming this source of supply at this early date. As such the current assemblage is not considered to hold any potential for further detailed analysis beyond the work already done for this assessment.

The Metallurgical Remains/Magnetic Material: Significance and Potential

- 6.2.35 The excavations have produced a negligible assemblage of slag from the site. The majority of material is not diagnostic of anything other than general burning. The few bits that are from iron working are present in such small quantities to suggest they do not relate to on-site activity but nearby domestic level iron smithing activity in the early Roman period. Such a level of working is commonplace on Roman rural settlements. As such the slag material is not considered to hold any potential for further analysis beyond that undertaken for this assessment.

The Human Bone: Significance and Potential

Skeleton [6074]

- 6.2.36 Due to the poor state of preservation of these remains, further analysis would not produce more accurate age or sex estimations, However, this individual is of interest as an isolated and partial Middle Bronze Age burial. Although Bronze Age burials are found in the South-East (McKinley 2004a, 2014) cremation is the dominant burial practice in this period and consequently, examples of inhumation burials of this period are relatively sparse (McKinley 2014).

The Cremated Bone: Significance and Potential

- 6.2.37 The cremated bone itself does not have any potential for further analysis as it

is not thought that further examination will result in more accurate age or sex estimates. However, the degree of fragmentation can be calculated. Middle Bronze Age cremations are not uncommon in the south east of England and the results of this analysis will be directly comparable.

The Animal Bone: Significance and Potential

Significance

- 6.2.38 The poor preservation of the assemblage severely limits its archaeological significance and potential. The faunal material in the majority likely represents refuse deposition related to domestic consumption, and thus indicates what people were eating in different periods, although sample sizes are too small to be comparable.
- 6.2.39 The horse remains from Well G122 are potentially significant as they give an indication of horse use and consumption in the British Bronze Age, as such evidence is relatively scarce (Brown and Anthony 1998). They could represent at least one animal that reached a fair age (modern domestic horses have an average lifespan of 25-30 years) that was used for traction or riding based on the possible bit wear. Driving or riding horses as working animals in the Bronze Age is suggested based on the presence of horse harness equipment in the UK and abroad, including cheek pieces that suggest the use of a bit (Britnell 1976; Thrane 1958; Sarauw 2015). After death it seems that the carcass was not only skinned but also processed in a way typical of butchery for consumption, and deposited in one event, suggesting communal and possibly ritual feasting. Whether the horses were slaughtered for meat, or opportunistically eaten once usefulness as a traction animal had ended, is not clear.

Potential

- 6.2.40 If analysed with the other phases of archaeological excavations at Littlehampton the zooarchaeological assemblage may be more directly comparable between phases (in particular ASE 2019 [170905] and forthcoming [proj. 180057]). This would certainly give a more complete picture of all phases of human activity at Toddington Lane, but particularly of the Bronze Age, Iron Age and Roman periods.
- 6.2.41 To this end, acquiring a more specific date for the horse remains, and comparing them to contemporary horse assemblages, has the potential to increase our understanding of Bronze Age horse use and consumption. Bone should be selected for radiocarbon dating to corroborate the spot date obtained from very fragmentary pottery.

The Shell: Significance and Potential

- 6.2.42 The marine shell assemblage is too small to be of significance. It is not considered to be of potential for further analysis.

The Registered Finds: Significance and Potential

- 6.2.43 Although small, the assemblage comprises a good group of Bronze Age

loomweights, including several complete examples. Further loomweights have been recovered from previous phases and as such this represents a group, of regional significance, especially if direct association with the inhumation can be proved.

6.2.44 Further research into the bar fragment may establish its function.

The Environmental Samples: Significance and Potential

Significance

6.2.45 The archaeobotanical assemblage from Toddington Lane AP6 comprises remains of crops in use in the prehistoric and Early Roman phases of site occupation and their associated weeds. These remains however represent a background signature and have a low significance. The charcoal from cremation [6021] is more relevant as previous excavations in the AP1 and AP4 areas uncovered contemporary Middle Bronze Age cremation cemeteries and it can therefore add to our knowledge of ritual and fuel selection at the site.

Potential

6.2.46 The bulk soil samples from Toddington Lane AP6 have yielded sporadic remains from the MBA, LBA/EIA and ER phases of site occupation. Due to their low quantity and poor preservation, they cannot add to our knowledge of diet and agrarian economy at the site and in the region, holding very low potential for full analysis. The charcoal from cremation [6021] has been fully analysed and the assemblages from remaining features cannot inform us on fuel selection strategies. The fragments of hazel/alder and Maloideae from pit [5512] are suitable for radiocarbon dating, if required.

7.0 PUBLICATION PROJECT

7.1 Revised research agenda: Aims and Objectives

7.1.1 This section combines those original research aims that the site archive has the potential to address with any new research aims identified in the assessment process by stratigraphic, finds and environmental specialists to produce a set of revised research aims that will form the basis of any future research agenda. Original research aims (OR's) are referred to where there is any synthesis of subject matter to form a new set of revised research aims (RRA's) posed as questions below.

RRA 1: Can the archaeological evidence inform our understanding of Neolithic structured deposits on the Coastal Plain

7.1.2 RRO 1: Can refitting flintwork or pottery be identified within Neolithic features and can differences in taphonomic processes inflicted on the finds be observed?

7.1.3 RRO 2: Can refined dating of the Neolithic remains help refine our understanding of the date of the assemblage?

7.1.4 RRO 3: Can parallels of Early Neolithic pit deposits be identified to determine if any patterning can be recognised?

RRA 2: What can the archaeological evidence tell us of Middle Bronze Age funerary practices?

7.1.5 RRO 4: Can further study of the pottery assemblage help us understand the nature of Middle Bronze Age structured deposition and its links with funerary practice?

7.1.6 RRO 5: Isolated Middle Bronze cremations are not uncommon on the Coastal Plain, how can the cremations and associated features uncovered on site inform us of alternative funerary practices and can parallels be drawn from other nearby sites.

7.1.7 RRO 6: Middle Bronze Age burials are rare in the Coastal Plain. What parallels can be found, and how can the example found further inform us of burial practices during this period? Is the inhumation in fact the remnant of more substantial funerary monument and is evidence that a barrow was once present here?

RRA 3: What can the archaeological evidence tell us of Late Bronze Age to earlier Iron Age use of the landscape?

7.1.8 RRO 7: Can inferences be made on what the functions the structure might have performed and what activities were being undertaken in its vicinity?

7.1.9 RRO 8: Can further examples of this type of structure be identified?

7.1.10 RRO 9: Can any reasons for the location of the structure over a Middle Bronze Age inhumation be found? Can parallels for this and the encountered structured deposits be sourced?

RRA 4: Can the archaeological evidence from the site inform our understanding of trade, infrastructure and connectivity during the Iron Age?

7.1.11 RRO 10: When assessed in conjunction with elements uncovered during previous phases of excavation at Toddington Lane, can further inferences be made on what activities were being undertaken and how the landscape was utilised during the Iron Age?

RRA 5: What can the site tell us of the environment and agricultural practices during the Early Roman period?

7.1.12 RRO 11: What range of crops were cultivated and/or used at the site in the Early-Roman period? Can the plant remains inform us on crop husbandry practices during these phases of site occupation and what information can the plant remains give regarding the local vegetation environment?

7.1.13 RRO 12: What information can the plant remains give regarding the local vegetation environment, and can any evidence of woodland management techniques be discerned. How does the charcoal assemblage compare with other contemporary assemblages from similar features in the area and what can be said of the drives behind fuel choices?

RRA 6: How did the Early Roman phase of the site fit in with evidence already uncovered in the wider landscape?

7.1.14 Can any link between the Early Roman site and, for example, the pottery kiln at the Former Horticulture Research International site be established?

7.2 Preliminary Publication Synopsis

- 7.2.1 It is suggested that the results of the excavation are published alongside the results of the other elements of fieldwork carried out on the site. Where practicable, results from excavations on the site by TVAS should be referenced.
- 7.2.2 Upon completion of all phases of archaeological fieldwork, it is proposed to review and prepare an Updated Project Design and Synopsis for Publication. This revised document will review tasks across all phases of work and outline tasks required for the publication.

7.3 Artefacts and Archive Deposition

- 7.3.1 The site archive is currently held at the offices of ASE. Following completion of all post-excavation work, including any publication work, the site archive will be deposited with Littlehampton Museum. Littlehampton Museum does not assign archive accession numbers in advance of deposition.

BIBLIOGRAPHY

Adderley, W. P., Wilson, C. A., Simpson, I. A., and Davidson, D. A. (2010). "Anthropogenic Features", in G. Stoops, V. Marcelino, and F. Mees, (eds.), *Interpretation of Micromorphological Features of Soils and Regoliths*. Elsevier, UK, pp. 569-588.

Allen, M J, & Fitzpatrick, A P, 2008, *Neolithic and Bronze Age activity*, in Fitzpatrick et al 2008, 91-140

Archaeology South-East, 2002. *An archaeological Desk-Based Assessment and Walkover Survey of Land to the west of Watersmead, Littlehampton, West Sussex* (Proj. No: 1604)

Archaeology South-East, 2003. *Archaeological Investigations at Roundstone Lane, Angmering, West Sussex*. Unpub ASE document

Archaeology South-East, 2007 *Archaeological Investigations on land at the Former Horticulture Research International Site (East), Worthing Road, Littlehampton, West Sussex: Post Excavation Assessment and Project Design for Publication*, ASE unpublished report (Proj No: 2083)

Archaeology South-East, 2015, *Archaeological evaluation report at Maudlin Nursery, Stane Street, Westhampnett, West Sussex*, Unpub ASE Rep 2015087

Archaeology South-East, 2016a. *Archaeological Evaluation Report; Land at Toddington Lane (Phase 4) Littlehampton, West Sussex* ASE unpublished report (Proj. No: 160459)

Archaeology South-East, 2016b *Archaeological Excavations at Roundstone Lane, Angmering, West Sussex* (Proj. No. 7082)

Archaeology South-East, 2016c. *Post-excavation Assessment and Updated Project Design Report; Archaeological Excavation on Land South of the A259 New Road Littlehampton West Sussex* (Proj. No: 3307)

Archaeology South-East, 2017 *Archaeological Post-excavation Assessment and Updated Project Design Report: Land at Toddington Lane (AP4), Littlehampton, West Sussex* ASE unpublished report (Proj. No. 160740)

Archaeology South-East, 2018a *An Archaeological Evaluation on Land at Toddington Lane (Phase 6), Littlehampton, West Sussex* ASE unpublished report (Proj No: 170372)

Archaeology South-East, 2018b *Archaeological Evaluation Report: Central Wetland Area, Toddington Lane, Littlehampton, West Sussex* ASE unpublished report (Proj No: 180403)

Archaeology South-East, 2018c *Archaeological Evaluation Report, Fairhaven Nursery and Allotment Land, Toddington Lane, Littlehampton, West Sussex* ASE unpublished report (Proj 170372)

Archaeology South-East, 2019 *Post-excavation assessment and updated project design report: archaeological excavations on land at Toddington Lane (AP1), Littlehampton, West Sussex*, Unpub ASE Rep 2019001 (Proj, 170905)

Archaeology South-East, forthcoming *Archaeological Excavations at Land at Toddington Lane (Fairhaven Nursery and Allotments), Littlehampton, West Sussex: A Post Excavation Assessment and Updated Project Design Report* (Proj 180057)

Armour Heritage, 2018 *Archaeological Phase 6, Land at Toddington Lane, Littlehampton, West Sussex: Written Scheme of Investigation: Archaeological Field Evaluation*, Unpublished report (Proj. No: AH666)

Aufderheide, A, Rodríguez Martín, C, 1998 *The Cambridge Encyclopedia of Human Paleopathology*

Bass, W, 2005 *Human Osteology: A Laboratory and Field Manual*, *Missouri Archaeol Soc, Special Publications*, **2**

Bedwin, O.R, 1978 *Iron Age Sussex – the Downs and Coastal Plain*, in P. Drewett 1978, 41-51

Bedwin, O, & Holgate, R, 1985 *Excavations at Copse Farm, Oving, West Sussex*, *PPS*, **51**, 215-45

Bell, M, 1977 *Excavations at Bishopstone, Sussex*, *SAC*, **115**, 1-299

Boessneck, J, 1969 *Osteological differences between sheep (*Ovis aries* Linné) and goats (*Capra hircus* Linné)*, in *Science in Archaeology: A survey of Progress and Research* (eds D Brothwell, & E Higgs)

Booth, P. 2008 *Rural Settlement* (SERF 2008)

Bradley, P, & Leivers, M, 2012 *Flint*, in Dingiddy, M, *A multi-period site at Eden Park (former Toddington Nurseries), Littlehampton, West Sussex*, *SAC*, **150**, 54-57

Bradley, R, 1982 *Belle Tout – Revision and assessment*, in Drewett, P, *The Archaeology of Bullock Down, Eastbourne: The development of a landscape*, *Sussex Arch Society Monograph*, **1**, 62-71

Britnell, W. J, 1976 *Antler cheekpieces of the British late bronze age*. *The Antiquaries Journal*, 56(1), 24-34.

- Brown, D., & Anthony, D, 1998 Bit wear, horseback riding and the Botai site in Kazakstan. *Journal of Archaeological Science*, 25(4), 331-347.
- Brück, J, 1999 Houses, lifecycles and deposition on Middle Bronze Age settlements in southern England, *PPS*, **65**, 145-7
- Brück, J, 2006 Fragmentation, personhood and the social construction of technology in Middle and Late Bronze Age Britain, *Cambridge Archaeol J*, **16** (3), 297-315
- Buikstra, J, Ubelaker, D, 1994 Standards for Data Collection from Human Skeletal Remains, Fayetteville, *Arkansas Archaeol Survey Rep*, **44**
- Butler, C, 2005 *Prehistoric Flintwork*
- Cappers, R., Bekker, R.M. and Janes, J.E.A. 2006. *Digital Seed Atlas of the Netherlands*. Groningen Archaeological Studies 4. Eelde: Barkhuis Publishing.
- Chadwick, A, 2006 Bronze Age burials and settlement and an Anglo-Saxon settlement at Claypit Lane, Westhamptnett, West Sussex, *SAC*, **144**, 7-50
- Champion, T, 2008 *The evolution of later and prehistoric settlement in Kent and Surrey* (SERF 2008)
- ClfA 2014, *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*
- Cunliffe, B, 1971 *Excavations at Fishbourne. Volume 2: the finds*, Res Rep Comm Soc Antiq, **27**
- Curwen, E C, 1931, Excavations in the Trundle, *SAC*, **72**, 100-50
- Curwen, E C, 1934 Excavations in Whitehawk Neolithic Camp, Brighton, 1932-33, *Antiq J*, **14**, 99-133
- Curwen, E C, 1936 Excavations in Whitehawk Camp, Brighton, third season, 1935, *SAC*, **77**, 60-92
- Dalrymple, J. B., and Jim, C. Y. (1984). "Experimental Study of Soil Microfabrics Induced by Isotropic Stresses of Wetting and Drying." *Geoderma*, 34, 43-68.
- Davies, B J, Richardson, B, and Tomber, R S, 1994 *A dated corpus of early Roman pottery from the City of London*, in *The Archaeology of Roman London* 5, CBA Res Rep, **98**
- Dinwiddy, 2012. M, A multi-period site at Eden Park (former Toddington Nurseries), Littlehampton, West Sussex, *SAC*, **150**, 47-69

- Doherty A, 2010 The prehistoric and Roman pottery, unpublished specialist analysis report prepared in support of Clarke, C, 2012 Exploration of the Sussex coastal plain through time: excavations at Titnore Lane, Goring-by-Sea, West Sussex, *SAC*, **150**, 5-46
- Doherty, A, 2015 The prehistoric and Roman pottery, in Hart, D, *Around the ancient track: Archaeological excavations for the Brighton and Hove Waste Water Treatment Works and adjacent housing at Peacehaven, East Sussex*, SpoilHeap Monog Ser, **10**, 213-35
- Doherty, A, in prep, Methodology, Specialist appendixes: Roman pottery, in Dunkin, D, Priestley-Bell, G, & Sygrave, J, *Excavations on the West Sussex coastal plain* (Title TBC), SpoilHeap Monog Ser
- Dunkin, D, Priestley-Bell, G & Sygrave, J, in prep *Excavations on the West Sussex Coastal Plain* (Title TBC), SpoilHeap Monog Ser
- Dunkin D, & Yates D, 2008 Period summary: the Bronze Age, in Manley 2008, 35-40
- English Heritage, 2008 *Management of Research Projects in the Historic Environment (MoRPHE), Project Planning Notes 3 (PPN3): Archaeological Excavation*
- Fitzpatrick, A P, Powell, A B, & Allen, M J, 2008 *Archaeological excavations on the route of the A27 Westhampnett Bypass, West Sussex, 1992. Volume 1: Late Upper Palaeolithic-Anglo-Saxon*, Wessex Archaeol Report, **21**
- Ford, S, 1987 Chronological and functional aspects of flint assemblages, in *Lithic analysis and Later British Prehistory* (eds A Brown and M Edmonds), BAR Brit Ser **162**, 67-81
- Gale, R. 2002 Charcoal, in Lovell, J. 'An early Roman pottery production site at Horticultural Research International, Littlehampton'. *Sussex Archaeological Collections* 140, 21-40.
- Gale, R. and Cutler, D. 2000. *Plants in Archaeology*. Otley: Westbury Publishing and Kew.
- Garwood, P, 2003. Round Barrows and Funerary Traditions in Late Neolithic and Bronze Age Sussex, in Rudling, D. (ed) *The Archaeology of Sussex to AD2000*, Heritage Marketing and Publications Ltd: King's Lynn, 47-68
- Garwood, P, 2008 *Landscapes, monuments and social practices in the late 4th and 3rd millennia BC: a survey* (SERF)
- Gilkes. O, 1993. Iron Age and Roman Littlehampton. *SAC* **131**,.1-20
- Gilkes, O & Hammond, P, 1991. Archaeological Discoveries at Toddington, West Sussex. *SAC* **129**, 241-4

Grinsell, L V, 1934 Sussex barrows, *SAC*, **75**, 217-75

Halstead, P, & Collins, P, 2002 Sorting the sheep from the goats: morphological distinctions between the mandibles and mandibular teeth of adult *Ovis* and *Capra*, *J Archaeol Sci*, **29**, 545-53

Halstead, P, 1985 A study of mandibular teeth from Romano-British contexts, in *The Fenland Project, Number 1: The Lower Welland Valley, volume 1* (ed I Longworth), East Anglian Archaeol Rep, **27**, 219-21

Hamilton, S. 2008. *Sussex later prehistory: a research framework* (SERF 2008)

Hart, D, 2015 *Around the ancient track, Archaeological excavations for the Brighton and Hove waste water treatment works and adjacent housing at Peacehaven, East Sussex*, SpoilHeap Monogr Ser, 10, London

Hart, D, Doherty, A, & Anderson-Whymark, H, 2015 Non-funerary deposition associated with buildings, in Hart, D, *Around the ancient track: Archaeological excavations for the Brighton and Hove Waste Water Treatment Works and adjacent housing at Peacehaven, East Sussex*, SpoilHeap Monogr Rep, **10**, 140-1

Hather, J.G. 2000. *The Identification of Northern European Woods: A Guide for Archaeologists and Conservators*. London: Archetype Publications Ltd.

Hawkes, C F C, & Hull, M R, 1947 *Camulodunum: first report on the excavations at Colchester, 1930-1939*, *Soc Antiquities Res Rep*, **XIV**

Healy, F. 2008. 'Causewayed enclosures and the Early Neolithic: the chronology and character of monument building and settlement in Kent, Surrey and Sussex in the early to mid-4th millennium cal BC', in *South East Research Framework* (SERF 2008)

Hillson, S, 1992 *Mammal bones and teeth: an introductory guide to methods of identification*

Hinton, P. 2002. Plant Remains, in Lovell, J. 'An early Roman pottery production site at Horticultural Research International, Littlehampton'. *Sussex Archaeological Collections* 140, 21-40.

Holden, J L Phakley, P and Clement, J G 1995a Scanning electron microscope observations of incinerated human femoral bone: a case study, *Forensic Sci International*, **74**, 17-28

Holden, J L, Phakley, P and Clement, J G 1995b Scanning electron microscope observations of heat-treated human bone. *Forensic Science International* **74**, 29-45

Holgate, R, 2003 *Late glacial and post-glacial hunter-gatherers in Sussex*, in Rudling 2003, 29-38

Inizan, M-L, Reduron-Ballinger, M, Roche, H, & Tixier, J, 1999 *Technology and terminology of knapped stone*. Tome 5. Cercle de Recherches et d'Etudes Préhistoriques (CREP), Nanterre

Jacomet, S. 2006. *Identification of Cereal Remains from Archaeological Sites*. Basel Archaeobotany Lab, IPAS.

King, D, & King, R, 2010 *St Richard's Hospital, Chichester, West Sussex: archaeological evaluation and watching brief*, Unpub Archaeological Management Services Rep

Le Hégarat, K, 2017 *The Flintwork*, in ASE, *Post-Excavation and Updated Project Design Report, Land West of Westergate, West Sussex*, Unpub ASE Rep 2017290

Leney, L., and Casteel, R.W., 1975. Simplified procedure for examining charcoal specimens for identification. *Journal of archaeological science*, 2, pp. 153-159.

Lindbo, D. L., Stolts, M. H., and Vepraskas, M. L. (2010). "Redoximorphic Features", in G. Stoops, V. Marcelino, and F. Mees, (eds.), *Interpretation of Micromorphological Features of Soils and Regoliths*. UK: Elsevier, pp. 129-185.

Lovejoy, C, Meindl, R, Pryzbeck, T, & Mensforth, R 1985 Chronological metamorphosis of the auricular surface of the ilium: a new method for the determination of adult skeletal age at death, *American J Physical Anthropol*, **68**, 15-28

Lovell, J, 2002 An early Roman pottery production site at Horticultural Research International, Littlehampton, SAC, **140**, 21-40

Macphail, R. I., Courty, M. A., and Gebhardt, A. (1990). "Soil Micromorphological Evidence of Early Agriculture in North-West Europe." *World Archaeology*, 22(1), 53-69.

Marsh, G, & Tyers, P, 1978 The Roman pottery from Southwark, in Bird, J, Graham, A H, Sheldon, H L, & Townend, P, *Southwark Excavations 1972-74*. LAMAS/ Surrey Arch Soc Joint Publication, **1**, 533-82

McKenna, R. unpublished. Charred Plant Remains, In Wallis, S. Late Iron Age and Roman occupation south of Toddington Lane (Phase 1), Littlehampton, West Sussex. Thames Valley Archaeological Services Unpublished Report.

McKinley, J I, 1993 Bone fragment size and weights of bone from modern British cremations and their implications for the analysis of archaeological cremations, *Int J Osteology*, **3**, 283-7

- McKinley, J, 2004a Archaeological excavations at The Bostle, Bronze Age and Anglo-Saxon barrow cemeteries, Blasdean, East Sussex, 1997, SAC, 142, 25-44
- McKinley, J I, 2004b Compiling a skeletal inventory: cremated human bone, in *Guidelines to the Standards for Recording Human Remains* (eds M Brickley & J I McKinley), British Association for Biological Anthropology and Osteoarchaeology and Institute for Field Archaeology, 9-12
- McKinley, J I, 2005 Compiling a skeletal inventory: cremated human bone, in M Brickley & J I McKinley (eds) *Guidelines to the Standards for Recording Human Bone*, IFA Paper no. 7, 9–13
- McKinley, J, 2014 Human bone and mortuary deposits, in *Cliffs End Farm, Isle of Thanet, Kent, A mortuary and ritual site of the Bronze Age, Iron Age and Anglo-Saxon period* (eds J Mckinley, M Leivers, J Schuster, P Marshall, A Barclays & N Stoodley), Wessex Archaeol Rep, **31**, 93-144
- McKinley, J I, and Roberts, C, 1993 *Excavation and post-excavation treatment of cremated and inhumed human remains*, IFA technical paper no. 13
- McParland, L.C., Collinson, M. E., Scott, A.C., Campbell G., Veal, R. 2010. Is vitrification in charcoal a result of high temperature burning of wood? *Journal of Archaeological Science* 37, 2679- 2687.
- MoLAS, 1994 *Site Manual for Archaeological Fieldwork*
- Munnery, T, 2013 *A Study of Neolithic Pits in south-east England: shifts in deposition, farming and self-perception*, unpub MA thesis, Univ Leicester
- Munnery, T, 2017 Bronze Age Barrows in the High Weald: excavations at Potman's Lane, East Sussex, SAC, **155**, 31-42
- Ortner, D, 2003 *Identification of Pathological Conditions in Human Skeletal Remains*, Amsterdam: Academic Press
- PCRG, 2010 *The study of later prehistoric pottery: general policies and guidelines for analysis and publication*. Prehistoric Ceramic Research Group Occasional Papers, **1&2**, 3rd edition,
http://www.pcrq.org.uk/News_pages/PCRG%20Gudielines%203rd%20Edition%20%282010%29.pdf
- PCRG, SGRP & MPRG, 2016 *A standard for pottery studies in archaeology*, Prehistoric Ceramics Research Group, Study Group for Roman Pottery and Medieval Ceramic Research Group
[http://romanpotterystudy.org/new/wp-content/uploads/2016/06/Standard for Pottery Studies in Archaeology.pdf](http://romanpotterystudy.org/new/wp-content/uploads/2016/06/Standard_for_Pottery_Studies_in_Archaeology.pdf)

- Peacock, D, 1987 Iron Age and Roman Quern production at Lodsworth, West Sussex, *Ant J*, **67**, 61-85
- Pelling, R. 2012a Charred Plant Remains In Dinwiddy, M. 'A multi-period site at Eden Park (former Toddington Nurseries), Littlehampton, West Sussex'. *Sussex Archaeological Collections* 150, 47–69.
- Pelling, R. 2012b Charcoal In Dinwiddy, M. 'A multi-period site at Eden Park (former Toddington Nurseries), Littlehampton, West Sussex'. *Sussex Archaeological Collections* 150, 47–69.
- Roberts, M B, & Parfitt, S A, 1999 *A Middle Pleistocene hominid site at Eartham Quarry, Boxgrove, West Sussex*, Engl Heritage Archaeol Report 17
- Rudling, D, & Gilkes, O, 2000. Important archaeological discoveries made during the construction of the A259 Rustington Bypass, 1990, *SAC*, **138**, 15-28
- Sarauw, T. 2015 The Late Bronze Age hoard from Bækkedal, Denmark—new evidence for the use of two-horse teams and bridles. *Danish Journal of Archaeology*, 4(1), 3-20.
- Schmid, E, 1972 *Atlas of Animal Bones for pre-historians, archaeologists and quaternary geologists*, Amsterdam: Elsevier Publishing Company
- Schoch, W., Heller, I., Schweingruber, F.H. and Kienast, F. 2004. *Wood Anatomy of Central European Species*. Online version: www.woodanatomy.ch.
- Schweingruber, F.H. 1990. *Macroscopic Wood Anatomy* (3rd ed). Birmensdorf: Swiss Federal Institute for Forest, Snow and Landscape Research.
- Seager Thomas, M, 2010 Peterborough Ware from Westbourne: a rare Middle Neolithic 'Ritual' (?) deposit from the West Sussex Coastal Plain, *SAC*, **148**, 7-15
- Serjeantson, D, 1996 The Animal Bones, in *Runnymede Bridge Research Excavations, Volume 2: Refuse and Disposal at Area 16 East, Runnymede* (eds S Needham & T Spense)
- Silver, I A, 1969 The ageing of domestic animals, in *Science in Archaeology: A survey of Progress and Research* (eds D Brothwell & E Higgs)
- Stace, C. 1997. *New Flora of the British Isles* (2nd ed). Cambridge: Cambridge University Press.
- Stephenson, P & Krawiec, K, 2019 *A View from the edge: Archaeological investigation on the Manhood Peninsula, Selsey for the Medmerry Managed Realignment Scheme*, London: SpoilHeap Monograph Series **20**:
- Taylor, M. 1981. *Wood in Archaeology*. Aylesbury: Shire Publications.

Thames Valley Archaeological Services Ltd, 2015a *Land at Courtwick Lane, Littlehampton, West Sussex: An Archaeological Post-excavation Assessment*, TVAS unpublished report 10/85c)

Thames Valley Archaeological Services Ltd, 2015b *Land at Toddington Lane (Archaeological Phase 1), Littlehampton, West Sussex, an archaeological evaluation for Persimmon Homes Thames Valley*, TVAS unpublished report 15/192

Thames Valley Archaeological Services Ltd, 2016a *Land at Toddington Lane (Archaeological Phase 2), Littlehampton, West Sussex, an archaeological evaluation for Persimmon Homes Thames Valley*, TVAS unpublished report 15/192b

Thames Valley Archaeological Services Ltd, 2016b *Land at Toddington Lane (Archaeological Phase 3), Littlehampton, West Sussex, an archaeological evaluation for Persimmon Homes Thames Valley*, TVAS unpublished report 15/192c

Thrane, H, 1958, The rattle pendants from the Parc-y-Meirch hoard, Wales *Proceedings of the Prehistoric Society*, **24**, 241-227

Tröels-Smith, J, 1955 Karakterisering af løse jordater (Characterisation of unconsolidated sediments), *Danm, Geol Unders, Ser IV* 3, 73

Usai, M. R. (2001). "Textural Pedofeatures and Pre-Hadrian's Wall Ploughed Paleosols at Stanwix, Carlisle, Cumbria, U.K." *Journal of Archaeological Science*, **28**, 541-553.

Weaver, S, 1995. 'Horticultural Research International Site, Worthing Road, Littlehampton – An Archaeological evaluation and desktop study', TVAS Report 95/53, Reading.

Williamson, R P R, 1930 Excavations in Whitehawk Neolithic Camp, Near Brighton, *SAC*, **71**, 57-96

WSCC, 2017. *Sussex Archaeological Standards*

Zeder, M A, & Lapham, H A, 2010 Assessing the reliability of criteria used to identify postcranial bones in sheep, *Ovis*, and goats, *Capra, J Archaeol Sci*, **37** (11), 2887-2905

Zohary, D. and Hopf, M. 1994. *Domestication of Plants in the Old World* (2nd ed). Oxford: Oxford University Press.

Websites

BGS 2019, *Geology of Britain viewer* accessed on 03/01/2019
<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

ACKNOWLEDGEMENTS

ASE would like to thank Armour Heritage for commissioning the work and for their assistance throughout the project, and James Kenny, archaeological advisor to Arun District Council for his guidance and monitoring. The excavation was directed by Tom Munnery with John Hirst providing secondary supervisory cover. The author would like to thank all archaeologists who worked on the excavations: Henry Bishop-Wright, Henry Callender, Chris Down, Alice Dowsett, Janie Gammans, Jess Haines, Mel Harvell, Lucy May, Hannah O'Loughlin-Tapp, Steve Patton, Pippa Postgate, Rae Regensberg, Lia Schurtenberger, Lucy Sheeran, Teresa Vieira, Mai Walker, Gemma Ward and Jake Wilson; surveyors John Cook, Naomi Humphreys and Rob Kaleta, Lauren Gibson who produced the figures for this report; Paul Mason who project managed the excavations and Jim Stevenson and Dan Swift who project managed the post-excavation process.

Appendix 1: Context Register

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
5500	Void			0			
5501	Cut	Ditch terminus	5501	1061	166	Field/Enclosure Ditch	9.1
5502	Fill	Fill	5501	1061	166	Field/Enclosure Ditch	9.1
5503	Cut	Ditch	5503	1060	166	Field/Enclosure Ditch	9.1
5504	Fill	Fill	5503	1060	166	Field/Enclosure Ditch	9.1
5505	Deposit	Redeposited natural	5505	0			
5506	Cut	Pit	5506	0			
5507	Fill	Fill	5506	0			
5508	Deposit	Destruction debris	5508	0			
5509	Deposit	Subsoil	5509	0			
5510	Deposit	Natural	5510	0			
5511	Void			0			
5512	Cut	Pit	5512	709	110	E Neo pit group	5
5513	Fill	Fill	5512	709	110	E Neo pit group	5
5514	Cut	Ditch	5514	1071	168	Field/Enclosure Ditch	
5515	Fill	Fill	5514	1071	168	Field/Enclosure Ditch	
5516	Cut	Ditch	5516	1064	166	Field/Enclosure Ditch	9.1
5517	Fill	Fill	5516	1064	166	Field/Enclosure Ditch	9.1
5518	Cut	Pit	5518	710	110	E Neo pit group	5
5519	Fill	Fill	5518	710	110	E Neo pit group	5
5520	Cut	Posthole	5520	0			
5521	Fill	Fill	5520	0			
5522	Cut	Posthole	5522	0			
5523	Fill	Fill	5522	0			
5524	Cut	Ditch	5524	1070	168	Field/Enclosure Ditch	
5525	Fill	Fill	5524	1070	168	Field/Enclosure Ditch	
5526	Cut	Pit	5526	711	110	E Neo pit group	5
5527	Fill	Fill	5526	711	110	E Neo pit group	5
5528	Cut	Pit	5528	0			
5529	Fill	Fill	5528	0			
5530	Cut	Pit	5530	0			
5531	Fill	Fill	5530				
5532	Cut	Pit	5532	0			
5533	Fill	Fill	5532				
5534	Cut	Pit	5534	712	110	E Neo pit group	5
5535	Fill	Fill	5534	712	110	E Neo pit group	5
5536	Cut	Posthole	5536	0			
5537	Fill	Fill	5536	0			
5538	Cut	Pit	5538	0			

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
5539	Fill	Fill	5538	0			
5540	Cut	Pit	5540	0			
5541	Fill	Fill	5540	0			
5542	Cut	Pit	5542	0			
5543	Fill	Fill	5542				
5544	Cut	Pit	5544	0			
5545	Fill	Fill	5544				
5546	Cut	Ditch	5546	1062	166	Field/Enclosure Ditch	9.1
5547	Fill	Fill	5546	1062	166	Field/Enclosure Ditch	9.1
5548	Cut	Pit	5548	0			
5549	Fill	Fill	5548	0			
5550	Cut	Ditch	5550	1063	166	Field/Enclosure Ditch	9.1
5551	Fill	Fill	5550	1063	166	Field/Enclosure Ditch	9.1
5552	Cut	Pit	5552	0			
5553	Fill	Fill	5552				
5554	Cut	Ditch	5554	0			
5555	Fill	Fill	5554	0			
5556	Cut	Ditch	5556	1066	167	Field/Enclosure Ditch	9.1
5557	Fill	Fill	5556	1066	167	Field/Enclosure Ditch	9.1
5558	Cut	Ditch	5558	0			
5559	Fill	Fill	5558	0			
5560	Cut	Ditch	5560	1069	168	Field/Enclosure Ditch	
5561	Fill	Fill	5560	1069	168	Field/Enclosure Ditch	
5562	Cut	Ditch	5562	1065	167	Field/Enclosure Ditch	9.1
5563	Fill	Fill	5562	1065	167	Field/Enclosure Ditch	9.1
5564	Cut	Pit	5564	0			
5565	Fill	Fill	5564	0			
5566	Cut	Stakehole	5566	0			
5567	Fill	Fill	5566	0			
5568	Cut	Ditch	5568	1076	169	Field/Enclosure Ditch	
5569	Fill	Fill	5568	1076	169	Field/Enclosure Ditch	
5570	Cut	Ditch	5570	1075	169	Field/Enclosure Ditch	
5571	Fill	Fill	5570	1075	169	Field/Enclosure Ditch	
5572	Cut	Ditch	5572	1073	169	Field/Enclosure Ditch	
5573	Fill	Fill	5572	1073	169	Field/Enclosure Ditch	
5574	Cut	Ditch	5574	1067	167	Field/Enclosure Ditch	9.1
5575	Fill	Fill	5574	1067	167	Field/Enclosure Ditch	9.1
5576	Cut	Ditch	5576	1068	167	Field/Enclosure Ditch	9.1
5577	Fill	Fill	5576	1068	167	Field/Enclosure Ditch	9.1
5578	Cut	Posthole	5578	832	118	Postholes and Stakeholes	7

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
						extra to structure	
5579	Fill	Fill	5578	832	118	Postholes and Stakeholes extra to structure	7
5580	Cut	Posthole	5580	833	118	Postholes and Stakeholes extra to structure	7
5581	Fill	Fill	5580	833	118	Postholes and Stakeholes extra to structure	7
5582	Cut	Posthole	5582	790	115	Structure - ?Roundhouse	7
5583	Fill	Fill	5582	790	115	Structure - ?Roundhouse	7
5584	Cut	Posthole	5584	789	115	Structure - ?Roundhouse	7
5585	Fill	Fill	5584	789	115	Structure - ?Roundhouse	7
5586	Cut	Posthole	5586	772	115	Structure - ?Roundhouse	7
5587	Fill	Fill	5586	772	115	Structure - ?Roundhouse	7
5588	Cut	Posthole	5588	777	115	Structure - ?Roundhouse	7
5589	Fill	Fill	5588	777	115	Structure - ?Roundhouse	7
5590	Cut	Pit	5590	817	116	Pits within structure	7
5591	Fill	Fill	5590	818	116	Pits within structure	7
5592	Cut	Pit	5592	814	116	Pits within structure	7
5593	Fill	Fill	5592	814	116	Pits within structure	7
5594	Cut	Pit	5594	815	116	Pits within structure	7
5595	Fill	Fill	5594	816	116	Pits within structure	7
5596	Cut	Posthole	5596	781	115	Structure - ?Roundhouse	7
5597	Fill	Fill	5596	781	115	Structure - ?Roundhouse	7
5598	Cut	Pit	5598	824	117	Pits outside structure	7
5599	Fill	Fill	5598	824	117	Pits outside structure	7
5600	Cut	Pit	5600	812	116	Pits within structure	7
5601	Fill	Fill	5600	813	116	Pits within structure	7
5602	Cut	Pit	5602	823	117	Pits outside structure	7
5603	Fill	Fill	5602	823	117	Pits outside structure	7
5604	Cut	Pit	5604	822	117	Pits outside structure	7
5605	Fill	Fill	5604	822	117	Pits outside structure	7

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
5606	Cut	Posthole	5606	793	115	Structure - ?Roundhouse	7
5607	Fill	Fill	5606	793	115	Structure - ?Roundhouse	7
5608	Cut	Posthole	5608	796	115	Structure - ?Roundhouse	7
5609	Fill	Fill	5608	796	115	Structure - ?Roundhouse	7
5610	Cut	Posthole	5610	794	115	Structure - ?Roundhouse	7
5611	Fill	Fill	5610	794	115	Structure - ?Roundhouse	7
5612	Cut	Pit	5612	821	117	Pits outside structure	7
5613	Fill	Fill	5612	821	117	Pits outside structure	7
5614	Cut	Pit	5614	807	115	Structure - ?Roundhouse	7
5615	Fill	Fill	5614	807	115	Structure - ?Roundhouse	7
5616	Cut	Posthole	5616	783	115	Structure - ?Roundhouse	7
5617	Fill	Fill	5616	783	115	Structure - ?Roundhouse	7
5618	Cut	Posthole	5618	782	115	Structure - ?Roundhouse	7
5619	Fill	Fill	5618	782	115	Structure - ?Roundhouse	7
5620	Cut	Posthole	5620	785	115	Structure - ?Roundhouse	7
5621	Fill	Fill	5620	785	115	Structure - ?Roundhouse	7
5622	Cut	Posthole	5622	756	115	Structure - ?Roundhouse	7
5623	Fill	Fill, primary	5622	756	115	Structure - ?Roundhouse	7
5624	Fill	Fill, secondary	5622	757	115	Structure - ?Roundhouse	7
5625	Cut	Posthole	5625	769	115	Structure - ?Roundhouse	7
5626	Fill	Fill	5625	769	115	Structure - ?Roundhouse	7
5627	Cut	Posthole	5627	766	115	Structure - ?Roundhouse	7
5628	Fill	Fill	5627	766	115	Structure - ?Roundhouse	7
5629	Cut	Posthole	5629	760	115	Structure - ?Roundhouse	7
5630	Fill	Fill	5629	760	115	Structure - ?Roundhouse	7
5631	Cut	Posthole	5631	758	115	Structure - ?Roundhouse	7
5632	Fill	Fill	5631	758	115	Structure - ?Roundhouse	7
5633	Cut	Posthole	5633	752	115	Structure - ?Roundhouse	7
5634	Fill	Fill	5633	752	115	Structure - ?Roundhouse	7
5635	Cut	Pit	5635	825	117	Pits outside structure	7
5636	Fill	Fill, basal	5635	825	117	Pits outside structure	7

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
5637	Fill	Fill, intermediate	5635	826	117	Pits outside structure	7
5638	Fill	Fill, upper	5635	827	117	Pits outside structure	7
5639	Cut	Pit or posthole	5639	800	115	Structure - ?Roundhouse	7
5640	Fill	Fill	5639	800	115	Structure - ?Roundhouse	7
5641	Cut	Posthole	5641	751	115	Structure - ?Roundhouse	7
5642	Fill	Fill	5641	751	115	Structure - ?Roundhouse	7
5643	Cut	Pit	5643	716	117	Pits outside structure	7
5644	Fill	Fill	5643	716	117	Pits outside structure	7
5645	Cut	Pit	5645	717	117	Pits outside structure	7
5646	Fill	Fill	5658	714	111	Hollow/Spread	6
5647	Fill	Fill	5645	717	117	Pits outside structure	7
5648	Cut	Pit	5648	1053	117	Pits outside structure	7
5649	Fill	Fill	5648	1053	117	Pits outside structure	7
5650	Cut	Pit	5650	819	117	Pits outside structure	7
5651	Fill	Fill	5650	819	117	Pits outside structure	7
5652	Cut	Posthole	5652	746	115	Structure - ?Roundhouse	7
5653	Fill	Fill	5652	746	115	Structure - ?Roundhouse	7
5654	Cut	Pit	5654	1054	117	Pits outside structure	7
5655	Fill	Fill	5654	1054	117	Pits outside structure	7
5656	Cut	Ditch	5656	835	119	Boundary ditch	7
5657	Fill	Fill	5656	835	119	Boundary ditch	7
5658	Cut	??	5658	714	111	Hollow/Spread	6
5659	Cut	Posthole	5659	762	115	Structure - ?Roundhouse	7
5660	Fill	Fill	5659	762	115	Structure - ?Roundhouse	7
5661	Cut	Posthole	5661	808	115	Structure - ?Roundhouse	7
5662	Fill	Fill	5661	808	115	Structure - ?Roundhouse	7
5663	Cut	Ditch	5663	834	119	Boundary ditch	7
5664	Fill	Fill	5663	834	119	Boundary ditch	7
5665	Cut	Pit/posthole	5665	828	117	Pits outside structure	7
5666	Fill	Fill	5665	828	117	Pits outside structure	7
5667	Deposit	Made ground		0			
5668	Deposit	Subsoil					
5669	Cut	Pit	5669	829	117	Pits outside structure	7
5670	Fill	Fill, basal	5669	829	117	Pits outside structure	7
5671	Fill	Fill, upper	5669	830	117	Pits outside structure	7
5672	Cut	Ditch terminus	5672	837	119	Boundary ditch	7

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
5673	Fill	Fill	5672	837	119	Boundary ditch	7
5674	Cut	Gully	5674	1055	163	Gully leading into Well 5676	7
5675	Fill	Fill	5674	1055	163	Gully leading into Well 5676	7
5676	Cut	Well	5676	848	122	Wells	6
5677	Fill	Fill, intermediate	5676	849	122	Wells	6
5678	Fill	Fill, intermediate	5676	849	122	Wells	6
5679	Fill	Fill, upper	5676	849	122	Wells	6
5680	Cut	Ditch	5680	853	123	Troughlike features near well [5676]	7
5681	Fill	Fill	5680	853	123	Troughlike features near well [5676]	7
5682	Cut	Ditch	5682	852	123	Troughlike features near well [5676]	7
5683	Fill	Fill	5682	852	123	Troughlike features near well [5676]	7
5684	Cut	Ditch	5684	854	123	Troughlike features near well [5676]	7
5685	Fill	Fill	5684	854	123	Troughlike features near well [5676]	7
5686	Cut	Ditch	5686	855	123	Troughlike features near well [5676]	7
5687	Fill	Fill	5686	855	123	Troughlike features near well [5676]	7
5688	Cut	Ditch	5688	856	123	Troughlike features near well [5676]	7
5689	Fill	Fill	5688	856	123	Troughlike features near well [5676]	7
5690	Cut	Ditch	5690	836	119	Boundary ditch	7
5691	Fill	Fill	5690	836	119	Boundary ditch	7
5692	Cut	Tree throw	5692				
5693	Fill	Fill	5692				
5694	Cut	Ditch	5694	1056	163	Gully leading into Well 5676	7
5695	Fill	Fill	5694	1056	163	Gully leading into Well 5676	7
5696	Cut	Tree throw	5696				
5697	Fill	Fill	5696				
5698	Cut	Ditch terminus	5698	843	121	Southern parallel ditch	7
5699	Fill	Fill	5698	843	121	Southern parallel ditch	7
5700	Cut	Pit	5700				
5701	Fill	Fill	5700	0			
5702	Cut	Ditch terminus	5702	838	120	Northern parallel ditch	7
5703	Fill	Fill	5702	838	120	Northern parallel ditch	7
5704	Cut	Ditch terminus	5704	841	120	Northern parallel ditch	7

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
5705	Fill	Fill, basal	5704	841	120	Northern parallel ditch	7
5706	Fill	Fill, upper	5704	842	120	Northern parallel ditch	7
5707	Cut	Ditch	5707	844	121	Southern parallel ditch	7
5708	Fill	Fill, basal	5707	844	121	Southern parallel ditch	7
5709	Fill	Fill, upper	5707	845	121	Southern parallel ditch	7
5710	Cut	Pit	5710	861	124	Pits in AP6G	7
5711	Fill	Fill	5710	861	124	Pits in AP6G	7
5712	Cut	Ditch	5712	857	123	Troughlike features near well [5676]	7
5713	Fill	Fill	5712	857	123	Troughlike features near well [5676]	7
5714	Cut	Ditch	5714	839	120	Northern parallel ditch	7
5715	Fill	Fill	5714	839	120	Northern parallel ditch	7
5716	Cut	Ditch	5716	858	123	Troughlike features near well [5676]	7
5717	Fill	Fill	5716	858	123	Troughlike features near well [5676]	7
5718	Cut	Pit	5718				
5719	Fill	Fill	5718				
5720	Cut	Pit	5720	0			
5721	Fill	Fill	5720				
5722	Cut	Pit	5722	859	124	Pits in AP6G	7
5723	Fill	Fill, basal	5722	859	124	Pits in AP6G	7
5724	Fill	Fill, upper	5722	860	124	Pits in AP6G	7
5725	Cut	Ditch terminus	5725	847	121	Southern parallel ditch	7
5726	Fill	Fill	5725	847	121	Southern parallel ditch	7
5727	Fill	Fill	5658	714	111	Hollow/Spread	6
5728	Cut	Ditch	5728	1074	169	Field/Enclosure Ditch	
5729	Fill	Fill	5728	1074	169	Field/Enclosure Ditch	
5730	Cut	Ditch	5730	1072	169	Field/Enclosure Ditch	
5731	Fill	Fill	5730	1072	169	Field/Enclosure Ditch	
5732	Cut	Pit	5732	0			
5733	Fill	Fill	5732				
5734	Cut	Ditch	5734	840	120	Northern parallel ditch	7
5735	Fill	Fill	5734	840	120	Northern parallel ditch	7
5736	Cut	Posthole	5736	759	115	Structure - ?Roundhouse	7
5737	Fill	Fill	5736	759	115	Structure - ?Roundhouse	7
5738	Cut	Posthole	5738	778	115	Structure - ?Roundhouse	7
5739	Fill	Fill	5738	778	115	Structure - ?Roundhouse	7
5740	Fill	Fill, upper	5748	1015	154	Quarry pits	9

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
5741	Fill	Fill, intermediate	5748	1012	154	Quarry pits	9
5742	Fill	Fill, intermediate	5748	1012	154	Quarry pits	9
5743	Layer	Natural		0			
5744	Fill	Fill	5748	1014	154	Quarry pits	9
5745	Fill	Fill	5748	1014	154	Quarry pits	9
5746	Fill	Fill	5748	1013	154	Quarry pits	9
5747	Fill	Fill	5748	1013	154	Quarry pits	9
5748	Cut	Pond/quarry	5748	1011	154	Quarry pits	9
5749	Void			0			
5750	Cut	Ditch terminus	5750	909	136	Boundary/Field ditch	8
5751	Fill	Fill	5750	909	136	Boundary/Field ditch	8
5752	Cut	Ditch terminus	5752	907	135	Boundary/Field ditch	8
5753	Fill	Fill	5752	907	135	Boundary/Field ditch	8
5754	Cut	Ditch	5754	910	136	Boundary/Field ditch	8
5755	Fill	Fill	5754	910	136	Boundary/Field ditch	8
5756	Cut	Ditch	5756	875	127	Boundary/Field ditch	8.1
5757	Fill	Fill	5756	875	127	Boundary/Field ditch	8.1
5758	Cut	Ditch	5758	899	131	Ditch, possible trackway	8
5759	Fill	Fill	5758	899	131	Ditch, possible trackway	8
5760	Fill	Fill, basal	5594	815	116	Pits within structure	7
5761	Fill	Fill, basal	5600	812	116	Pits within structure	7
5762	Fill	Fill, basal	5590	817	116	Pits within structure	7
5763	Cut	Pit	5763	811	116	Pits within structure	7
5764	Fill	Fill	5763	811	116	Pits within structure	7
5765	Cut	Posthole	5765	806	115	Structure - ?Roundhouse	7
5766	Fill	Fill	5765	806	115	Structure - ?Roundhouse	7
5767	Cut	Pit	5767	810	116	Pits within structure	7
5768	Fill	Fill	5767	810	116	Pits within structure	7
5769	Cut	Posthole	5769	805	115	Structure - ?Roundhouse	7
5770	Fill	Fill	5769	805	115	Structure - ?Roundhouse	7
5771	Cut	Posthole	5771	803	115	Structure - ?Roundhouse	7
5772	Fill	Fill, basal	5771	803	115	Structure - ?Roundhouse	7
5773	Fill	Fill, upper	5771	804	115	Structure - ?Roundhouse	7
5774	Cut	Ditch	5774	893	130	Ditch, possible trackway	8
5775	Fill	Fill	5774	893	130	Ditch, possible trackway	8

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
5776	Cut	Ditch	5776	898	131	Ditch, possible trackway	8
5777	Fill	Fill	5776	898	131	Ditch, possible trackway	8
5778	Cut	Ditch	5778	1046	161	Post-med ditch	10
5779	Fill	Fill	5778	1046	161	Post-med ditch	10
5780	Fill	Fill, intermediate	5676	849	122	Wells	6
5781	Cut	Posthole	5781	801	115	Structure - ?Roundhouse	7
5782	Fill	Fill	5781	801	115	Structure - ?Roundhouse	7
5783	Cut	Ditch	5783	933	140	Trackway	8
5784	Fill	Fill	5783	933	140	Trackway	8
5785	Cut	Ditch	5785	1048	161	Post-med ditch	10
5786	Fill	Fill	5785	1048	161	Post-med ditch	10
5787	Cut	Posthole	5787	802	115	Structure - ?Roundhouse	7
5788	Fill	Fill	5787	802	115	Structure - ?Roundhouse	7
5789	Cut	Well	5789	850	122	Wells	6
5790	Fill	Fill	5789	851	122	Wells	6
5791	Fill	Fill	5789	851	122	Wells	6
5792	Fill	Fill	5789	851	122	Wells	6
5793	Fill	Fill	5789	851	122	Wells	6
5794	Fill	Fill	5789	851	122	Wells	6
5795	Fill	Fill	5789	851	122	Wells	6
5796	Fill	Fill	5789	851	122	Wells	6
5797	Fill	Fill	5789	851	122	Wells	6
5798	Fill	Fill	5789	851	122	Wells	6
5799	Fill	Fill	5789	851	122	Wells	6
5800	Cut	Ditch	5800	934	140	Trackway	8
5801	Fill	Fill	5800	934	140	Trackway	8
5802	Cut	Posthole	5802	797	115	Structure - ?Roundhouse	7
5803	Fill	Fill	5802	797	115	Structure - ?Roundhouse	7
5804	Cut	Posthole	5804	795	115	Structure - ?Roundhouse	7
5805	Fill	Fill	5804	795	115	Structure - ?Roundhouse	7
5806	Cut	Posthole	5806	729	115	Structure - ?Roundhouse	7
5807	Fill	Fill	5806	729	115	Structure - ?Roundhouse	7
5808	Cut	Posthole	5808	730	115	Structure - ?Roundhouse	7
5809	Fill	Fill	5808	730	115	Structure - ?Roundhouse	7
5810	Cut	Posthole	5810	731	115	Structure - ?Roundhouse	7
5811	Fill	Fill	5810	731	115	Structure - ?Roundhouse	7
5812	Cut	Pit	5812	867	126	Pits in AP6E	7
5813	Fill	Fill	5812	867	126	Pits in AP6E	7
5814	Cut	Ditch terminus	5814	876	127	Boundary/Field ditch	8.1
5815	Fill	Fill	5814	876	127	Boundary/Field ditch	8.1
5816	Cut	Ditch	5816	884	129	Ditch, possible trackway	8

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
5817	Fill	Fill	5816	884	129	Ditch, possible trackway	8
5818	Cut	Pit	5818	939	141	Pits in AP6E	8
5819	Fill	Fill	5818	939	141	Pits in AP6E	8
5820	Cut	Pit	5820	935	141	Pits in AP6E	8
5821	Fill	Fill	5820	935	141	Pits in AP6E	8
5822	Cut	Ditch	5822	892	130	Ditch, possible trackway	8
5823	Fill	Fill	5822	892	130	Ditch, possible trackway	8
5824	Cut	Ditch	5824	1045	161	Post-med ditch	10
5825	Fill	Fill	5824	1045	161	Post-med ditch	10
5826	Cut	Ditch terminus	5826	908	135	Boundary/Field ditch	8
5827	Fill	Fill	5826	908	135	Boundary/Field ditch	8
5828	Cut	Pit	5828	865	126	Pits in AP6E	7
5829	Fill	Fill	5828	865	126	Pits in AP6E	7
5830	Cut	Ditch	5830	919	138	Trackway	8
5831	Fill	Fill	5830	919	138	Trackway	8
5832	Cut	Ditch	5832	923	139	Trackway	8
5833	Fill	Fill	5832	923	139	Trackway	8
5834	Cut	Posthole	5834	0			
5835	Fill	Fill	5834	0			
5836	Cut	Posthole	5836	792	115	Structure - ?Roundhouse	7
5837	Fill	Fill	5836	792	115	Structure - ?Roundhouse	7
5838	Cut	Posthole	5838	788	115	Structure - ?Roundhouse	7
5839	Fill	Fill	5838	788	115	Structure - ?Roundhouse	7
5840	Cut	Posthole	5840	787	115	Structure - ?Roundhouse	7
5841	Fill	Fill	5840	787	115	Structure - ?Roundhouse	7
5842	Cut	Posthole	5842	784	115	Structure - ?Roundhouse	7
5843	Fill	Fill	5842	784	115	Structure - ?Roundhouse	7
5844	Cut	Posthole	5844	767	115	Structure - ?Roundhouse	7
5845	Fill	Fill	5844	767	115	Structure - ?Roundhouse	7
5846	Cut	Posthole	5846	764	115	Structure - ?Roundhouse	7
5847	Fill	Fill	5846	764	115	Structure - ?Roundhouse	7
5848	Cut	Posthole	5848	765	115	Structure - ?Roundhouse	7
5849	Fill	Fill	5848	765	115	Structure - ?Roundhouse	7
5850	Cut	Ditch	5850	897	131	Ditch, possible trackway	8
5851	Fill	Fill	5850	897	131	Ditch, possible trackway	8
5852	Cut	Ditch	5852	915	137	Boundary/Field ditch	8
5853	Fill	Fill	5852	915	137	Boundary/Field ditch	8
5854	Cut	Ditch	5854	891	130	Ditch, possible trackway	8

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
5855	Fill	Fill	5854	891	130	Ditch, possible trackway	8
5856	Cut	Pit	5856	868	126	Pits in AP6E	7
5857	Fill	Fill	5856	868	126	Pits in AP6E	7
5858	Cut	Pit	5858	869	126	Pits in AP6E	7
5859	Fill	Fill	5858	869	126	Pits in AP6E	7
5860	Cut	Ditch	5860	905	134	Boundary/Field ditch	8
5861	Fill	Fill	5860	905	134	Boundary/Field ditch	8
5862	Cut	Ditch	5862	885	129	Ditch, possible trackway	8
5863	Fill	Fill	5862	885	129	Ditch, possible trackway	8
5864	Cut	Ditch	5864	1043	160	Boundary/Field ditch	9
5865	Fill	Fill	5864	1043	160	Boundary/Field ditch	9
5866	Cut	Linear	5866	0			
5867	Fill	Fill	5866	0			
5868	Cut	Ditch	5868	1047	161	Post-med ditch	10
5869	Fill	Fill	5868	1047	161	Post-med ditch	10
5870	Cut	Ditch terminus	5870	880	128	Ditch, possible trackway	8
5871	Fill	Fill	5870	880	128	Ditch, possible trackway	8
5872	Cut	Ditch	5872	887	129	Ditch, possible trackway	8
5873	Fill	Fill	5872	887	129	Ditch, possible trackway	8
5874	Cut	Ditch	5874	911	137	Boundary/Field ditch	8
5875	Fill	Fill, upper	5874	912	137	Boundary/Field ditch	8
5876	Fill	Fill, intermediate	5874	912	137	Boundary/Field ditch	8
5877	Fill	Fill, basal	5874	911	137	Boundary/Field ditch	8
5878	Cut	Ditch	5878	940	141	Pits in AP6E	8
5879	Fill	Fill	5878	940	141	Pits in AP6E	8
5880	Cut	Ditch	5880	916	137	Boundary/Field ditch	8
5881	Fill	Fill	5880	916	137	Boundary/Field ditch	8
5882	Cut	Ditch	5882	873	127	Boundary/Field ditch	8.1
5883	Fill	Fill, basal	5882	873	127	Boundary/Field ditch	8.1
5884	Fill	Fill, upper	5882	874	127	Boundary/Field ditch	8.1
5885	Cut	Ditch terminus	5885	902	132	Boundary/Field ditch	8
5886	Fill	Fill	5885	902	132	Boundary/Field ditch	8
5887	Cut	Ditch	5887	917	137	Boundary/Field ditch	8
5888	Fill	Fill	5887	917	137	Boundary/Field ditch	8
5889	Cut	Pit	5889	720	114	?Pyre related pits around cremations	6

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
5890	Fill	Fill	5889	720	114	?Pyre related pits around cremations	6
5891	Cut	Ditch	5891	881	128	Ditch, possible trackway	8
5892	Fill	Fill	5891	881	128	Ditch, possible trackway	8
5893	Cut	Ditch	5893	882	128	Ditch, possible trackway	8
5894	Fill	Fill	5893	882	128	Ditch, possible trackway	8
5895	Cut	Ditch	5895	900	131	Ditch, possible trackway	8
5896	Fill	Fill	5895	900	131	Ditch, possible trackway	8
5897	Cut	Pit	5897	936	141	Pits in AP6E	8
5898	Fill	Fill	5897	936	141	Pits in AP6E	8
5899	Cut	Ditch	5899	918	138	Trackway	8
5900	Fill	Fill	5899	918	138	Trackway	8
5901	Cut	Ditch	5901	894	130	Ditch, possible trackway	8
5902	Fill	Fill	5901	894	130	Ditch, possible trackway	8
5903	Layer	Made ground		0			
5904	Layer	Subsoil		0			
5905	Cut	Ditch	5905	883	129	Ditch, possible trackway	8
5906	Fill	Fill	5905	883	129	Ditch, possible trackway	8
5907	Cut	Ditch	5907	879	128	Ditch, possible trackway	8
5908	Fill	Fill	5907	879	128	Ditch, possible trackway	8
5909	Cut	Pit	5909	866	126	Pits in AP6E	7
5910	Fill	Fill	5909	866	126	Pits in AP6E	7
5911	Cut	Pit, quarry	5911	1016	154	Quarry pits	9
5912	Fill	Fill, upper	5911	1018	154	Quarry pits	9
5913	Fill	Fill, intermediate	5911	1018	154	Quarry pits	9
5914	Fill	Fill, basal	5911	1017	154	Quarry pits	9
5915	Cut	Posthole	5915	770	115	Structure - ?Roundhouse	7
5916	Fill	Fill	5915	770	115	Structure - ?Roundhouse	7
5917	Cut	Posthole	5917	774	115	Structure - ?Roundhouse	7
5918	Fill	Fill	5917	774	115	Structure - ?Roundhouse	7
5919	Cut	Pit	5919	722	114	?Pyre related pits around cremations	6
5920	Fill	Fill	5919	722	114	?Pyre related pits around cremations	6
5921	Cut	Posthole	5921	771	115	Structure - ?Roundhouse	7
5922	Fill	Fill	5921	771	115	Structure - ?Roundhouse	7
5923	Cut	Pit, cremation	5923	719	114	?Pyre related pits around cremations	6

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
5924	Fill	Fill	5923	719	114	?Pyre related pits around cremations	6
5925	Cut	Ditch	5925	878	127	Boundary/Field ditch	8.1
5926	Fill	Fill	5925	878	127	Boundary/Field ditch	8.1
5927	Cut	Ditch	5927	922	138	Trackway	8
5928	Fill	Fill	5927	922	138	Trackway	8
5929	Cut	Ditch	5929	925	139	Trackway	8
5930	Fill	Fill	5929	925	139	Trackway	8
5931	Cut	Pit	5931	937	141	Pits in AP6E	8
5932	Fill	Fill	5931	937	141	Pits in AP6E	8
5933	Cut	Ditch	5933	920	138	Trackway	8
5934	Fill	Fill	5933	920	138	Trackway	8
5935	Cut	Ditch	5935	901	132	Boundary/Field ditch	8
5936	Fill	Fill	5935	901	132	Boundary/Field ditch	8
5937	Cut	Pit	5937	938	141	Pits in AP6E	8
5938	Fill	Fill	5937	938	141	Pits in AP6E	8
5939	Cut	Pit, quarry	5939	1019	154	Quarry pits	9
5940	Fill	Fill, basal	5939	1020	154	Quarry pits	9
5941	Fill	Fill, secondary	5939	1020	154	Quarry pits	9
5942	Fill	Fill, tertiary	5939	1020	154	Quarry pits	9
5943	Fill	Fill, basal	5939	1020	154	Quarry pits	9
5944	Fill	Fill, intermediate	5939	1021	154	Quarry pits	9
5945	Fill	Fill, intermediate	5939	1021	154	Quarry pits	9
5946	Fill	Fill, intermediate	5939	1022	154	Quarry pits	9
5947	Cut	Ditch	5947	877	127	Boundary/Field ditch	8.1
5948	Fill	Fill	5947	877	127	Boundary/Field ditch	8.1
5949	Cut	Ditch	5949	871	127	Boundary/Field ditch	7
5950	Fill	Fill	5949	871	127	Boundary/Field ditch	7
5951	Fill	Fill, upper	5939	1022	154	Quarry pits	9
5952	Cut	Pit	5952	723	114	?Pyre related pits around cremations	6
5953	Fill	Fill	5952	723	114	?Pyre related pits around cremations	6
5954	Cut	Ditch	5954	870	127	Boundary/Field ditch	8.1
5955	Fill	Fill	5954	870	127	Boundary/Field ditch	8.1
5956	Cut	Ditch	5956	872	127	Boundary/Field ditch	7
5957	Fill	Fill	5956	872	127	Boundary/Field ditch	7
5958	Cut	Ditch	5958	1044	160	Boundary/Field ditch	9
5959	Fill	Fill	5958	1044	160	Boundary/Field ditch	9
5960	Cut	Ditch	5960	896	131	Ditch, possible trackway	8

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
5961	Fill	Fill	5960	896	131	Ditch, possible trackway	8
5962	Cut	Ditch	5962	889	130	Ditch, possible trackway	8
5963	Fill	Fill	5962	889	130	Ditch, possible trackway	8
5964	Cut	Ditch	5964	906	134	Boundary/Field ditch	8
5965	Fill	Fill	5964	906	134	Boundary/Field ditch	8
5966	Cut	Ditch	5966	928	140	Trackway	8
5967	Fill	Fill	5966	928	140	Trackway	8
5968	Cut	Ditch	5968	927	140	Trackway	8
5969	Fill	Fill	5968	927	140	Trackway	8
5970	Cut	Pit	5970	0			
5971	Fill	Fill	5970				
5972	Cut	Ditch	5972	929	140	Trackway	8
5973	Fill	Fill	5972	929	140	Trackway	8
5974	Cut	Ditch	5974	913	137	Boundary/Field ditch	8
5975	Fill	Fill	5974	913	137	Boundary/Field ditch	8
5976	Cut	Ditch	5976	904	133	Boundary/Field ditch	8
5977	Fill	Fill	5976	904	133	Boundary/Field ditch	8
5978	Cut	Ditch	5978	890	130	Ditch, possible trackway	8
5979	Fill	Fill	5978	890	130	Ditch, possible trackway	8
5980	Cut	Ditch	5980	930	140	Trackway	8
5981	Fill	Fill	5980	930	140	Trackway	8
5982	Cut	Pit	5982	721	114	?Pyre related pits around cremations	6
5983	Fill	Fill	5982	721	114	?Pyre related pits around cremations	6
5984	Cut	Ditch	5984	0			
5985	Fill	Fill	5984	0			
5986	Cut	Ditch	5986	0			
5987	Fill	Fill	5986				
5988	Cut	Ditch	5988	888	130	Ditch, possible trackway	8
5989	Fill	Fill	5988	888	130	Ditch, possible trackway	8
5990	Cut	Ditch	5990	895	131	Ditch, possible trackway	8
5991	Fill	Fill	5990	895	131	Ditch, possible trackway	8
5992	Cut	Pit	5992	0			
5993	Fill	Fill	5992	0			
5994	Cut	Ditch	5994	931	140	Trackway	8
5995	Fill	Fill	5994	931	140	Trackway	8
5996	Cut	Ditch	5996	903	133	Boundary/Field ditch	8
5997	Fill	Fill	5996	903	133	Boundary/Field ditch	8
5998	Cut	Ditch	5998	886	129	Ditch, possible trackway	8
5999	Fill	Fill	5998	886	129	Ditch, possible trackway	8

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
6000	Cut	Ditch	6000	914	137	Boundary/Field ditch	8
6001	Fill	Fill	6000	914	137	Boundary/Field ditch	8
6002	Cut	Pit	6002				
6003	Fill	Fill	6002				
6004	Cut	Ditch	6004	1058	165	Field/Enclosure Ditch	9.1
6005	Fill	Fill	6004	1058	165	Field/Enclosure Ditch	9.1
6006	Cut	Ditch	6006	1059	165	Field/Enclosure Ditch	9.1
6007	Fill	Fill	6006	1059	165	Field/Enclosure Ditch	9.1
6008	Cut	Pit	6008	1031	157	Pits in AP6C	9
6009	Fill	Fill	6008	1031	157	Pits in AP6C	9
6010	Cut	Ditch	6010	1004	152	Boundary/Field ditch	9.2
6011	Fill	Fill	6010	1004	152	Boundary/Field ditch	9.2
6012	Cut	Ditch	6012	1005	152	Boundary/Field ditch	9.2
6013	Fill	Fill	6012	1005	152	Boundary/Field ditch	9.2
6014	Cut	Ditch	6014	1001	152	Boundary/Field ditch	9.2
6015	Fill	Fill	6014	1001	152	Boundary/Field ditch	9.2
6016	Cut	Pit	6016	0			
6017	Fill	Fill	6016				
6018	Cut	Pit	6018	864	125	Pits in AP6C	7
6019	Fill	Fill, basal	6018	864	125	Pits in AP6C	7
6020	Fill	Fill, upper	6018	864	125	Pits in AP6C	7
6021	Cut	Pit, cremation	6021	718	113	Cremation group	6
6022	Fill	Fill	6021	718	113	Cremation group	6
6023	Cut	Ditch terminus	6023	1006	152	Boundary/Field ditch	9.2
6024	Fill	Fill	6023	1006	152	Boundary/Field ditch	9.2
6025	Layer	Subsoil					
6026	Cut	Stakehole	6026	786	115	Structure - ?Roundhouse	7
6027	Fill	Fill	6026	786	115	Structure - ?Roundhouse	7
6028	Cut	Posthole	6028	779	115	Structure - ?Roundhouse	7
6029	Fill	Fill	6028	779	115	Structure - ?Roundhouse	7
6030	Cut	Posthole	6030	780	115	Structure - ?Roundhouse	7
6031	Fill	Fill	6030	780	115	Structure - ?Roundhouse	7
6032	Cut	Posthole	6032	775	115	Structure - ?Roundhouse	7
6033	Fill	Fill	6032	775	115	Structure - ?Roundhouse	7
6034	Cut	Posthole	6034	773	115	Structure - ?Roundhouse	7
6035	Fill	Fill	6034	773	115	Structure - ?Roundhouse	7

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
6036	Cut	Posthole	6036	768	115	Structure - ?Roundhouse	7
6037	Fill	Fill	6036	768	115	Structure - ?Roundhouse	7
6038	Cut	Posthole	6038	763	115	Structure - ?Roundhouse	7
6039	Fill	Fill	6038	763	115	Structure - ?Roundhouse	7
6040	Cut	Posthole	6040	761	115	Structure - ?Roundhouse	7
6041	Fill	Fill	6040	761	115	Structure - ?Roundhouse	7
6042	Cut	Posthole	6042	755	115	Structure - ?Roundhouse	7
6043	Fill	Fill	6042	755	115	Structure - ?Roundhouse	7
6044	Cut	Posthole	6044	753	115	Structure - ?Roundhouse	7
6045	Fill	Fill	6044	753	115	Structure - ?Roundhouse	7
6046	Cut	Posthole	6046	809	115	Structure - ?Roundhouse	7
6047	Fill	Fill	6046	809	115	Structure - ?Roundhouse	7
6048	Cut	Posthole	6048	742	115	Structure - ?Roundhouse	7
6049	Fill	Fill	6048	742	115	Structure - ?Roundhouse	7
6050	Cut	Posthole	6050	749	115	Structure - ?Roundhouse	7
6051	Fill	Fill	6050	749	115	Structure - ?Roundhouse	7
6052	Cut	Posthole	6052	736	115	Structure - ?Roundhouse	7
6053	Fill	Fill	6052	736	115	Structure - ?Roundhouse	7
6054	Cut	Posthole	6054	732	115	Structure - ?Roundhouse	7
6055	Fill	Fill	6054	732	115	Structure - ?Roundhouse	7
6056	Cut	Posthole	6056	728	115	Structure - ?Roundhouse	7
6057	Fill	Fill	6056	728	115	Structure - ?Roundhouse	7
6058	Cut	Posthole	6058	798	115	Structure - ?Roundhouse	7
6059	Fill	Fill	6058	798	115	Structure - ?Roundhouse	7
6060	Cut	Posthole	6060	733	115	Structure - ?Roundhouse	7
6061	Fill	Fill	6060	733	115	Structure - ?Roundhouse	7
6062	Cut	Posthole	6062	799	115	Structure - ?Roundhouse	7
6063	Fill	Fill	6062	799	115	Structure - ?Roundhouse	7
6064	Cut	Posthole	6064	776	115	Structure - ?Roundhouse	7
6065	Fill	Fill	6064	776	115	Structure - ?Roundhouse	7
6066	Cut	Ditch	6066	952	145	Boundary/Field ditch	9.1

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
6067	Fill	Fill	6066	952	145	Boundary/Field ditch	9.1
6068	Cut	Ditch	6068	924	139	Trackway	8
6069	Fill	Fill	6068	924	139	Trackway	8
6070	Cut	Ditch	6070	921	138	Trackway	8
6071	Fill	Fill	6070	921	138	Trackway	8
6072	Cut	Ditch	6072	941	142	Boundary/Field ditch	9.1
6073	Fill	Fill	6072	941	142	Boundary/Field ditch	9.1
6074	Fill	Fill	5658	714	111	Hollow/Spread	6
6075	Cut	Ditch	6075	943	142	Boundary/Field ditch	9.1
6076	Fill	Fill	6075	943	142	Boundary/Field ditch	9.1
6077	Cut	Ditch	6077	944	143	Boundary/Field ditch	9.1
6078	Fill	Fill	6077	944	143	Boundary/Field ditch	9.1
6079	Void			0			
6080	Void						
6081	Cut	Pit	6081	1027	156	Pit cluster in AP6B	9
6082	Fill	Fill	6081	1027	156	Pit cluster in AP6B	9
6083	Cut	Pit	6083	1028	156	Pit cluster in AP6B	9
6084	Fill	Fill	6083	1028	156	Pit cluster in AP6B	9
6085	Cut	Ditch	6085	953	145	Boundary/Field ditch	9.1
6086	Fill	Fill	6085	953	145	Boundary/Field ditch	9.1
6087	Cut	Ditch	6087	1002	152	Boundary/Field ditch	9.2
6088	Fill	Fill, upper	6087	1003	152	Boundary/Field ditch	9.2
6089	Fill	Fill, basal	6087	1002	152	Boundary/Field ditch	9.2
6090	Cut	Gully	6090	962	147	Boundary/Field ditch	9.1
6091	Fill	Fill	6090	962	147	Boundary/Field ditch	9.1
6092	Cut	Pit	6092	1029	156	Pit cluster in AP6B	9
6093	Fill	Fill, basal	6092	1029	156	Pit cluster in AP6B	9
6094	Fill	Fill, upper	6092	1030	156	Pit cluster in AP6B	9
6095	Layer	Make up	6092	1030	156	Pit cluster in AP6B	9
6096	Cut	Posthole	6096	735	115	Structure - ?Roundhouse	7
6097	Fill	Fill	6096	735	115	Structure - ?Roundhouse	7
6098	Cut	Posthole	6098	734	115	Structure - ?Roundhouse	7
6099	Fill	Fill	6098	734	115	Structure - ?Roundhouse	7
6100	Cut	Posthole	6100	737	115	Structure - ?Roundhouse	7
6101	Fill	Fill	6100	737	115	Structure - ?Roundhouse	7

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
6102	Cut	Posthole	6102	738	115	Structure - ?Roundhouse	7
6103	Fill	Fill	6102	738	115	Structure - ?Roundhouse	7
6104	Cut	Posthole	6104	739	115	Structure - ?Roundhouse	7
6105	Fill	Fill	6104	739	115	Structure - ?Roundhouse	7
6106	Cut	Stakehole	6106	740	115	Structure - ?Roundhouse	7
6107	Fill	Fill	6106	740	115	Structure - ?Roundhouse	7
6108	Cut	Posthole	6108	741	115	Structure - ?Roundhouse	7
6109	Fill	Fill	6108	741	115	Structure - ?Roundhouse	7
6110	Cut	Posthole	6110	745	115	Structure - ?Roundhouse	7
6111	Fill	Fill	6110	745	115	Structure - ?Roundhouse	7
6112	Cut	Posthole	6112	744	115	Structure - ?Roundhouse	7
6113	Fill	Fill	6112	744	115	Structure - ?Roundhouse	7
6114	Cut	Posthole	6114	743	115	Structure - ?Roundhouse	7
6115	Fill	Fill	6114	743	115	Structure - ?Roundhouse	7
6116	Cut	Posthole	6116	747	115	Structure - ?Roundhouse	7
6117	Fill	Fill	6116	747	115	Structure - ?Roundhouse	7
6118	Cut	Posthole	6118	748	115	Structure - ?Roundhouse	7
6119	Fill	Fill	6118	748	115	Structure - ?Roundhouse	7
6120	Cut	Posthole	6120	754	115	Structure - ?Roundhouse	7
6121	Fill	Fill	6120	754	115	Structure - ?Roundhouse	7
6122	Cut	Posthole	6122	750	115	Structure - ?Roundhouse	7
6123	Fill	Fill	6122	750	115	Structure - ?Roundhouse	7
6124	Cut	Stakehole	6124	791	115	Structure - ?Roundhouse	7
6125	Fill	Fill	6124	791	115	Structure - ?Roundhouse	7
6126	Cut	Stakehole	6126	831	118	Postholes and Stakeholes extra to structure	7
6127	Fill	Fill	6126	831	118	Postholes and Stakeholes extra to structure	7
6128	Cut	Pit	6128	820	117	Pits outside structure	7
6129	Fill	Fill	6128	820	117	Pits outside structure	7
6130	Fill	Fill	5658	714	111	Hollow/Spread	6
6131	Void			0			

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
6132	Cut	Ditch	6132	954	145	Boundary/Field ditch	9.1
6133	Fill	Fill	6132	954	145	Boundary/Field ditch	9.1
6134	Cut	Pit	6134	862	125	Pits in AP6C	7
6135	Fill	Fill, basal	6134	862	125	Pits in AP6C	7
6136	Fill	Fill, upper	6134	863	125	Pits in AP6C	7
6137	Cut	Ditch	6137	958	146	Boundary/Field ditch	9.1
6138	Fill	Fill	6137	958	146	Boundary/Field ditch	9.1
6139	Cut	Ditch	6139	1050	146	Boundary/Field ditch	9.1
6140	Fill	Fill	6139	1050	146	Boundary/Field ditch	9.1
6141	Cut	Ditch	6141	946	144	Boundary/Field ditch	9.1
6142	Fill	Fill	6141	946	144	Boundary/Field ditch	9.1
6143	Cut	Ditch	6143	956	145	Boundary/Field ditch	9.1
6144	Fill	Fill	6143	956	145	Boundary/Field ditch	9.1
6145	Cut	Ditch	6145	957	145	Boundary/Field ditch	9.1
6146	Fill	Fill	6145	957	145	Boundary/Field ditch	9.1
6147	Cut	Posthole	6147	1051	155	Pits in AP6B	9
6148	Fill	Fill	6147	1051	155	Pits in AP6B	9
6149	Cut	Ditch	6149	949	144	Boundary/Field ditch	9.1
6150	Fill	Fill	6149	949	144	Boundary/Field ditch	9.1
6151	Cut	Ditch	6151	950	144	Boundary/Field ditch	9.1
6152	Fill	Fill	6151	950	144	Boundary/Field ditch	9.1
6153	Cut	Ditch	6153	987	150	Field/Enclosure Ditch	9.2
6154	Fill	Fill	6153	987	150	Field/Enclosure Ditch	9.2
6155	Cut	Ditch	6155	947	144	Boundary/Field ditch	9.1
6156	Fill	Fill	6155	947	144	Boundary/Field ditch	9.1
6157	Cut	Ditch terminus	6157	985	150	Field/Enclosure Ditch	9.2
6158	Fill	Fill	6157	985	150	Field/Enclosure Ditch	9.2
6159	Cut	Ditch	6159	948	144	Boundary/Field ditch	9.1
6160	Fill	Fill	6159	948	144	Boundary/Field ditch	9.1
6161	Cut	Ditch	6161	984	150	Field/Enclosure Ditch	9.2
6162	Fill	Fill	6161	984	150	Field/Enclosure Ditch	9.2
6163	Cut	Ditch	6163	982	150	Field/Enclosure Ditch	9.2
6164	Fill	Fill, basal	6163	982	150	Field/Enclosure Ditch	9.2
6165	Fill	Fill, upper	6163	983	150	Field/Enclosure Ditch	9.2

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
6166	Cut	Ditch	6166	970	149	Boundary/Field ditch	9.1
6167	Fill	Fill	6166	970	149	Boundary/Field ditch	9.1
6168	Cut	Gully	6168	966	148	Boundary/Field ditch	9.1
6169	Fill	Fill	6168	966	148	Boundary/Field ditch	9.1
6170	Cut	Ditch	6170	959	146	Boundary/Field ditch	9.1
6171	Fill	Fill, upper	6170	960	146	Boundary/Field ditch	9.1
6172	Fill	Fill, basal	6170	959	146	Boundary/Field ditch	9.1
6173	Cut	Posthole	6173	1052	162	Posthole in ditch nexus	9
6174	Fill	Fill	6173	1052	162	Posthole in ditch nexus	9
6175	Cut	Ditch	6175	988	150	Field/Enclosure Ditch	9.2
6176	Fill	Fill, basal	6175	988	150	Field/Enclosure Ditch	9.2
6177	Fill	Fill, upper	6175	989	150	Field/Enclosure Ditch	9.2
6178	Cut	Ditch	6178	990	150	Field/Enclosure Ditch	9.2
6179	Fill	Fill, basal	6178	990	150	Field/Enclosure Ditch	9.2
6180	Fill	Fill, intermediate	6178	991	150	Field/Enclosure Ditch	9.2
6181	Fill	Fill, upper	6178	991	150	Field/Enclosure Ditch	9.2
6182	Cut	Ditch	6182	969	149	Boundary/Field ditch	9.1
6183	Fill	Fill	6182	969	149	Boundary/Field ditch	9.1
6184	Cut	Posthole	6184	1035	155	Pits in AP6B	9
6185	Fill	Fill	6184	1035	155	Pits in AP6B	9
6186	Cut	Posthole	6186	1036	155	Pits in AP6B	9
6187	Fill	Fill	6186	1036	155	Pits in AP6B	9
6188	Cut	Ditch	6188	986	150	Field/Enclosure Ditch	9.2
6189	Fill	Fill	6188	986	150	Field/Enclosure Ditch	9.2
6190	Cut	Ditch	6190	993	150	Field/Enclosure Ditch	9.2
6191	Fill	Fill	6190	993	150	Field/Enclosure Ditch	9.2
6192	Cut	Ditch	6192	975	150	Field/Enclosure Ditch	9.2
6193	Fill	Fill	6192	975	150	Field/Enclosure Ditch	9.2
6194	Cut	Ditch	6194	995	151	Boundary/Field ditch	9.2
6195	Fill	Fill	6194	995	151	Boundary/Field ditch	9.2
6196	Cut	Ditch	6196	996	151	Boundary/Field ditch	9.2
6197	Fill	Fill	6196	996	151	Boundary/Field ditch	9.2
6198	Cut	Ditch	6198	997	151	Boundary/Field ditch	9.2

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
6199	Fill	Fill	6198	997	151	Boundary/Field ditch	9.2
6200	Cut	Ditch	6200	973	150	Field/Enclosure Ditch	9.2
6201	Fill	Fill	6200	973	150	Field/Enclosure Ditch	9.2
6202	Cut	Pit	6202	1007	153	Clay-lined pit ?function	9.2
6203	Fill	Fill, intermediate	6202	1009	153	Clay-lined pit ?function	9.2
6204	Fill	Fill, upper	6202	1010	153	Clay-lined pit ?function	9.2
6205	Void						
6206	Deposit	Subsoil					
6207	Deposit	Subsoil					
6208	Cut	Ditch	6208	980	150	Field/Enclosure Ditch	9.2
6209	Fill	Fill	6208	980	150	Field/Enclosure Ditch	9.2
6210	Cut	Ditch	6210	951	144	Boundary/Field ditch	9.1
6211	Fill	Fill	6210	951	144	Boundary/Field ditch	9.1
6212	Cut	Ditch	6212	992	150	Field/Enclosure Ditch	9.2
6213	Fill	Fill	6212	992	150	Field/Enclosure Ditch	9.2
6214	Fill	Fill, intermediate	6202	1009	153	Clay-lined pit ?function	9.2
6215	Fill	Fill, tertiary	6202	1008	153	Clay-lined pit ?function	9.2
6216	Fill	Fill, secondary	6202	1008	153	Clay-lined pit ?function	9.2
6217	Fill	Fill, primary	6202	1007	153	Clay-lined pit ?function	9.2
6218	Cut	Ditch	6218	998	151	Boundary/Field ditch	9.2
6219	Fill	Fill	6218	998	151	Boundary/Field ditch	9.2
6220	Cut	??	6220	715	111	Hollow/Spread	6
6221	Fill	Fill	6220	715	111	Hollow/Spread	6
6222	Cut	Tree throw	6222	1057			
6223	Fill	Fill, upper	6222	1057			
6224	Fill	Fill, basal	6222	1057			
6225	Fill	Fill, upper	6222	1057			
6226	Cut	Ditch terminus	6226	971	150	Field/Enclosure Ditch	9.2
6227	Fill	Fill	6226	971	150	Field/Enclosure Ditch	9.2
6228	Cut	Pit	6228	1024	155	Pits in AP6B	9
6229	Fill	Fill, basal	6228	1024	155	Pits in AP6B	9
6230	Fill	Fill, intermediate	6228	1025	155	Pits in AP6B	9
6231	Fill	Fill, upper	6228	1025	155	Pits in AP6B	9
6232	Cut	Pit	6232	1023	155	Pits in AP6B	9
6233	Fill	Fill	6232	1023	155	Pits in AP6B	9
6234	Cut	Pit	6234	1026	155	Pits in AP6B	9
6235	Fill	Fill	6234	1026	155	Pits in AP6B	9
6236	Cut	Ditch	6236	981	150	Field/Enclosure Ditch	9.2
6237	Fill	Fill	6236	981	150	Field/Enclosure Ditch	9.2

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
6238	Fill	Fill	6220	715	111	Hollow/Spread	6
6239	Fill	Fill	6220	715	111	Hollow/Spread	6
6240	Cut	Ditch	6240	1000	151	Boundary/Field ditch	9.2
6241	Fill	Fill	6240	1000	151	Boundary/Field ditch	9.2
6242	Cut	Ditch	6242	978	150	Field/Enclosure Ditch	9.2
6243	Fill	Fill, basal	6242	978	150	Field/Enclosure Ditch	9.2
6244	Fill	Fill, upper	6242	979	150	Field/Enclosure Ditch	9.2
6245	Cut	Ditch	6245	974	150	Field/Enclosure Ditch	9.2
6246	Fill	Fill	6245	974	150	Field/Enclosure Ditch	9.2
6247	Cut	Pit	6247	1033	158	Post pad	9
6248	Fill	Fill, basal	6247	1033	158	Post pad	9
6249	Fill	Fill, upper	6247	1034	158	Post pad	9
6250	Layer	Made ground	6250	1041	159	Pit cluster in AP6B	9
6251	Layer	Made ground	6250	1041	159	Pit cluster in AP6B	9
6252	Cut	Pit	6252	1039	159	Pit cluster in AP6B	9
6253	Fill	Fill	6252	1039	159	Pit cluster in AP6B	9
6254	Layer	Made ground	6254	1042	159	Pit cluster in AP6B	9
6255	Layer	Made ground	6254	1042	159	Pit cluster in AP6B	9
6256	Cut	Posthole	6256	1037	159	Pit cluster in AP6B	9
6257	Fill	Fill	6256	1037	159	Pit cluster in AP6B	9
6258	Void			0			
6259	Void			0			
6260	Cut	Posthole	6260	1038	159	Pit cluster in AP6B	
6261	Fill	Fill	6260	1038	159	Pit cluster in AP6B	
6262	Cut	Ditch	6262	965	147	Boundary/Field ditch	9.1
6263	Fill	Fill	6262	965	147	Boundary/Field ditch	9.1
6264	Cut	Ditch	6264	968	148	Boundary/Field ditch	9.1
6265	Fill	Fill	6264	968	148	Boundary/Field ditch	9.1
6266	Cut	Ditch	6266	999	151	Boundary/Field ditch	9.2
6267	Fill	Fill	6266	999	151	Boundary/Field ditch	9.2
6268	Cut	Ditch	6268	976	150	Field/Enclosure Ditch	9.2
6269	Fill	Fill	6268	976	150	Field/Enclosure Ditch	9.2
6270	Cut	Pit with posthole	6270	1032	155	Pits in AP6B	9
6271	Fill	Fill	6270	1032	155	Pits in AP6B	9
6272	Cut	Ditch	6272	967	148	Boundary/Field ditch	9.1

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
6273	Fill	Fill	6272	967	148	Boundary/Field ditch	9.1
6274	Cut	Pit	6274	1040	159	Pit cluster in AP6B	9
6275	Fill	Fill	6274	1040	159	Pit cluster in AP6B	9
6276	Cut	Ditch	6276	994	151	Boundary/Field ditch	9.2
6277	Fill	Fill	6276	994	151	Boundary/Field ditch	9.2
6278	Cut	Ditch	6278	963	147	Boundary/Field ditch	9.1
6279	Fill	Fill, basal	6278	963	147	Boundary/Field ditch	9.1
6280	Fill	Fill, upper	6278	964	147	Boundary/Field ditch	9.1
6281	Cut	Ditch	6281	846	121	Southern parallel ditch	7
6282	Fill	Fill	6281	846	121	Southern parallel ditch	7
6283	Cut	Ditch	6283	961	146	Boundary/Field ditch	9.1
6284	Fill	Fill	6283	961	146	Boundary/Field ditch	9.1
6285	Fill	Fill	6285				
6286	Fill	Fill	6286				
6287	Cut	Pit, quarry	6287	0			
Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
5500	Void			0			
5501	Cut	Ditch terminus	5501	1061	166	Field/Enclosure Ditch	9.1
5502	Fill	Fill	5501	1061	166	Field/Enclosure Ditch	9.1
5503	Cut	Ditch	5503	1060	166	Field/Enclosure Ditch	9.1
5504	Fill	Fill	5503	1060	166	Field/Enclosure Ditch	9.1
5505	Deposit	Redeposited natural	5505	0			
5506	Cut	Pit	5506	0			
5507	Fill	Fill	5506	0			
5508	Deposit	Destruction debris	5508	0			
5509	Deposit	Subsoil	5509	0			
5510	Deposit	Natural	5510	0			
5511	Void			0			
5512	Cut	Pit	5512	709	110	E Neo pit group	5
5513	Fill	Fill	5512	709	110	E Neo pit group	5
5514	Cut	Ditch	5514	1071	168	Field/Enclosure Ditch	
5515	Fill	Fill	5514	1071	168	Field/Enclosure Ditch	
5516	Cut	Ditch	5516	1064	166	Field/Enclosure Ditch	9.1
5517	Fill	Fill	5516	1064	166	Field/Enclosure Ditch	9.1
5518	Cut	Pit	5518	710	110	E Neo pit group	5
5519	Fill	Fill	5518	710	110	E Neo pit group	5

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
5520	Cut	Posthole	5520	0			
5521	Fill	Fill	5520	0			
5522	Cut	Posthole	5522	0			
5523	Fill	Fill	5522	0			
5524	Cut	Ditch	5524	1070	168	Field/Enclosure Ditch	
5525	Fill	Fill	5524	1070	168	Field/Enclosure Ditch	
5526	Cut	Pit	5526	711	110	E Neo pit group	5
5527	Fill	Fill	5526	711	110	E Neo pit group	5
5528	Cut	Pit	5528	0			
5529	Fill	Fill	5528	0			
5530	Cut	Pit	5530	0			
5531	Fill	Fill	5530				
5532	Cut	Pit	5532	0			
5533	Fill	Fill	5532				
5534	Cut	Pit	5534	712	110	E Neo pit group	5
5535	Fill	Fill	5534	712	110	E Neo pit group	5
5536	Cut	Posthole	5536	0			
5537	Fill	Fill	5536	0			
5538	Cut	Pit	5538	0			
5539	Fill	Fill	5538	0			
5540	Cut	Pit	5540	0			
5541	Fill	Fill	5540	0			
5542	Cut	Pit	5542	0			
5543	Fill	Fill	5542				
5544	Cut	Pit	5544	0			
5545	Fill	Fill	5544				
5546	Cut	Ditch	5546	1062	166	Field/Enclosure Ditch	9.1
5547	Fill	Fill	5546	1062	166	Field/Enclosure Ditch	9.1
5548	Cut	Pit	5548	0			
5549	Fill	Fill	5548	0			
5550	Cut	Ditch	5550	1063	166	Field/Enclosure Ditch	9.1
5551	Fill	Fill	5550	1063	166	Field/Enclosure Ditch	9.1
5552	Cut	Pit	5552	0			
5553	Fill	Fill	5552				
5554	Cut	Ditch	5554	0			
5555	Fill	Fill	5554	0			
5556	Cut	Ditch	5556	1066	167	Field/Enclosure Ditch	9.1
5557	Fill	Fill	5556	1066	167	Field/Enclosure Ditch	9.1
5558	Cut	Ditch	5558	0			
5559	Fill	Fill	5558	0			
5560	Cut	Ditch	5560	1069	168	Field/Enclosure Ditch	
5561	Fill	Fill	5560	1069	168	Field/Enclosure Ditch	
5562	Cut	Ditch	5562	1065	167	Field/Enclosure Ditch	9.1
5563	Fill	Fill	5562	1065	167	Field/Enclosure Ditch	9.1
5564	Cut	Pit	5564	0			
5565	Fill	Fill	5564	0			

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
5566	Cut	Stakehole	5566	0			
5567	Fill	Fill	5566	0			
5568	Cut	Ditch	5568	1076	169	Field/Enclosure Ditch	
5569	Fill	Fill	5568	1076	169	Field/Enclosure Ditch	
5570	Cut	Ditch	5570	1075	169	Field/Enclosure Ditch	
5571	Fill	Fill	5570	1075	169	Field/Enclosure Ditch	
5572	Cut	Ditch	5572	1073	169	Field/Enclosure Ditch	
5573	Fill	Fill	5572	1073	169	Field/Enclosure Ditch	
5574	Cut	Ditch	5574	1067	167	Field/Enclosure Ditch	9.1
5575	Fill	Fill	5574	1067	167	Field/Enclosure Ditch	9.1
5576	Cut	Ditch	5576	1068	167	Field/Enclosure Ditch	9.1
5577	Fill	Fill	5576	1068	167	Field/Enclosure Ditch	9.1
5578	Cut	Posthole	5578	832	118	Postholes and Stakeholes extra to structure	7
5579	Fill	Fill	5578	832	118	Postholes and Stakeholes extra to structure	7
5580	Cut	Posthole	5580	833	118	Postholes and Stakeholes extra to structure	7
5581	Fill	Fill	5580	833	118	Postholes and Stakeholes extra to structure	7
5582	Cut	Posthole	5582	790	115	Structure - ?Roundhouse	7
5583	Fill	Fill	5582	790	115	Structure - ?Roundhouse	7
5584	Cut	Posthole	5584	789	115	Structure - ?Roundhouse	7
5585	Fill	Fill	5584	789	115	Structure - ?Roundhouse	7
5586	Cut	Posthole	5586	772	115	Structure - ?Roundhouse	7
5587	Fill	Fill	5586	772	115	Structure - ?Roundhouse	7
5588	Cut	Posthole	5588	777	115	Structure - ?Roundhouse	7
5589	Fill	Fill	5588	777	115	Structure - ?Roundhouse	7
5590	Cut	Pit	5590	817	116	Pits within structure	7
5591	Fill	Fill	5590	818	116	Pits within structure	7
5592	Cut	Pit	5592	814	116	Pits within structure	7
5593	Fill	Fill	5592	814	116	Pits within structure	7

Context	Type	Interpretation	Parent	SubGroup	Group	G Desc	Period
5594	Cut	Pit	5594	815	116	Pits within structure	7
5595	Fill	Fill	5594	816	116	Pits within structure	7
5596	Cut	Posthole	5596	781	115	Structure - ?Roundhouse	7
5597	Fill	Fill	5596	781	115	Structure - ?Roundhouse	7
5598	Cut	Pit	5598	824	117	Pits outside structure	7
5599	Fill	Fill	5598	824	117	Pits outside structure	7
5600	Cut	Pit	5600	812	116	Pits within structure	7
5601	Fill	Fill	5600	813	116	Pits within structure	7
5602	Cut	Pit	5602	823	117	Pits outside structure	7
5603	Fill	Fill	5602	823	117	Pits outside structure	7
5604	Cut	Pit	5604	822	117	Pits outside structure	7
5605	Fill	Fill	5604	822	117	Pits outside structure	7
5606	Cut	Posthole	5606	793	115	Structure - ?Roundhouse	7
5607	Fill	Fill	5606	793	115	Structure - ?Roundhouse	7
5608	Cut	Posthole	5608	796	115	Structure - ?Roundhouse	7
5609	Fill	Fill	5608	796	115	Structure - ?Roundhouse	7

Appendix 2: Finds Quantification

Context	Lithics	Weight (g)	Pottery	Weight (g)	CBM	Weight (g)	Stone	Weight (g)	Slag	Weight (g)	Iron	Weight (g)	Bone	Weight (g)	Skeleton	Weight (g)	Fire Cracked Flint	Weight (g)	Fired Clay or Daub	Weight (g)	Glass	Weight (g)	Shell	Weight (g)
211/007	5	202	22	73													7	124						
222/005	1	37															1	11						
227/005	2	49															10	547						
234/013	1	11															1	28						
234/015			1	4																				
234/017	1	37																						
234/021	2	11	3	5													3	243						
234/025																	2	41						
234/027	1	32															2	150						
234/029			2	3																				
234/031	1	3															5	52						
234/033	2	79															2	108						
234/035	6	83	1	2													2	27						
234/039																	1	22						
234/041			7	104																				
234/043			3	29																				
235/004	2	32	2	6													33	683						
235/006	3	97	12	37													22	605						

Context	Lithics	Weight (g)	Pottery	Weight (g)	CBM	Weight (g)	Stone	Weight (g)	Slag	Weight (g)	Iron	Weight (g)	Bone	Weight (g)	Skeleton	Weight (g)	Fire Cracked Flint	Weight (g)	Fired Clay or Daub	Weight (g)	Glass	Weight (g)	Shell	Weight (g)
294/005	10	480	12	28													21	829	1	10				
327/004	1	2	7	80													4	137						
328/004	1	56	49	350			1	65									8	223	7	31				
329/004	1	2	5	4															2	7				
331/004	1	18	2	8													3	120						
338/004	5	13															5	60						
346/004			1	2	9	1212	2	982									2	48						
348/004	4	229															6	94						
354/006	1	13															2	52						
354/008	1	43	1	3													1	93						
356/004	2	153	63	507	1	240	1	11					17	118			15	487	7	88				
370/005	3	25	6	22													9	33						
371/006	1	17	2	41																				
378/004	1	9															2	14						
380/007	1	8	1	7													1	61						
381/008	8	65	6	38													28	342						
381/009			1	7																				
383/002			6	12																				
386/005	1	4	6	22													4	122						
414/004	4	32															5	59						

Context	Lithics	Weight (g)	Pottery	Weight (g)	CBM	Weight (g)	Stone	Weight (g)	Slag	Weight (g)	Iron	Weight (g)	Bone	Weight (g)	Skeleton	Weight (g)	Fire Cracked Flint	Weight (g)	Fired Clay or Daub	Weight (g)	Glass	Weight (g)	Shell	Weight (g)
414/007	3	40															4	108						
416/005																	1	14						
421/005	3	50					1	22									11	170						
427/007	12	568	8	41													18	536						
427/008	14	220															31	657						
431/007	7	54															7	132						
434/005					1	522																		
434/019	1	4																						
435/005	3	466															2	23						
436/005	2	93																						
438/004	6	272															2	114						
440/006	4	53															3	31						
444/005	1	5															7	221						
450/010	2	58															2	186						
450/011	2	17															10	167						
451/005	1	29															1	10						
451/007	30	1912	4	45			2	293									75	2694						
451/008	26	400	5	35									276	1538			32	925	1	11				
451/009	2	23	1	4													3	81						
499/005	1	13															21	535						

Context	Lithics	Weight (g)	Pottery	Weight (g)	CBM	Weight (g)	Stone	Weight (g)	Slag	Weight (g)	Iron	Weight (g)	Bone	Weight (g)	Skeleton	Weight (g)	Fire Cracked Flint	Weight (g)	Fired Clay or Daub	Weight (g)	Glass	Weight (g)	Shell	Weight (g)
5513	2	18	9	73																				
5515	1	2					1	376									6	56	2	297				
5519	8	180	32	119																				
5525	4	53											14	47			7	54						
5527	4	46	15	56													2	12						
5531	1	1	2	3																				
5533	1	10																						
5535			1	3																				
5543																			2	1				
5545																	1	9						
5551																	2	51						
5553																	2	12						
5557	1	12																						
5561	1	4											23	53			10	83						
5569	2	20															2	52						
5573	1	42															1	9	2	2				
5579																	1	61						
5583	5	35															7	1079						
5589	18	369	12	146			4	76									22	358	2	64				
5593	3	44	136	1147													34	465						

Context	Lithics	Weight (g)	Pottery	Weight (g)	CBM	Weight (g)	Stone	Weight (g)	Slag	Weight (g)	Iron	Weight (g)	Bone	Weight (g)	Skeleton	Weight (g)	Fire Cracked Flint	Weight (g)	Fired Clay or Daub	Weight (g)	Glass	Weight (g)	Shell	Weight (g)
5594			31	230													3	220						
5595			1	12																				
5597	2	15															15	116						
5599																	3	103						
5603																	1	21						
5605	44	993	17	112			1	21									275	3767	5	42				
5611			2	4													1	27						
5613	1	29	1	1													11	41						
5617	1	9																						
5619	1	3																						
5621																	3	544						
5623			17	292			1	78					9	60			7	121	18	955				
5626			1	51																				
5628			7	25													1	3						
5632	1	5															17	237						
5634																	3	82	5	10				
5636																	6	690						
5637	6	423	25	535									4	2			11	1075						
5638	3	11	11	125									6	7			21	561						
5642	1	19	5	25			1	24									4	86						

Context	Lithics	Weight (g)	Pottery	Weight (g)	CBM	Weight (g)	Stone	Weight (g)	Slag	Weight (g)	Iron	Weight (g)	Bone	Weight (g)	Skeleton	Weight (g)	Fire Cracked Flint	Weight (g)	Fired Clay or Daub	Weight (g)	Glass	Weight (g)	Shell	Weight (g)
5644	2	39	29	165													43	614						
5646	6	42	49	1068									1	2			41	918	15	64				
5647			6	111													27	531						
5649																	2	65						
5651			2	8			3	279									21	265	1	18				
5653			5	2													1	35						
5657			2	3																				
5660	2	17	3	1															1	2				
5664	5	58	1	1													3	26						
5666	20	425	13	25													94	795	7	16				
5668			1	46																				
5673																	1	16						
5677	72	1184	4	39			2	1134					8	141			189	6262	1	21				
5678	19	333	5	26													143	3324	3	51				
5679	29	493	10	57													264	5868	3	21				
5681																	1	8						
5685	3	4	1	4																				
5689	1	44	1	6													3	101						
5691	1	5					1	15									1	5						
5703	6	155	2	6													7	103						

Context	Lithics	Weight (g)	Pottery	Weight (g)	CBM	Weight (g)	Stone	Weight (g)	Slag	Weight (g)	Iron	Weight (g)	Bone	Weight (g)	Skeleton	Weight (g)	Fire Cracked Flint	Weight (g)	Fired Clay or Daub	Weight (g)	Glass	Weight (g)	Shell	Weight (g)
5705	1	33																						
5706	5	112	1	1															1	1				
5709	2	6	2	6													5	49						
5711																	17	549						
5713	1	13																						
5715	7	112	6	15													2	26	1	3				
5719	3	33																						
5721	10	278																						
5723	1	1	3	10			1	3524									3	313						
5724			2	4																				
5726	6	58															10	180						
5727	5	135	40	402													55	996	13	433				
5733							1	452																
5735	24	400	1	1													6	53	1	2				
5737	8	76	1	4			2	2									6	81	3	1				
5739			26	85													10	288	3	46				
5740	8	368	1	5	1	121							35	50			8	350					9	2
5742																	2	31						
5745	1	1	2	2																				
5746	5	87					1	57					106	279			4	185	1	64			1	56

Context	Lithics	Weight (g)	Pottery	Weight (g)	CBM	Weight (g)	Stone	Weight (g)	Slag	Weight (g)	Iron	Weight (g)	Bone	Weight (g)	Skeleton	Weight (g)	Fire Cracked Flint	Weight (g)	Fired Clay or Daub	Weight (g)	Glass	Weight (g)	Shell	Weight (g)
5751			1	20					1	3							1	1						
5757			14	32									5	3					2	1				
5762			31	340													24	551	1	2				
5764			1	6													7	123						
5766																	5	58						
5768																	3	20						
5773	2	2															8	60						
5775	5	13															3	49	1	3				
5777																	2	30	1	2				
5779	1	18			2	55	1	436			50	911							2	8				
5780	51	930	1	15									3	23			144	4180						
5784	2	20																						
5786	1	2			5	92													4	46				
5794	2	22																						
5796	1	17															5	368						
5797	2	49															4	105						
5798	4	69															9	635						
5805	1	2															3	115						
5807	1	3	2	3													3	9						
5809																	1	3						

Context	Lithics	Weight (g)	Pottery	Weight (g)	CBM	Weight (g)	Stone	Weight (g)	Slag	Weight (g)	Iron	Weight (g)	Bone	Weight (g)	Skeleton	Weight (g)	Fire Cracked Flint	Weight (g)	Fired Clay or Daub	Weight (g)	Glass	Weight (g)	Shell	Weight (g)
5813																	2	32						
5815	1	4	38	208									7	6			15	297	7	121				
5817	1	7																						
5819									1	11							1	9	1	2				
5821			1	5													4	31						
5823	1	16	1	10																				
5825	2	6															1	14			1	72		
5829	3	57	16	57													17	213	1	1				
5831	1	4																						
5839			3	4																				
5841																	3	48						
5843																	1	12						
5845			4	21													1	16						
5847																	2	67						
5851	3	11															1	51						
5853	1	15															1	2	1	1				
5859			1	6																				
5861			2	2													3	12						
5863			1	2													1	56						
5865	2	40	1	4													1	8						

Context	Lithics	Weight (g)	Pottery	Weight (g)	CBM	Weight (g)	Stone	Weight (g)	Slag	Weight (g)	Iron	Weight (g)	Bone	Weight (g)	Skeleton	Weight (g)	Fire Cracked Flint	Weight (g)	Fired Clay or Daub	Weight (g)	Glass	Weight (g)	Shell	Weight (g)
5869	1	2	2	5	5	26			1	1	1	6	1	21			3	20						
5871	1	4															2	63	15	91				
5873	2	51											9	63			2	51	8	175				
5875	3	11	1	1													3	144						
5881					1	4											1	6						
5883	3	38	5	116					5	178							6	270	1	1				
5884	9	136	1	2													6	50						
5888																	2	64						
5894																	1	12	87	3093				
5896													10	10			2	23	2	24				
5898	7	240	1	1					2	2							5	197	2	54				
5900	1	8																						
5902	1	6																						
5906	2	27	1	6													6	172						
5912	2	41																						
5922	1	18	2	11													3	51						
5926	2	3	3	12													23	341						
5936	2	4															5	74						
5938	4	22															19	259						
5940	3	105	2	14													9	202						

Context	Lithics	Weight (g)	Pottery	Weight (g)	CBM	Weight (g)	Stone	Weight (g)	Slag	Weight (g)	Iron	Weight (g)	Bone	Weight (g)	Skeleton	Weight (g)	Fire Cracked Flint	Weight (g)	Fired Clay or Daub	Weight (g)	Glass	Weight (g)	Shell	Weight (g)
5948	2	3															4	84						
5950	3	4															5	69						
5955	3	73	1	5													15	230						
5957			1	7																				
5959	19	771	9	59													14	344						
5961	3	105															1	21						
5967	1	2															1	32						
5969	1	12	1	12																				
5971	2	15	1	4													29	995						
5975																	3	18	2	2				
5987																	5	64						
5989	4	20	1	1													4	99						
5995			1	7																				
5997																	2	79						
5999			2	3													3	105						
6003			3	12													8	18						
6011	1	17															6	161						
6013	8	45	5	7													52	404	3	19				
6015			3	3																				
6017	19	383															15	227						

Context	Lithics	Weight (g)	Pottery	Weight (g)	CBM	Weight (g)	Stone	Weight (g)	Slag	Weight (g)	Iron	Weight (g)	Bone	Weight (g)	Skeleton	Weight (g)	Fire Cracked Flint	Weight (g)	Fired Clay or Daub	Weight (g)	Glass	Weight (g)	Shell	Weight (g)
6019	5	267	9	67			1	44									48	1094	8	102				
6020	3	134	10	58													14	715	1	12				
6025	1	359																						
6029																	1	31						
6033																	4	9						
6035																	6	20						
6037			1	5													2	325						
6039	3	17															2	43						
6041			2	14													3	32						
6045			1	1													6	273						
6047																	2	11	8	43				
6049			16	140			2	315									3	20						
6051																	2	8						
6055			1	5													3	14						
6061			1	2													5	72						
6065			3	4													7	74						
6067	1	7	7	141													1	53	2	32				
6069	4	37	3	15													3	86						
6071	6	7															2	22						
6073			29	219													1	12						

Context	Lithics	Weight (g)	Pottery	Weight (g)	CBM	Weight (g)	Stone	Weight (g)	Slag	Weight (g)	Iron	Weight (g)	Bone	Weight (g)	Skeleton	Weight (g)	Fire Cracked Flint	Weight (g)	Fired Clay or Daub	Weight (g)	Glass	Weight (g)	Shell	Weight (g)
6074	2	66	2	47											1	1	7	821	1	10				
6076	2	24	10	68													4	39						
6080			13	179	1	208											1	25						
6082			1	2									1	1			1	34						
6084	3	5	3	22													4	38	2	20				
6086	4	46	21	83			1	175					26	91			1	64	4	90				
6088	1	80															4	44						
6091			1	1																				
6093			31	450			1	29					1	1			2	95	2	34				
6094			9	113									5	22					3	35				
6095			1	40																				
6103			7	46													8	248						
6105			3	15													6	256						
6107																	2	13						
6109	1	108															4	29						
6113	5	193	3	69													22	1086						
6115	1	4	7	59									3	1			19	469						
6117			3	14													9	222						
6119	1	2	2	4													7	130	1	2				
6121			1	4			2	66									5	22						

Context	Lithics	Weight (g)	Pottery	Weight (g)	CBM	Weight (g)	Stone	Weight (g)	Slag	Weight (g)	Iron	Weight (g)	Bone	Weight (g)	Skeleton	Weight (g)	Fire Cracked Flint	Weight (g)	Fired Clay or Daub	Weight (g)	Glass	Weight (g)	Shell	Weight (g)
6123																	6	361						
6129	6	125	11	45													56	1486	3	19				
6130	11	271	87	1508			6	310									54	1808	25	451				
6133			1	7									1	3										
6136			9	77															2	11				
6138			8	46													1	22	3	8				
6142			64	283													6	98	3	12				
6144																	1	100	4	481				
6146			6	69																				
6152			3	12															4	11				
6154	48	180	19	70			1	55									10	431						
6156			2	9																				
6158			2	7													2	98						
6160	2	23	110	811									1	1			1	4	1	94				
6162	2	39	1	5													3	134						
6164	1	20	2	4																				
6167			2	3													1	52						
6171			145	1377									5	75			7	592	21	1308				
6174			49	177									10	51			2	138	5	559				
6177	3	13	159	1620			1	793	1	402			2	5			8	293	11	224				

Context	Lithics	Weight (g)	Pottery	Weight (g)	CBM	Weight (g)	Stone	Weight (g)	Slag	Weight (g)	Iron	Weight (g)	Bone	Weight (g)	Skeleton	Weight (g)	Fire Cracked Flint	Weight (g)	Fired Clay or Daub	Weight (g)	Glass	Weight (g)	Shell	Weight (g)
6181			3	66																				
6183			1	4																				
6189			19	92													12	110						
6191			31	279															12	91				
6193			15	130									9	9					6	45				
6195																			1	2				
6197			1	7													1	4						
6199	2	174	3	24							2	13					1	2	2	1				
6201			1	2													1	24						
6203			6	16																				
6205																			7	121				
6207			2	5																				
6209	3	7	3	6													4	41	1	28			1	1
6211			4	22															1	4				
6213			10	44			2	154											10	31				
6219																	1	3						
6221	1	43	14	76							1	49					7	399						
6225	100	245																						
6227			3	42													3	247						
6230	2	230	38	324													2	127	4	739				

Context	Lithics	Weight (g)	Pottery	Weight (g)	CBM	Weight (g)	Stone	Weight (g)	Slag	Weight (g)	Iron	Weight (g)	Bone	Weight (g)	Skeleton	Weight (g)	Fire Cracked Flint	Weight (g)	Fired Clay or Daub	Weight (g)	Glass	Weight (g)	Shell	Weight (g)
6231	1	14	29	218			1	106									3	229	7	109				
6233	1	45	3	9															2	14				
6235	1	11	2	5													1	30	1	2				
6237			17	153															3	4				
6238	1	8	12	16					4	95			15	68			1	103	1	4				
6241			17	92													4	23	9	24				
6243			10	91			1	85									3	43	2	3				
6246	2	38	30	238									2	2			3	97						
6248	12	1156					8	2899									133	6287	9	80				
6255			2	20															1	428				
6261			29	188															3	31				
6263	2	6	35	346													3	76	4	53				
6267			10	70															7	22				
6269	1	75	7	19															46	443				
6271	2	18	14	63													4	80						
6273			9	11															2	8				
6276			32	178																				
6279			11	112													2	33						
6280	3	81	73	500			1	506			1	4							11	60				
6282	1	19															9	140						

Context	Lithics	Weight (g)	Pottery	Weight (g)	CBM	Weight (g)	Stone	Weight (g)	Slag	Weight (g)	Iron	Weight (g)	Bone	Weight (g)	Skeleton	Weight (g)	Fire Cracked Flint	Weight (g)	Fired Clay or Daub	Weight (g)	Glass	Weight (g)	Shell	Weight (g)
6284			10	88															1	18				
6285			71	609													4	412	3	41				
6286					1	800																		
6289			19	305																				
Total	814	14525	2185	18572	16	1306	48	12011	15	692	55	983	322	1097	1	1	2570	64832	501	11724	1	72	11	59

Appendix 3: Environmental Quantifications

Table 1: Residue quantification (* = 1-10, ** = 11-50, *** = 51-250, **** = >250) and weights in grams

Sample Number	Context	Context Type	Sample Volume (L)	Charcoal >4mm	Weight (g)	Charcoal 2-4mm	Weight (g)	Charcoal Identifications	Charred Botanicals	Weight (g)	Bone and Teeth	Weight (g)	Burnt Bone >8mm	Weight (g)	Burnt Bone 4-8mm	Weight (g)	Burnt Bone 2-4mm	Weight (g)	Marine Molluscs	Weight (g)	Land Snail Shells	Weight (g)	Other (eg. pot, cbm, etc.) (quantity/ weight)
105	5513	Pit	40	**	4	***	4	<i>Quercus</i> sp. 2, Maloideae 2, <i>Corylus/Alnus</i> sp. 2	*	<1													Pot (**/97g) Flint (*5g) Slag (*1g) FCF (*40g)Mag.Mat. >2mm (*<1g) Mag.Mat. <2mm (***/1g)
106	5527	Pit	30	*	<1																		Flint (*9g) FCF (**/133g) Mag.Mat. >2mm (*<1g) Mag.Mat. <2mm (***/<1g)
107	5589	Ph	20	**	7	***	7																Pot (**/117g) Stone (*291g) Flint (*1g) B.Clay (*4g) FCF (***/1927g) Mag.Mat. >2mm (**/1g) Mag.Mat. <2mm (***/3g)
108	5593	Pit	20	**	2	****	8																Pot (**/35g) Flint (*1g) FCF (***/974g) Mag.Mat. >2mm (**/1g) Mag.Mat. <2mm (***/4g)

Sample Number	Context	Context Type	Sample Volume (L)	Charcoal >4mm	Weight (g)	Charcoal 2-4mm	Weight (g)	Charcoal Identifications	Charred Botanicals	Weight (g)	Bone and Teeth	Weight (g)	Burnt Bone >8mm	Weight (g)	Burnt Bone 4-8mm	Weight (g)	Burnt Bone 2-4mm	Weight (g)	Marine Molluscs	Weight (g)	Land Snail Shells	Weight (g)	Other (eg. pot, cbm, etc.) (quantity/ weight)
109	5605	Pit	40	**	3	***	4		*	<1	*	1											Pot (*94g) Flint (*94g) FCF (***/782g) Mag.Mat. >2mm (***/4g) Mag.Mat. <2mm (***/9g)
110	5693	Tree throw	20			*	<1		*	<1							*	<1					Pot (**/49g) FCF (***/541g) Mag.Mat. >2mm (*/<1g) Mag.Mat. <2mm (***/2g)
111	5623	Post hole	40	*	2	**	<1				**	<1		*	<1	*	<1						Pot (**/70g) FCF (***/366g) Mag.Mat. >2mm (***/7g) Mag.Mat. <2mm (***/10g)
112	5637	Pit	40	*	<1	*	<1		*	<1	***	6											Pot (**/43g) FCF (**/252g) Mag.Mat. >2mm (***/7g) Mag.Mat. <2mm (***/10g)
113	5666	Pit	40	**	5	****	5		**	1													Pot (*18g) F.Clay (***/368g) Mag.Mat. <2mm (***/16g)
115	5679	Well	40	*	<1																		Pot (*33g) Flint (*19g) Stone (*16g) FCF (***/296g) Mag.Mat. >2mm (**/2g) Mag.Mat. <2mm (***/2g)

Sample Number	Context	Context Type	Sample Volume (L)	Charcoal >4mm	Weight (g)	Charcoal 2-4mm	Weight (g)	Charcoal Identifications	Charred Botanicals	Weight (g)	Bone and Teeth	Weight (g)	Burnt Bone >8mm	Weight (g)	Burnt Bone 4-8mm	Weight (g)	Burnt Bone 2-4mm	Weight (g)	Marine Molluscs	Weight (g)	Land Snail Shells	Weight (g)	Other (eg. pot, cbm, etc.) (quantity/ weight)
116	5733	Pit	40			*	<1		*	<1													Stone (*126g) B.Clay (*10g) Flint (*<1g) FCF (**82g) Mag.Mat. >2mm (***/6g) Mag.Mat. <2mm (***/6g)
117	5723	Pit	40	**	4	***	3																Flint (*1g) FCF (***/6993g) Mag.Mat. <2mm (***/3g)
119	5587	Post hole	10			*	<1		*	<1													Flint (*1g) FCF (**59g) Mag.Mat. >2mm (*<1g) Mag.Mat. <2mm (**<1g)
120	5619	Post hole	10			*	<1																FCF (**77g) Mag.Mat. <2mm (***/2g)
121	5737	Post hole	30	*	1	***	3		*	<1													Pot (*22g) FCF (**91g) Mag.Mat. >2mm (*<1g) Mag.Mat. <2mm (***/3g)
122	5585	Post hole	20	*	<1	**	<1		*	<1													Pot (*7g) Flint (*19g) FCF (**61g) Mag.Mat. >2mm (*1g) Mag.Mat. <2mm (***/3g)
123	5583	Post hole	20	*	<1	**	<1																Pot (*3g) Flint (*20g)

Sample Number	Context	Context Type	Sample Volume (L)	Charcoal >4mm	Weight (g)	Charcoal 2-4mm	Weight (g)	Charcoal Identifications	Charred Botanicals	Weight (g)	Bone and Teeth	Weight (g)	Burnt Bone >8mm	Weight (g)	Burnt Bone 4-8mm	Weight (g)	Burnt Bone 2-4mm	Weight (g)	Marine Molluscs	Weight (g)	Land Snail Shells	Weight (g)	Other (eg. pot, cbm, etc.) (quantity/ weight)	
124	5589	Post hole	20	**	2	***	2		*	<1													Pot (**/85g) Flint (*/<1g) F.Clay (*/8g) B.Stone (*/9g) FCF (***/2012g) Mag.Mat. >2mm (**/1g) Mag.Mat. <2mm (***/4g)	
127	5746	Pond	10												*	<1	*	<1						Flint (*/<1g) FCF (**/6g)
129	5780	Well	40	**	1	**	1		*	<1	**	3											Pot (*/11g) FCF (***/756g) Mag.Mat. >2mm (**/2g) Mag.Mat. <2mm (***/1g)	
130	5677	Well	40	**	2	****	8				**	2											Pot (*/9g) Flint (*/8g) Cu (*/<1g) FCF (***/634g) Mag.Mat. >2mm (**/2g) Mag.Mat. <2mm (***/2g)	
131	5798	Well	40	*	<1	**	<1				*	1											Flint (*/5g) FCF (**/84g) Mag.Mat. >2mm (*/<1g) Mag.Mt. <2mm (**/<1g)	
132	5797	Well	40			**	<1				**	1											Flint (*/1g) FCF (**/20g) Mag.Mat. <2mm (**/<1g)	

Sample Number	Context	Context Type	Sample Volume (L)	Charcoal >4mm	Weight (g)	Charcoal 2-4mm	Weight (g)	Charcoal Identifications	Charred Botanicals	Weight (g)	Bone and Teeth	Weight (g)	Burnt Bone >8mm	Weight (g)	Burnt Bone 4-8mm	Weight (g)	Burnt Bone 2-4mm	Weight (g)	Marine Molluscs	Weight (g)	Land Snail Shells	Weight (g)	Other (eg. pot, cbm, etc.) (quantity/ weight)
133	5794	Well	40			**	2																Flint (*2g) FCF (*15g) Mag.Mat. <2mm (**1g)
134	5890	Pyre ?	25	**	2	****	32		*	<1													FCF (**22g) Mag.Mat. >2mm (*<1g) Mag.Mat. <2mm (**<1g)
135	5920	Cremation	25	**	2	****	7																FCF (**67g) Mag.Mat. >2mm (*<1g) Mag.Mat. <2mm (**1g)
136	5924	Cremation	80	*	1	***	4							**	3	**	2						Glass (*1g) Mag.Mat. <2mm (**1g)
137	5953	Cremation	5			*	<1				*	<1											NO FINDS
141	6022	Cremation	10	*	<1	**	<1	<i>Quercus</i> sp. 10					**	15	**	16	***	9					Pot (*76g) Fe (*5g) Mag.Mat. <2mm (**<1g)
142	6017	Pit	40	***	15	***	15																Flint (*1g) FCF (***/435g) Mag.Mat. <2mm (**5g)

Sample Number	Context	Context Type	Sample Volume (L)	Charcoal >4mm	Weight (g)	Charcoal 2-4mm	Weight (g)	Charcoal Identifications	Charred Botanicals	Weight (g)	Bone and Teeth	Weight (g)	Burnt Bone >8mm	Weight (g)	Burnt Bone 4-8mm	Weight (g)	Burnt Bone 2-4mm	Weight (g)	Marine Molluscs	Weight (g)	Land Snail Shells	Weight (g)	Other (eg. pot, cbm, etc.) (quantity/ weight)
143	6019	Pit	40	**	6	**	2		*	<1					*	<1							Pot (**/101g) Flint (* /279g) FCF (***/938g) Mag.Mat. >2mm (**/2g) Mag.Mat. <2mm (***/3g)
144	5983	Cremation	10			**	<1								*	1	**	1					NO FINDS
145	6074	Layer	15	*	<1	**	<1				****	33							*	<1			Pot (* /<1g) Flint (* /<1g) FCF (**/13g) Mag.Mat. <2mm (**/ <1g)
146	6074	Layer	20			**	1				***	18											Pot (* /6g) FCF (**/11g) Mag.Mat. >2mm (* /<1g) Mag.Mat. <2mm (**/ <1g)
147	6074	Layer	10								***	17											FCF (**/2g) Mag.Mat. >2mm (* /<1g) Mag.Mat. <2mm (**/ <1g)
148	6074	Layer	30			**	<1													*	<1		FCF (**/44g) Mag.Mat. <2mm (**/ <1g)
149	6093	Gully	40	**	1	**	1		*	<1	*	9	*	3	*	2	*	<1					Pot (**/92g) Fe (* /2g) Flint (* /2g) FCF (**/19g) Mag.Mat. >2mm (**/2g) Mag.Mat. <2mm (***/2g)

Sample Number	Context	Context Type	Sample Volume (L)	Charcoal >4mm	Weight (g)	Charcoal 2-4mm	Weight (g)	Charcoal Identifications	Charred Botanicals	Weight (g)	Bone and Teeth	Weight (g)	Burnt Bone >8mm	Weight (g)	Burnt Bone 4-8mm	Weight (g)	Burnt Bone 2-4mm	Weight (g)	Marine Molluscs	Weight (g)	Land Snail Shells	Weight (g)	Other (eg. pot, cbm, etc.) (quantity/ weight)
150	6074	?	1																				H.Bone >8mm (* /10g) H.Bone 4-8mm (**/3g) H.Bone 2-4mm (**/1g) FCF (* /4g)
151	6177	Pit	40			**	<1		*	<1	*	<1											Pot (* /19g) CBM (* /3g) Flint (* /26g) FCF (**/11g) Mag.Mat. >2mm (**/1g) Mag.Mat. <2mm (**/1g)
152	6171	Ditch	40	*	<1	**	2				**	16			*	1	**	1					Pot (**/224g) Flint (* /68g) Stone (* /1288g) FCF (**/18g) Mag.Mat. >2mm (**/3g) Mag.Mat. <2mm (****/5g)
153	6225	Tree throw	40	*	1	**	1																Flint (**/32g) Slag (* /2g) FCF (* /2g) Mag.Mat. >2mm (**/ <1g) Mag.Mat. <2mm (****/1g)
154	6230	Pit	40			**	<1																Pot (**/54g) FCF (**/26g) Mag.Mat. <2mm (****/2g)

Sample Number	Context	Context Type	Sample Volume (L)	Charcoal >4mm	Weight (g)	Charcoal 2-4mm	Weight (g)	Charcoal Identifications	Charred Botanicals	Weight (g)	Bone and Teeth	Weight (g)	Burnt Bone >8mm	Weight (g)	Burnt Bone 4-8mm	Weight (g)	Burnt Bone 2-4mm	Weight (g)	Marine Molluscs	Weight (g)	Land Snail Shells	Weight (g)	Other (eg. pot, cbm, etc.) (quantity/ weight)
155	6215	Pit	20								*	<1			*	<1	*	<1					Flint (*4g) FCF (**/28g) Mag.Mat. >2mm (*/<1g) Mag.Mat. <2mm (**/<1g)
156	6280	Ditch	40			**	<1				**	1											Pot (**/29g) FCF (*31g) Mag.Mat. <2mm (***/3g)
166	6021	Cremation	60	**	<1	**	1	<i>Quercus</i> sp. 43	*	<1			**	38	****	74	****	34					Pot (**/277g) Ochre (*2g) FCF (**/11g) Mag.Mat. >2mm (*/<1g) Mag.Mat. <2mm (**/1g)
167	5982	Cremation	50			**	<1										**	2					Mag.Mat. >2mm (*/<1g) Mag.Mat. <2mm (**/<1g)
170	6021	Cremation	10	**	<1	**	1	<i>Quercus</i> sp. 17					***	144	****	173	****	260					Pot (*136g) FCF (****/489g) Mag.Mat. >2mm (*/<1g) Mag.Mat. <2mm (***/1g)

Table 2 Flot quantification (* = 1-10, ** = 11-50, *** = 51-250, **** = >250) and preservation (+ = poor, ++ = moderate, +++ = good)

Sample Number	Context	Weight (g)	Flot volume (ml)	Uncharred (%)	Sediment (%)	Seeds Uncharred	Charcoal >4mm	Charcoal 2-4mm	Charcoal <2mm	Crop Seeds Charred	Identifications	Preservation	Weed Seeds Charred	Identifications	Preservation	Other Botanical Charred	Identifications	Preservation	
105	5513	25	40	10	50		*	**	****										
106	5527	4.5	7.5	20	10		*	**	****										
107	5589	37	95	20	20		***	****	****										
108	5593	19	30	20	50		**	***	****	**	<i>Hordeum vulgare</i> , hulled, cf <i>Triticum</i> sp., <i>Triticum/Hordeum</i> sp.	+							
109	5605	30	50	30	40		**	***	****	**	<i>Hordeum vulgare</i> , hulled, <i>Triticum/Hordeum</i> sp.	+							

Sample Number	Context	Weight (g)	Flot volume (ml)	Uncharred (%)	Sediment (%)	Seeds Uncharred	Charcoal >4mm	Charcoal 2-4mm	Charcoal <2mm	Crop Seeds Charred	Identifications	Preservation	Weed Seeds Charred	Identifications	Preservation	Other Botanical Charred	Identifications	Preservation
110	5693	4	5	20	40	** <i>Chenopodium</i> sp.			****	**	<i>Triticum</i> sp., <i>Hordeum</i> sp. hulled, <i>Triticum/Hordeum</i> sp.	+ / ++				**	<i>Triticum dicoccum/spelta</i>	+
111	5623	54	150	10	20		***	****	****	**	<i>Triticum</i> sp., <i>Hordeum</i> sp. hulled, <i>Triticum/Hordeum</i> sp.	+ / +	**	<i>Chenopodium</i> sp., <i>Persicaria</i> sp., Large Poaceae	++			
112	5637	35	60	20	40	** <i>Chenopodium</i> sp.	**	***	****	**	<i>Hordeum vulgare</i> , hulled, <i>Triticum/Hordeum</i> sp.	+ / +	**	<i>Fallopia convolvulus</i> , <i>Persicaria</i> sp., <i>Vicia/Lathyrus</i> sp., Polygonaceae, <i>Avena/Bromus</i> sp.	++			
113	5666	50	120	10	30		**	***	****	**	<i>Hordeum vulgare</i> , hulled, <i>Triticum</i> sp., <i>Triticum/Hordeum</i> sp.	+ / +=	**	Poaceae of various size, <i>Fallopia convolvulus</i> , <i>Malva</i> sp.	++			
115	5679	4	15	30	40	* <i>Chenopodium</i> sp.		*	***									

Sample Number	Context	Weight (g)	Flot volume (ml)	Uncharred (%)	Sediment (%)	Seeds Uncharred	Charcoal >4mm	Charcoal 2-4mm	Charcoal <2mm	Crop Seeds Charred	Identifications	Preservation	Weed Seeds Charred	Identifications	Preservation	Other Botanical Charred	Identifications	Preservation	
116	5733	7.5	30	70	10				****										
117	5723	44	120	30	40		**	***	****										
119	5587	4.5	20	30	40			*	***										
120	5619	19	5	20	40	* <i>Chenopodium</i> sp.			****										
121	5737	6.6	20	20	10	** <i>Chenopodium</i> sp.	**	***	****				*	Poaceae 2	+	*	<i>Arrhenatherum elatius</i> 1	++	

Sample Number	Context	Weight (g)	Flot volume (ml)	Uncharred (%)	Sediment (%)	Seeds Uncharred	Charcoal >4mm	Charcoal 2-4mm	Charcoal <2mm	Crop Seeds Charred	Identifications	Preservation	Weed Seeds Charred	Identifications	Preservation	Other Botanical Charred	Identifications	Preservation
122	5585	40	35	30	40			*	****	**	<i>Triticum</i> sp., <i>Hordeum</i> sp. hulled, <i>Triticum/Hordeum</i> sp.	+ / ++	**	<i>Bromus</i> sp., <i>Vicia/Lathyrus</i> sp., <i>Galium</i> sp., <i>Chenopodium</i> sp., Asteraceae	++			
123	5583	15	25	20	60	* <i>Chenopodium</i> sp.			**									
124	5589	48	90	20	40	* <i>Chenopodium</i> sp.	**	***	****	*	cf <i>Hordeum</i> sp., <i>Triticum/Hordeum</i> sp.	+						
127	5746	2	10	40	20	* <i>Sambucus</i> sp.			***									
129	5780	7.1	15	30	40		*	**	****	*	<i>Hordeum</i> sp., hulled 1, <i>Triticum/Hordeum</i> sp. 1	+						

Sample Number	Context	Weight (g)	Flot volume (ml)	Uncharred (%)	Sediment (%)	Seeds Uncharred	Charcoal >4mm	Charcoal 2-4mm	Charcoal <2mm	Crop Seeds Charred	Identifications	Preservation	Weed Seeds Charred	Identifications	Preservation	Other Botanical Charred	Identifications	Preservation	
130	5677	9.4	15	20	50				***	*	Cerealia 1	+							
131	5798	51	40	30	30				***				*	Poa/Phleum sp. 1	++				
132	5797	8	10	20	60	* <i>Chenopodium</i> sp.		*	***										
133	5794	2.3	10	50	20			*	**										
134	5890	54	100	10	20		**	***	****										

Sample Number	Context	Weight (g)	Flot volume (ml)	Uncharred (%)	Sediment (%)	Seeds Uncharred	Charcoal >4mm	Charcoal 2-4mm	Charcoal <2mm	Crop Seeds Charred	Identifications	Preservation	Weed Seeds Charred	Identifications	Preservation	Other Botanical Charred	Identifications	Preservation	
135	5920	80	175	10	20		**	***	****										
136	5924	53	95	20	30		**	***	****										
137	5953	1	10	20	20		*	**	***										
141	6022	0.4	10	30	20			*	****										
142	6017	48	125	30	40		**	***	****										

Sample Number	Context	Weight (g)	Flot volume (ml)	Uncharred (%)	Sediment (%)	Seeds Uncharred	Charcoal >4mm	Charcoal 2-4mm	Charcoal <2mm	Crop Seeds Charred	Identifications	Preservation	Weed Seeds Charred	Identifications	Preservation	Other Botanical Charred	Identifications	Preservation	
143	6019	28	100	30	20		**	**	****	**	<i>Vicia faba</i> , <i>Triticum dicoccum/spelta</i> , <i>Hordeum vulgare</i> , hulled	++/+	**	<i>Chenopodium</i> sp., Large Poaceae, <i>Lolium/Festuca</i> sp., <i>Vicia/Lathyrus</i> sp., Polygonaceae	++	*	Cereal 'concretions' 2, Poaceae stem fragment	++	
144	6983	0.2	5	40	30				***										
145	6074	5.3	7	40	40	** <i>Chenopodium</i> sp.			***										
146	6074	7.8	10	40	30	** <i>Chenopodium</i> sp.		*	***										
147	6074	0.5	10	80	20	* <i>Chenopodium</i> sp.													

Sample Number	Context	Weight (g)	Flot volume (ml)	Uncharred (%)	Sediment (%)	Seeds Uncharred	Charcoal >4mm	Charcoal 2-4mm	Charcoal <2mm	Crop Seeds Charred	Identifications	Preservation	Weed Seeds Charred	Identifications	Preservation	Other Botanical Charred	Identifications	Preservation
148	6074	9.3	13	20	60	** <i>Chenopodium</i> sp.	**	***	****									
149	6093	14	35	20	20				****	**	<i>Triticum</i> sp., <i>Hordeum vulgare</i> , hulled	++	**	<i>Rumex</i> sp., <i>Chenopodium</i> sp., Poaceae	++	***	<i>Triticum dicoccuma/spelta</i> , <i>Triticum spelta</i>	++ /+ ++
150	6074	1.8	10	20	70			*										
151	6177	0.8	5	30	30			*	**	*	<i>Triticum/Hordeum</i> sp. 1	+						
152	6171	15	45	30	40				****	**	<i>Triticum</i> sp. , <i>Hordeum vulgare</i> hulled, <i>Triticum/Hordeum</i> sp. , <i>Vicia/Lathyrus/Pisum</i> sp.	++/+++	*8	<i>Bromus</i> sp., <i>Lolium/Festuca</i> sp., <i>Rumex</i> sp., <i>Chenopodium</i> sp., <i>Galium</i> sp.	++	**	<i>Triticum spelta</i> glume bases, Poaceae stem fragments	++ /+ ++
153	6225	5.8	25	20	40	* <i>Chenopodium</i> sp.		**	****	*	<i>Triticum</i> sp. 1							
154	6230	2.3	20	50	20	* <i>Chenopodium</i> sp.	*	**	****	**	<i>Hordeum vulgare</i> , hulled , <i>Vicia/Lathyrus/Pisum</i> sp.	+++/+	*	<i>Vicia/Lathyrus</i> sp. 1, <i>Rumex</i> sp. 1, <i>Stellaria media</i> 2, <i>Bromus</i> sp. 1	++	**	<i>Triticum dicoccum/spelta</i> , <i>Triticum spelta</i>	++

Sample Number	Context	Weight (g)	Flot volume (ml)	Uncharred (%)	Sediment (%)	Seeds Uncharred	Charcoal >4mm	Charcoal 2-4mm	Charcoal <2mm	Crop Seeds Charred	Identifications	Preservation	Weed Seeds Charred	Identifications	Preservation	Other Botanical Charred	Identifications	Preservation
155	6215	1	10	30	30				****	**	<i>Hordeum vulgare</i> , hulled, <i>Triticum/Hordeum</i> sp., <i>Vicia/Lathyrus/Pisum</i> sp.	++/+	**	<i>Persicaria</i> sp., <i>Vicia/Lathyrus</i> sp., <i>Poa/Phleum</i> sp., <i>Tripleurospermum inodorum</i> , <i>Galium</i> sp.	++/+			
156	6280	4	20	30	10	* <i>Chenopodium</i> sp.	*	**	****	**	<i>Hordeum vulgare</i> , hulled, <i>Triticum dicoccum/spelta</i> , <i>Triticum/Hordeum</i> sp.	++/+++	**	<i>Chenopodium album</i> 1, cf <i>Bromus</i> sp., <i>Rumex</i> sp., <i>Trifolium/Medicago</i> , large Poaceae	++	**	<i>Triticum spelta</i> , <i>Triticum dicoccum/spelta</i>	++
166	6021	16	75	40	30	* <i>Chenopodium</i> sp.			****	*	<i>Triticum/Hordeum</i> sp. 2	+				*	Poaceae stem fragments, <i>Arrhenatherum elatius</i>	++
167	5982	7.7	25							*	<i>Triticum</i> sp. 1, <i>Hordeum vulgare</i> hulled 1	++				*	<i>Arrhenatherum elatius</i> 1	++ +
170	6021	0.8	10	60	20		*	*	**							*	<i>Arrhenatherum elatius</i> 1, possible indeterminate <i>ruber</i> 1	

Appendix 4: Taxa abundance per context by Number of Identifiable Specimens

Taxa abundance per context by Number of Identifiable Specimens (NISP). Context rows include both hand-collected and bulk sampled material where bone derived from both. Combined weights of specimens from bulk sampled contexts are also presented. Where indeterminate material was approximately counted an X is placed in the final column.

CXT	ENV	N	NISP	Cattle	Ovicaprid	Pig	Horse	Common shrew	Shrew sp.	Vole sp.	Mouse/ vole sp.	Anuran	Small rodent	Small bird	Large mammal	Medium mammal	Small mammal	Microfauna	Bird	Indeterminate	Enviro weight	Approx. count
5525		18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18		
5561		50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50		X
5605	109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1g	
5623	111	9	9	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	<1g	
5637	112	16	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6g	
5638		20	20	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0		
5677	130	16	14	5	0	0	0	0	1	2	3	0	1	0	1	0	0	1	0	2	2g	
5740		25	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5746		272	122	121	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	150		X
5757		5	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3		
5780	129	32	31	0	1	0	0	1	3	2	3	7	1	2	1	1	0	9	0	1	3g	
5797	132	2	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1g	
5798	131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1g	
5815		3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3		

CXT	ENV	N	NISP	Cattle	Ovicaprid	Pig	Horse	Common shrew	Shrew sp.	Vole sp.	Mouse/ vole sp.	Anuran	Small rodent	Small bird	Large mammal	Medium mammal	Small mammal	Microfauna	Bird	Indeterminate	Enviro weight	Approx. count
5869		1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
5873		9	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5896		10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10		
5953	137	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<1g	
6074	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33g	
6074	146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18g	
6074	147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17g	
6082		1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0		
6086		26	26	4	2	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0		
6093	149	5	5	0	3	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	9g	
6094		5	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3		
6115		3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3		
6133		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
6160		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
6171	152	12	12	1	0	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	16g	
6174		25	2	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	23		
6177	151	2	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	<1g	
6193		10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10		
6215	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<1g	

CXT	ENV	N	NISP	<i>Cattle</i>	<i>Ovicaprid</i>	<i>Pig</i>	<i>Horse</i>	<i>Common shrew</i>	<i>Shrew sp.</i>	<i>Vole sp.</i>	<i>Mouse/ vole sp.</i>	<i>Anuran</i>	<i>Small rodent</i>	<i>Small bird</i>	<i>Large mammal</i>	<i>Medium mammal</i>	<i>Small mammal</i>	<i>Microfauna</i>	<i>Bird</i>	<i>Indeterminate</i>	Enviro weight	Approx. count
6238		19	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15		
6246		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
6280	156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1g	

Appendix 5: Geoarchaeological Logs

Table 1. Geoarchaeological Logs

Context No.	Unit	Depth (m bgl)	Top of Unit (m AOD)	Sediment description	Coarse component	DA	ST	EL	SICC	UB	Composition	Sample
[5658] large hollow/spread Middle Bronze Age												
5646	1	0.0-0.32	+3.82	compact dark brown clayey silt with occasional pot, flint, FCF, loom weight								<118> micromorph top is 0.20m bgl, 3.62m AOD plus spot samples
	2	0.32+	+3.43	chalk								
[5676] well Middle Bronze Age												
5679	1	0.0-0.38	+3.55	moderately compact mid greyish brown sandy silty clay, occ charcoal flecks, occ FCF and pot								<115> bulk enviro
5678	2	0.38-0.83	+3.17	moderately compact dark grey-brown silty sandy clay, occ charcoal flecks, FCF, pot and worked flint								
5677	3	0.83-2.28	+2.72	moderately loose mid grey-brown silty sandy clay with occ charcoal flecks, FCF, worked flint, pot								
5780	4	0.83-1.59	+2.72	moderately compact mottled orange grey-brown silty clay with occ charcoal flecks, FCF, worked flint,	5% SR flint 10mm							<130> bulk enviro
	5	1.59-3.05	+1.96	mid grey brown, fine sandy clayey silt, compact, maleable, soft, fine, occ charcoal								
	6	3.05-3.35	+0.50	Clay silt with sand, mid greyish brown. Occ charcoal flecks. Becomes darker with depth	Occ chalk flecks ~2mm.	2	1	1	1		Ag2 As1 Ga1	<138> auger - 5.02-5.04m bgl: humic 1121-929 cal BC (SUERC-83942; 2862 ±31 BP), humin 1210-1031 cal BC (SUERC-83943; 2913 ±31 BP) Middle-Late Bronze Age
	7	3.35-3.94	+0.20	Greenish brown sandy silt with clay. Occ charcoal.	Occ SR chalk ~2mm	3	1	1	1	0	Ag3 Ga1 As+	
	8	3.94-4.18	-0.39	Dark grey-brown sandy silt with clay.	Occ SA flints <10mm	3	0	1	1	0	Ga1 Ag3 As+	
	9	4.18-4.81	-0.63	Very dark greyish brown sandy silt with clay. Humic. Organic plant fragments visible.	Occ SR chalk ~3mm.	4	0	2	1		Ag3 Sh1 Ga+ As+ Tl+	
	10	4.81-5.05	-1.26	Dark brown black silty peat. Humic. Waterlogged. Large organic fragments.		4	0	2	1	3	Sh1 Tl2 Ag1 As+	

Context No.	Unit	Depth (m bgl)	Top of Unit (m AOD)	Sediment description	Coarse component	DA	ST	EL	SICC	UB	Composition	Sample
	11	5.05-6.0	-1.50	Clayey sandy silt. Light brownish grey. Very wet/sloppy.	Moderate small ~1mm SR chalk.	1	0	1	1		Ga2 Ag2 As+	
	12	6.0+	-2.45	chalk								

Large pond/ quarry feature [5748] Early Roman G154												
5740	1	0-0.5m	+1.98	orange brown with grey mottling sandy silt, occ rooting, friable, occ pottery, FCF, flint, less finds with depth, occ iron staining/manganese with depth, fairly homogenous, charcoal flecks	5% R-SR flint 20-60mm, occ chalk 40mm SR							
5741	2	0.5-0.65m	+1.48	light grey brown very chalky sandy silt	50% chalk gravel							
5742	3	0.65-0.75m	+1.33	orange brown sandy silty clay with flecks of charcoal, occ FCF at interface with chalk								
5743	4	0.75m+	+1.23	undulating chalk								
5744	5	0.34-0.40	+1.64	light orange brown soft maleable silty clay pocket, freq charcoal flecks								
5745	6	0.44-0.80	+1.54	grey brown mottled orang, rooted sandy silty clay occ pottery	5% 2-5mm rolled chalk and flint							
5746	7	0.30-0.46	+1.68	dark grey silty sandy clay with slight orange mottling, organic, occ worked flint, contained bone dump	10% R flint 50mm, 10% chalk, more chalk with depth,	2	0	1	3	3	As2 Ag2 Ga+	<125> top is 0.28m bgl, 1.68m AOD. <126> top is 0.36m bgl, 1.62m AOD columns
		0.46-0.60	+1.52	mid grey silty sandy clay with slight orange mottling, organic	5% 1mm SA flint	3	0	1	3	2	As2 Ag2 Ga+	
5747	8	0.40-0.85	+1.58	orange brown clayey sand, gets sandier with depth								

Well [5789] (old eval number [451/006]) Middle Bronze Age												
(451/007)	1	0.00-0.46	+1.86	moderately compact mid greyish brown sandy silty clay, occ charcoal flecks								
(451/008) (5799)	2	0.46-0.96	+1.40	moderately compact mid brownish grey silty clay with occ charcoal and partially articulates remains of 2 horse skeletons	5% 5-10mm SR flint							

Context No.	Unit	Depth (m bgl)	Top of Unit (m AOD)	Sediment description	Coarse component	DA	ST	EL	SICC	UB	Composition	Sample
(451/009) (5798)	3	0.96-1.13	+0.90	moderately compact, light grey-brown silty clay, occ charcoal flecks	5% 5-10mm SR chalk							
(451/010) (5797)	4	1.13-1.31	+0.73	moderately compact mid brown-orange silty clay with occ charcoal flecks, occ. worked flint and FCF								
(5796)	5	1.31-1.43	+0.55	moderately compact mid orange brown silty clay, occ. Charcoal flecks, occ worked flint and FCF	5% 40mm SR chalk							
(5795)	6	1.43-1.59	+0.43	moderately compact mid orange brown silty clay	redeposited chalk 10% SR 50-70mm chalk							
(5794)	7	1.59-1.73	+0.27	friable dark orange brown silty clay, occ charcoal flecks, occ worked flint and FCF	5% 30mm SR chalk							
(5793)	8	1.73-2.10	+0.13	friable mid brown-orange silty clay	10% sub-rounded chalk 5-20mm							
	9	2.10-2.33	-0.24	Sandy silty clay, yellow brown, maleable. Higher water content.	10% sub-rounded chalk 5-20mm						Ga1 Ag1 As2	
	10	2.33-2.77	-0.47	Yellow brown sandy silt. Sharp upper boundary.	10% chalk 2-20mm, more chalk with depth and larger (40mm). Occ charcoal.	2	0	2	2	4	Ga1 Ag3	
	11	2.77-4.00	-0.91	yellow grey sandy silt, occ flecks charcoal		2	1	2	2	0	Ga1 Ag3	
	12	4.00-4.27	-2.14	Mid greyish brown sandy silt with clay. Very wet. Occasional flecks of charcoal.	Occasional small SA chalk pellets 1-3mm. Occasional SA flint 1-3mm	2	1	3	1	4	Ag3 Ga1 As+	
	13	4.27-4.34	-2.41	Sandy silt with clay. Dark brownish grey. Moderate flecks charcoal. Quite waterlogged.	occ SR chalk 1-4mm.	3	1	2	1	1	Ga1+ Ag3 As+	<139> <149> augers
	14	4.34-4.38	-2.48	Mid brownish grey sandy silt with clay. Occasional charcoal.	Fr chalk and chalk flecks <4mm	2	1	2	2	1	Ag3 Ga1 As+	
	15	4.38-4.50	-2.52	Mid brownish grey sandy silt. Occasional charcoal.	Occasional small chalky flecks.	2	1	2	2	1	Ga2 Ag2 As+	
	16	4.50+	-2.64	chalk								

Table 2: Geoarchaeological Sample Logs

Sample	Unit	Depth (m bgl)	Top of Unit (m AOD)	Interpretation	Sediment description	DA	ST	EL	SICC	UB	Composition
<126>	7	0.36-0.44	1.62-1.54		Greenish grey silty clay with sand. Stone free	2	0	1	3		As2 Ag1 Ga1
	7	0.44-0.56	1.54-1.42		Dark reddish brown silty clay with sand. Occasional very small ~1mm sub-angular flint.	3	0	1	3	2	As2 Ag2 Ga+
	7	0.56-0.59	1.42-1.39		Greenish brown silt clay with sand. Occasional sub-angular flint and chalk 1-10mm	2	0	1	3	1	As2 Ag1 Ga1
	7	0.59-0.61	1.39-1.37		Chalk with flint gravel	0	0	0	4	2	
<138>	6	3.05-3.35	+0.50	Well Silt	Clay silt with sand, mid greyish brown. Occ charcoal flecks. Occ chalk flecks ~2mm. Becomes darker with depth	2	1	1	1		Ag2 As1 Ga1
	7	3.35-3.48	+0.2	Well Silt	Greenish brown sandy silt with clay. Occ charcoal. Occ SR chalk ~2mm	3	1	1	1	0	Ag3 Ga1 As+
	7	3.58-3.94	-0.03	Well Silt	As above						
	8	3.94-4.18	-0.39	Well Silt	Dark greyish brown sandy silt with clay. Occ SA flints <10mm	3	0	1	1	0	Ga1 Ag3 As+
	9	4.18-4.68	-0.63	Silty peat	Very dark greyish brown sandy silt with clay. Humic. Occ SR chalk ~3mm. Organic plant fragments visible.	4	0	2	1		Ag3 Sh1 Ga+ As+ TI+
	9	4.78-4.81	-1.23	Silty peat	As above						
	10	4.81-5.05	-1.26	Peat	Dark brown black silty peat. Humic. Waterlogged. Large organic fragments.	4	0	2	1	3	Sh1 TI2 Ag1 As+
	11	5.05-6.0	-2.2	Well Silt	Clayey sandy silt. Light brownish grey. Very waterlogged. Moderate small ~1mm SR chalk.	1	0	1	1		Ga2 Ag2 As+
<149>	12	4.00-4.27	-2.14	Well Silt	Mid greyish brown sandy silt with clay. Very wet. Occasional small SA chalk pellets 1-3mm. Occasional flecks of charcoal. Occasional SA flint 1-3mm	2	1	3	1		Ag3 Ga1 As+
	13	4.27-4.34	-2.41	Well Silt	Sandy silt with clay. Dark brownish grey. Moderate flecks charcoal. Quite waterlogged. SR chalk 1-4mm.	3	1	2	1	1	Ga1+ Ag3 As+
	14	4.34-4.38	-2.48	Well Silt	Mid brownish grey sandy silt with clay. Fr chalk and chalk flecks <4mm. Occasional charcoal.	2	1	2	2	1	Ag3 Ga1 As+

Table 3: Physical and sedimentary properties of deposits according to Troels-Smith (1955)

Degree of Darkness		Degree of Stratification		Degree of Elasticity		Degree of Dryness	
nig.4	black	strf.4	well stratified	elas.4	very elastic	sicc.4	very dry
nig.3		strf.3		elas.3		sicc.3	
nig.2		strf.2		elas.2		sicc.2	
nig.1		strf.1		elas.1		sicc.1	
nig.0	white	strf.0	no stratification	elas.0	no elasticity	sicc.0	water

	Sharpness of Upper Boundary
lim.4	< 0.5mm
lim.3	< 1.0 & > 0.5mm
lim.2	< 2.0 & > 1.0mm
lim.1	< 10.0 & > 2.0mm
lim.0	> 10.0mm

	<i>Sh</i>	<i>Substantia humosa</i>	Humous substance, homogeneous microscopic structure
<i>I Turfa</i>	<i>Tb</i>	<i>T. bryophytica</i>	Mosses +/- humous substance
	<i>Tl</i>	<i>T. lignosa</i>	Stumps, roots, intertwined rootlets, of ligneous plants
	<i>Th</i>	<i>T. herbacea</i>	Roots, intertwined rootlets, rhizomes of herbaceous plants
<i>II Detritus</i>	<i>Dl</i>	<i>D. lignosus</i>	Fragments of ligneous plants >2mm
	<i>Dh</i>	<i>D. herbosus</i>	Fragments of herbaceous plants >2mm
	<i>Dg</i>	<i>D. granosus</i>	Fragments of ligneous and herbaceous plants <2mm >0.1mm
<i>III Limus</i>	<i>Lf</i>	<i>L. ferrugineus</i>	Rust, non-hardened. Particles <0.1mm
<i>IV Argilla</i>	<i>As</i>	<i>A. steatodes</i>	Particles of clay
	<i>Ag</i>	<i>A. granosa</i>	Particles of silt
<i>V Grana</i>	<i>Ga</i>	<i>G. arenosa</i>	Mineral particles 0.6 to 0.2mm
	<i>Gs</i>	<i>G. saburralia</i>	Mineral particles 2.0 to 0.6mm
	<i>Gg(min)</i>	<i>G. glareosa minora</i>	Mineral particles 6.0 to 2.0mm
	<i>Gg(maj)</i>	<i>G. glareosa majora</i>	Mineral particles 20.0 to 6.0mm
	<i>Ptm</i>	<i>Particulae testae molloscorum</i>	Fragments of calcareous shells

Appendix 6: Micromorphological Report

**To be found in S:\ARCHAEOL_ASE_Projects\2018\180315 Littlehampton,
Toddington Lane AP6 Mitigaiton\PX\Geoarch\External specialists**

Appendix 7: Pollen Assessment by Dr Tom Hill

Department of Earth Sciences
Natural History Museum
Cromwell Road
London

Introduction

A total of 10 samples were submitted for pollen assessment from four sedimentary sequences extracted during ground investigations at Toddington Lane, Littlehampton, west Sussex (project code LNR16). Three contexts were sampled, <126>, <138> and <149>. <126> has been interpreted by ASE as a land pond within quarry feature [5748], and is believed to be Early Roman in age. <138> is interpreted as a well feature [5676]. <149> is also believed to be a well feature [5789]. Within <138> [5676], between 4.81-5.05m depth was a distinct silty peat unit. Radiocarbon dating at 5.02-5.04m bgl returned dates of humic 1121-929 cal BC (SUERC-83942; 2862 ±31 cal BP) and humin 1210-1031 cal BC (SUERC-83943; 2913 ±31 cal BP). Assuming both wells ([5676] and [5789]) are contemporaneous with one another, this dating confirms ASE's original interpretation that these features date the Middle-Late Bronze Age.

The samples from the three contexts under assessment were predominantly waterlogged deposits and were mainly comprised of organics and silty clays (with the peat layer within <138> an exception). A palaeoenvironmental investigation of the deposits was undertaken to assess whether a palaeovegetation record could be obtained from the deposits. The samples were taken at regular intervals through the three contexts. Full stratigraphic information regarding the sequence is provided within the archaeology report, only brief descriptions will be provided here when attempting to contextualise the pollen results.

Methodology

A selection of 10 spot samples were prepared for pollen assessment from the sedimentary sequence. A summary of the sampling strategy applied by ASE to the three archaeological features can be reviewed in Table 1.

Context		
126	138	149
0.10	3.29	4.26
0.16	4.05	4.46
	4.36	
	4.60	
	4.97	
	5.86	

Table 1: Summary of the 10 samples submitted for palynological consideration.

Pollen preparation followed standard techniques including potassium hydroxide (KOH) digestion, hydrofluoric acid (HF) treatment and acetylation (Moore *et al.*, 1991). High CaCO₃ content required additional pre-treatment with hydrochloric acid. A count of at least 100 total land pollen grains (TLP) excluding aquatics and spores were attempted for each sample. Pollen preservation was found to vary, with only a handful of samples containing pollen insufficient abundance to enable full assessments to be undertaken.

Results

Pollen preservation, abundance and diversity was found to vary, with only some samples from <126> and <138> yielding sufficient pollen for consideration at assessment level. Table 2 summarises the pollen encountered in the three contexts.

<126>

Whilst pollen was abundant throughout the sequence, floral diversity was somewhat restricted and grains were heavily crumpled. Herb pollen dominated the two samples, with Poaceae (wild grasses) and Cyperaceae (sedges) being most abundant within both samples, supported by Asteraceae (asters), Lactuceae (dandelion) and Caryophyllaceae (Pink Family). Tree pollen was restricted to single grains of *Quercus* (oak) in each sample. Quaternary spores were almost wholly absent, whilst aquatic taxa were restricted to occasional grains of *Typha* sp. (bulrush).

<138>

Preservation varied considerably within the samples assessed from <138>. Pollen was absent from the upper sample (3.49m) and encountered in very low abundances at 4.26m depth. The samples at 4.05m depth, 4.60m and 5.86m depth contained insufficient pollen to reach the desired count of 100 total land pollen (TLP). A complete pollen count was only achievable in the single peat sample at 4.97m depth. Of the samples with limited pollen presence, herbaceous taxa dominated, typified by Lactuceae and Asteraceae, with occasional grains of Chenopodiaceae (goosefoot), Poaceae and Cyperaceae. Tree pollen was absent, and shrub pollen was limited to isolated *Corylus-Myrica* type (hazel or sweet gale). Spore content varied, but some samples containing a large volume of *Pteridium* (bracken). The peat sample at 4.97m depth broadly reflected the other samples, in that herbaceous pollen again dominated, with Asteraceae and Chenopodiaceae encountered in relative abundance. However in addition, *Malva* type (tentatively identified at *Malva parviflora* [cheeseweed or small-flowered mallow] or *Malva sylvestris* [high mallow]) is very abundant, in addition to *Cirsium* type (thistles). Trees, shrubs, spores and aquatics are absent.

<149>

Pollen was again found to be too low to be able to achieve a full assessment count within these two samples. When present, similar herbaceous flora to that encountered in the other two context were identified, but all with low counts (Lactuceae, Asteraceae, Cheonopodiaceae). Charcoal that looked pre-Quaternary was evident in both samples, in addition to occasional pre-Quaternary dinoflagellate cysts (within sample 4.46m), suggesting reworking of geological strata was likely to have contributed to the sedimentary context.

		126		138						149	
		0.10m	0.16m	3.29m	4.05m	4.36m	4.60m	4.97m	5.86m	4.26m	4.46m
Trees	<i>Alnus</i>										
	<i>Betula</i>										
	<i>Fagus</i>										
	<i>Fraxinus</i>										
	<i>Juglans</i>										
	<i>Pinus</i>						1		1		2
	<i>Quercus</i>	1	1								
	<i>Tilia</i>										
	<i>Ulmus</i>										
Shrubs	<i>Corylus-Myrica</i> type	5					1	1	4		1
	Ericaceae undif.										
	<i>Hedera helix</i>										
	<i>Hippophae</i>										
	<i>Salix</i>										
Herbs	Poaceae	60	55		3		3	2	12		
	Cyperaceae	32	25		1		2				
	Cereal										
	Apiaceae (Umbelliferae) undif.	2	1					2			
	<i>Artemisia</i>										
	Asteraceae	1	4			7	6	33	13	3	
	Lactuceae	7	30		19	5	34		5	7	13
	Brassicaceae							1			
	Caryophyllaceae	7	3		1		2	2			1
	<i>Centaurea cyanus</i>										
	<i>Centaurea scabiosa</i>							3			
	Chenopodiaceae				3	1	8	17	2	1	3
	<i>Cirsium</i> type							21	4		
	<i>Galium</i>										
	<i>Helianthemum</i>										
	<i>Malva</i> type							34			
	<i>Plantago</i> sp.										
	<i>Polygonum</i>										
	<i>Ranunculus</i>										
<i>Rumex</i>											
<i>Sanguisorba</i>											
<i>Succisa</i>											
<i>Thalictrum</i>											
<i>Urtica</i>											
Spores	<i>Diphasiastrum</i>										
	<i>Osmunda</i>										
	<i>Polypodium</i>								1		
	<i>Pteridium</i>		1		>100		>100		13	3	
	<i>Pteropsida</i> (monolete) undif.						1		24		
<i>Sphagnum</i>											
Aquatics	<i>Myriophyllum</i>										
	<i>Nuphar</i>										
	Nymphaea										
	<i>Potamogeton</i>										
	<i>Sparganium</i>										
	<i>Typha angustifolia</i>	1	1						1		
<i>Typha latifolia</i>	1	3									
Abundance	high	high	n/a	low	low	low	high	low	low	low	
Diversity	mod	mod	n/a	low	low	mod	high	mod	low	low	

Table 2: Summary of pollen encountered at Toddington Lane, Littlehampton

Discussion

Unfortunately, the overall pollen preservation across the three archaeological contexts was found to be poor. Full counts were only achieved within the samples from <126> and a single sample from <138>. The latter sample was associated with the organic unit found within the well, dated to the late Bronze Age. It is difficult to comment much on the floral assemblages due to the overall poor preservation, but when present, the signal suggests an open landscape with traditional wildflowers, some associated with grassland and others with disturbed ground. The almost total absence of tree and shrub pollen may relate to the lack of woodland proximal to the site, or the relatively 'closed' nature of the archaeological features (especially if two of the contexts are indeed Bronze Age wells) limiting pollen source to the immediate locale. The presence of sedges and bulrush within the theorised Roman pond could point to an aquatic setting, but few other aquatic taxa identifiable at assessment level were encountered to reinforce this. The single pollen sample from within <138> that was associated with the organic unit did provide an interesting assemblage, particularly the abundance of mallow and (to a lesser extent) thistles. The background pollen is typical of grassland/disturbed wildflowers, but to have such high abundances of mallow may perhaps indicate the plant itself makes up some of the peat's composition, rather than the pollen being blown into the well. In addition, whilst there seems to be little literature with regards this taxa in UK archaeological records, *Malva sylvestris* is referred to as a summer crop weed by Perego (2017) and there are also some references to some species of mallow, being an aromatic herb with both medicinal and food uses elsewhere in the world (Ekstrom & Edens, 2003).

Recommendations for further analysis

The overall very poor preservation of pollen within the majority of the samples assessed here limits their potential for further analysis. The interesting signal encountered in the thin peat unit of <138> however could yield further insight to the landscape and/or human activities taking place around the late Bronze Age. Therefore if the site is of specific interest to furthering our understanding around this time period, further analysis of this sample (and additional samples immediately above/below, but *within* the organic unit) could be proposed, as this organic unit contains a rather unique signal and hence could yield additional information with regards the proximal landscape and its use.

References

- Bennett, K.D., Whittington, G. & Edwards, K.J. 1994. Recent plant nomenclatural changes and pollen morphology in the British Isles. *Quaternary Newsletter*, 73, 1–6.
- Ekstrom H., & Edens, C. 2003 Prehistoric Agriculture in Highland Yemen: New Results from Dhamar. *Bulletin of the American Institute for Yemeni Studies*, 43: 25-35.
- Moore, P. D., Webb, J. A. and Collinson, M. D. (1991). *Pollen Analysis*. Oxford, Blackwell.

Perego, R. 2017. *Contribution to the development of the Bronze Age plant economy in the surrounding of the Alps: an archaeobotanical case study of two Early and Middle Bronze Age sites in northern Italy (Lake Garda region)*. Unpublished PhD Thesis, University of Basel, Switzerland.

Appendix 8: Micropalaeontological Assessment by Alice Dowsett

Introduction

Two samples were selected for micropalaeontological analysis during the geoarchaeological investigation at the site of Littlehampton: Toddington Lane AP6 mitigation. The aim of this micropalaeontological assessment was to assess the sediments for microfaunal preservation, as well as ascertain the extent of preservation for other contained material.

Materials and Methods

Sample	Depth (m bgl)	Weight Processed (g)
<126>	0.02-0.06	142
<126>	0.11-0.15	130

Table 1. Details of the samples assessed

The samples were placed in aluminium tins and dried in an oven at 80°C. After drying, a small quantity of sodium carbonate was added to aid the breakdown of the clay fraction. The sediment was then immersed in hot water and left to soak for 2 hours. This was then washed through a 75µm sieve with hand-hot water, the resulting residue being returned to the bowl for drying. Once dry the residues were sieved through a nest of >500µm, >250µm and >125µm sieves. Sediment from each fraction was then picked by placing a small amount of residue onto a tray and examining it under a binocular microscope. Contained material of potential environmental or biostratigraphic value was noted and listed in tabular form on a presence/absence basis in Table 2.

Results

From the two samples assessed, neither were found to preserve any foraminifera or ostracods, therefore no palaeoenvironmental interpretations can be made using these proxies.

SAMPLE	<126>	<126>
	0.02-0.06m	0.11-0.15m
DEPTH OF SAMPLE		
iron (non-natural)		x
CBM		x
charcoal	x	x
modern seeds		x
insect remains	x	x

Ecology	archaeological deposit, poor preservation may be due to acidic soils/ weathering
---------	--

contained material was recorded on a presence (x)/ absence basis

Table 2: Contained material

Both samples contained small amounts of charcoal and insect remains (possibly modern). Sample <126> 0.11-0.15m also contained small amounts of artificially formed pieces of iron, as well as small fragments of CBM.

Discussion

Both samples exhibited a lack of microfauna. This could indicate that preservation was poor and that any ostracods that may have been living in the sediment have broken down. This poor preservation may be caused by acidic soils/sediments in the local area and/or weathering processes. However, it is also possible that there was no body of water in this location, which would account for the lack of ostracod presence.

Appendix 9: HER Summary

HER enquiry no.	NA				
Site code	LNR16				
Project code	180315				
Planning reference	LU/47/11				
Site address	Land at Toddington Lane, Littlehampton, West Sussex				
District/Borough	Arun District				
NGR (12 figures)	503876 104015				
Geology	Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation, and Culver Chalk Formation overlain by Raised Beach Deposits of sand and gravel				
Fieldwork type		Excav			
Date of fieldwork	June to August 2018				
Sponsor/client	Armour Heritage				
Project manager	Paul Mason				
Project supervisor	Tom Munnery				
Period summary		Mesolithic	Neolithic	Bronze Age	Iron Age
	Roman			Post-Medieval	
Project summary (100 word max)	An archaeological excavation was conducted at Land at Toddington Lane, Littlehampton, West Sussex NGR 503159 104026, between the June and August 2018. Four Early Neolithic pits were encountered. A Middle Bronze Age inhumation and cremation and associated features were revealed along with a Late Bronze Age to earliest Iron Age structure with structured deposits and nearby ditches. Iron Age field system and trackways were excavated which might have been used into the Roman period as were additional Early Roman boundaries and quarry pits.				
Museum/Accession No.	In prep				

Finds summary

Find type	Material	Period	Quantity
Pottery	Ceramic	Early Neolithic	370g
Flintwork	Lithics	Early Neolithic	29
Flintwork	Lithics	Late Prehistoric	583

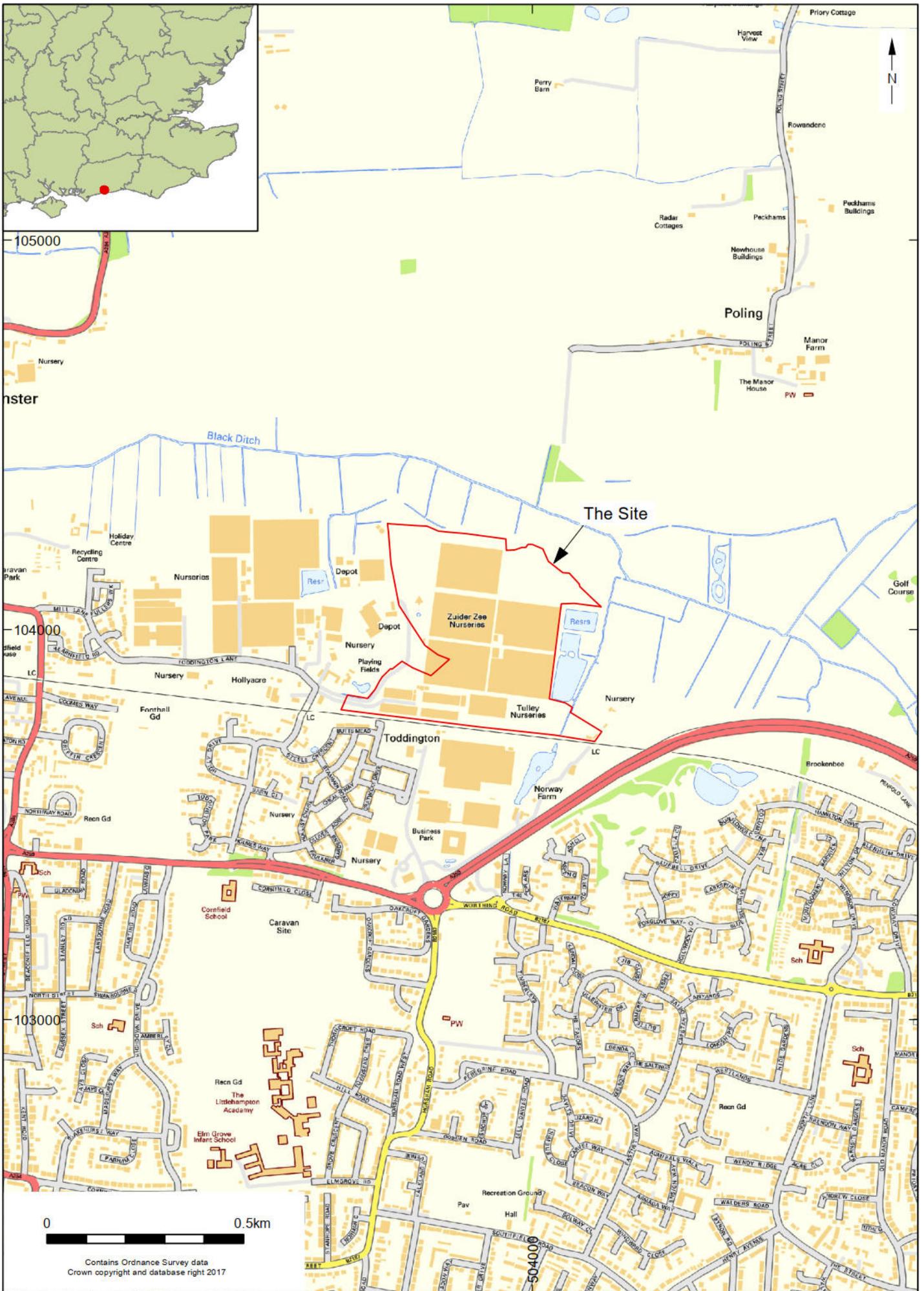
Pottery	Ceramic	Middle Bronze Age	3619g
Human bone	Bone	Middle Bronze Age	
Cremated bone	Bone	Middle Bronze Age	539g
Loomweights	Ceramic	Middle Bronze Age	17
Animal bone	Bone	Middle Bronze Age	19
Quern stone	Lithic	Late Bronze Age to earliest Iron Age	396g
Pottery	Ceramic	Late Bronze Age to earliest Iron Age	4411g
Animal bone	Bone	Late Bronze Age to earliest Iron Age	390
Pottery	Ceramic	Iron Age	434g
Animal bone	Bone	Iron Age	27
Pottery	Ceramic	Early Roman	9838g
Quern stone	Lithic	Early Roman	2900g
Animal bone	Bone	Early Roman	404

OASIS Form

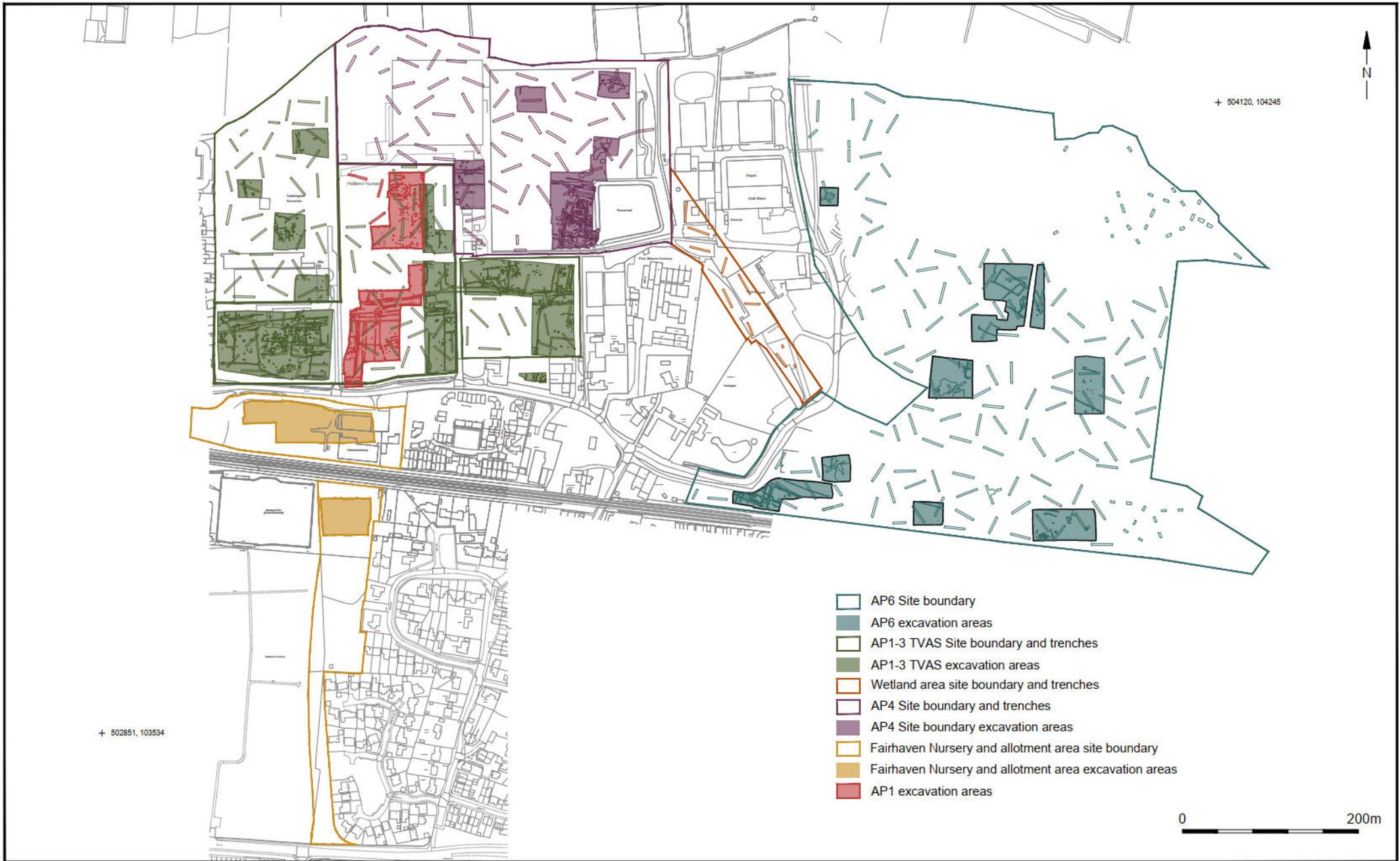
OASIS ID: archaeol6-371803

Project details

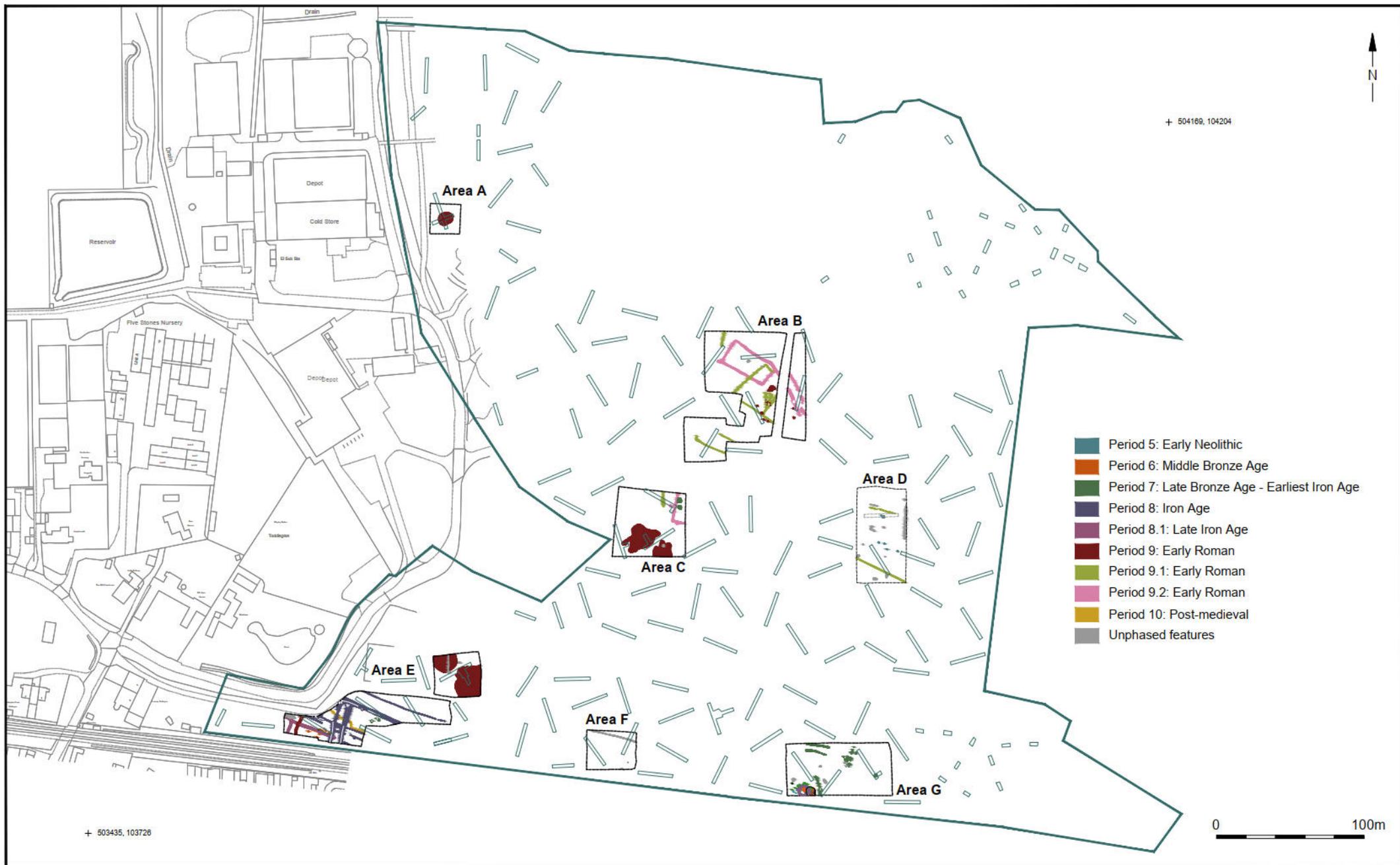
Project name	LAND AT TODDINGTON LANE (AP6), LITTLEHAMPTON, WEST SUSSEX
Short description of the project	An archaeological excavation was conducted at Land at Toddington Lane, Littlehampton, West Sussex NGR 503159 104026, between the June and August 2018. Four Early Neolithic pits were encountered. A Middle Bronze Age inhumation and cremation and associated features were revealed along with a Late Bronze Age to earliest Iron Age structure with structured deposits and nearby ditches. Iron Age field system and trackways were excavated which might have been used into the Roman period as were additional Early Roman boundaries and quarry pits.
Project dates	Start: 01-06-2018 End: 28-10-2019
Previous/future work	Yes / No
Type of project	Field evaluation
Current Land use	Vacant Land 1 - Vacant land previously developed
Project location	
Country	England
Site location	WEST SUSSEX ARUN BOGNOR REGIS Toddington AP6
Study area	3.6 Hectares
Site coordinates	TQ 503876 104015 50.872941130394 0.137676731872 50 52 22 N 000 08 15 E Point
Project creators	
Name of Organisation	Archaeology South-East
Project brief originator	Chichester District Council
Project design originator	Armour Heritage
Project director/manager	Paul Mason
Project supervisor	Tom Munnery
Entered by	Jim Stevenson (jim.stevenson@ucl.ac.uk)
Entered on	28 October 2019



© Archaeology South-East		Land at Toddlington Lane - AP6, Littlehampton, West Sussex	Fig. 1
Project Ref: 180315	October 2019	Site location	
Report Ref: 2019066	Drawn by: LG		

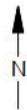


© Archaeology South-East		Land at Toddington Lane - AP6, Littlehampton, West Sussex	Fig.2
Project Ref: 180315	October 2019	All areas of archaeological mitigation	
Report Ref: 2019066	Drawn by: LG		

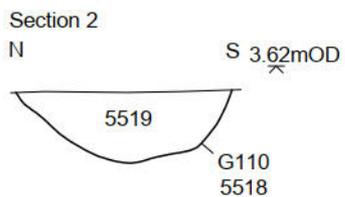
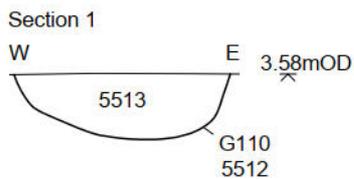
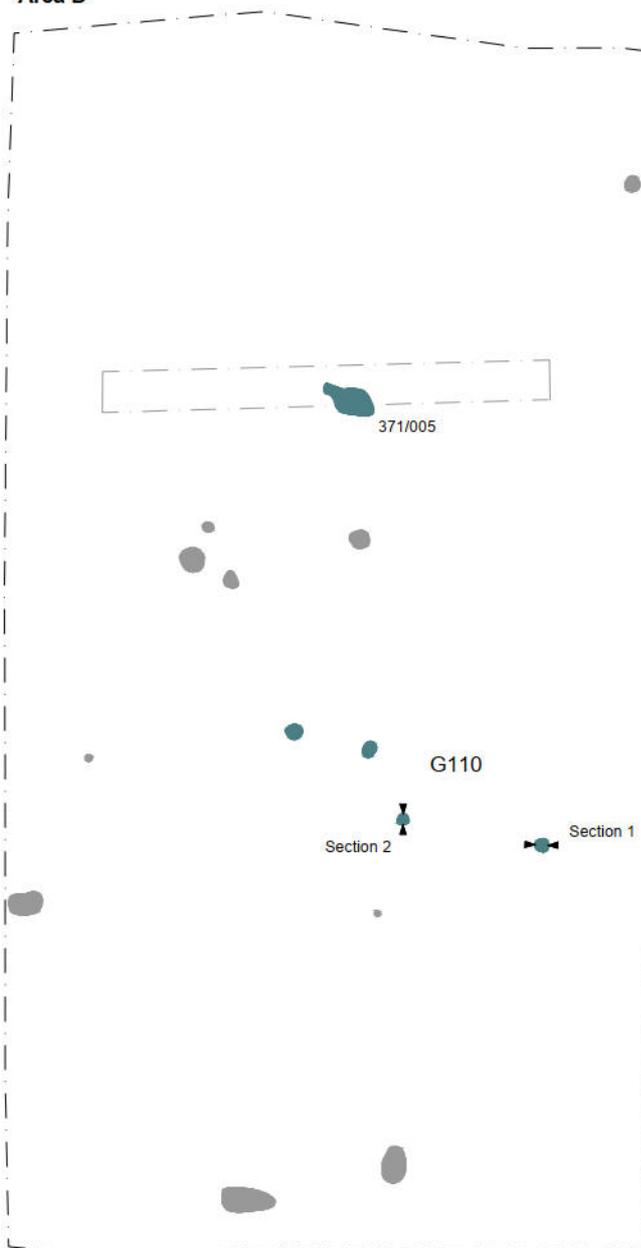


© Archaeology South-East		Land at Toddington Lane - AP6, Littlehampton, West Sussex	Fig.3
Project Ref: 180315	October 2019	AP6 areas of excavation and evaluation	
Report Ref: 2019066	Drawn by: LG		

Area D



- Period 5: Early Neolithic
- Unphased but potentially relevant



0 0.5m

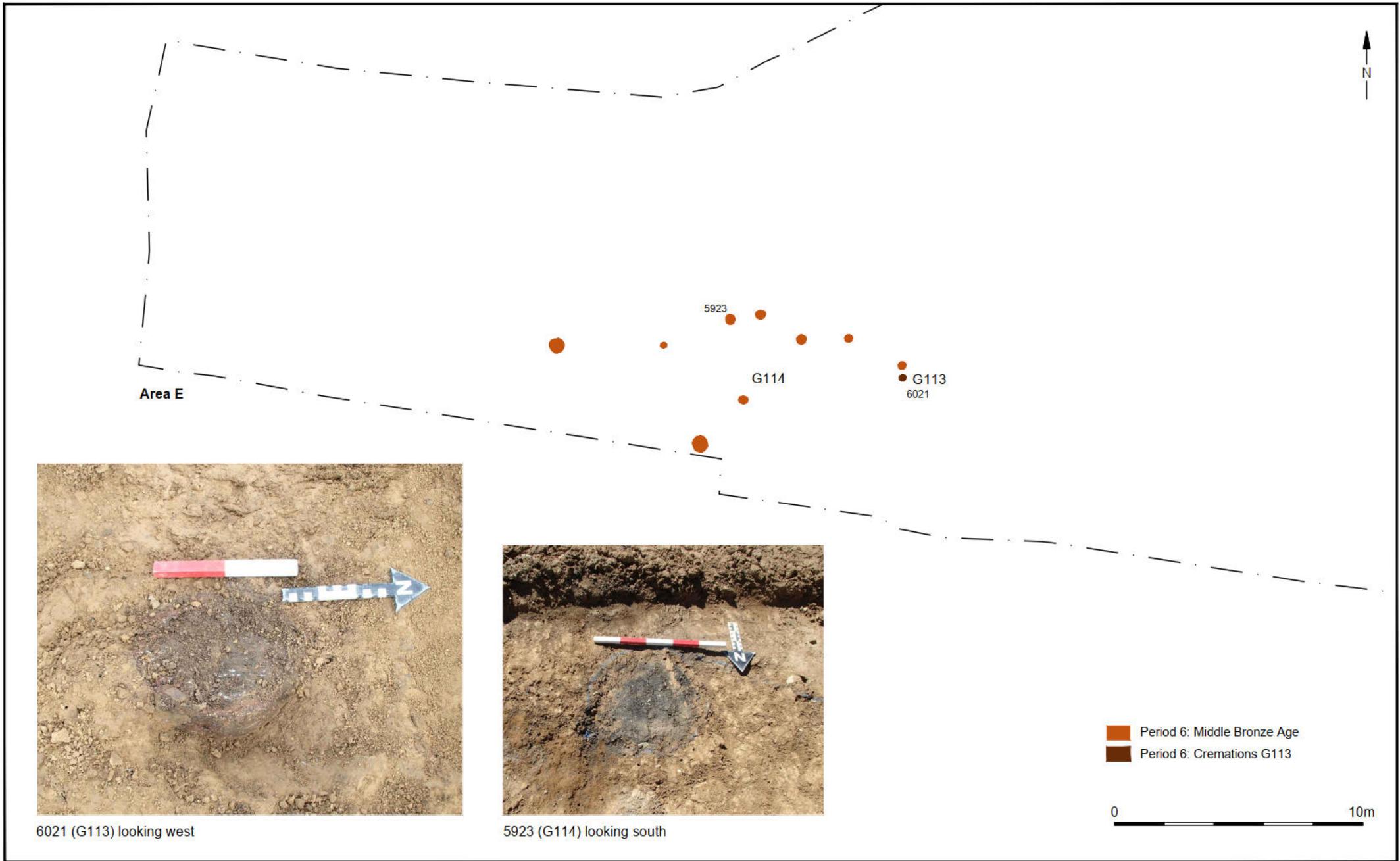
0 10m

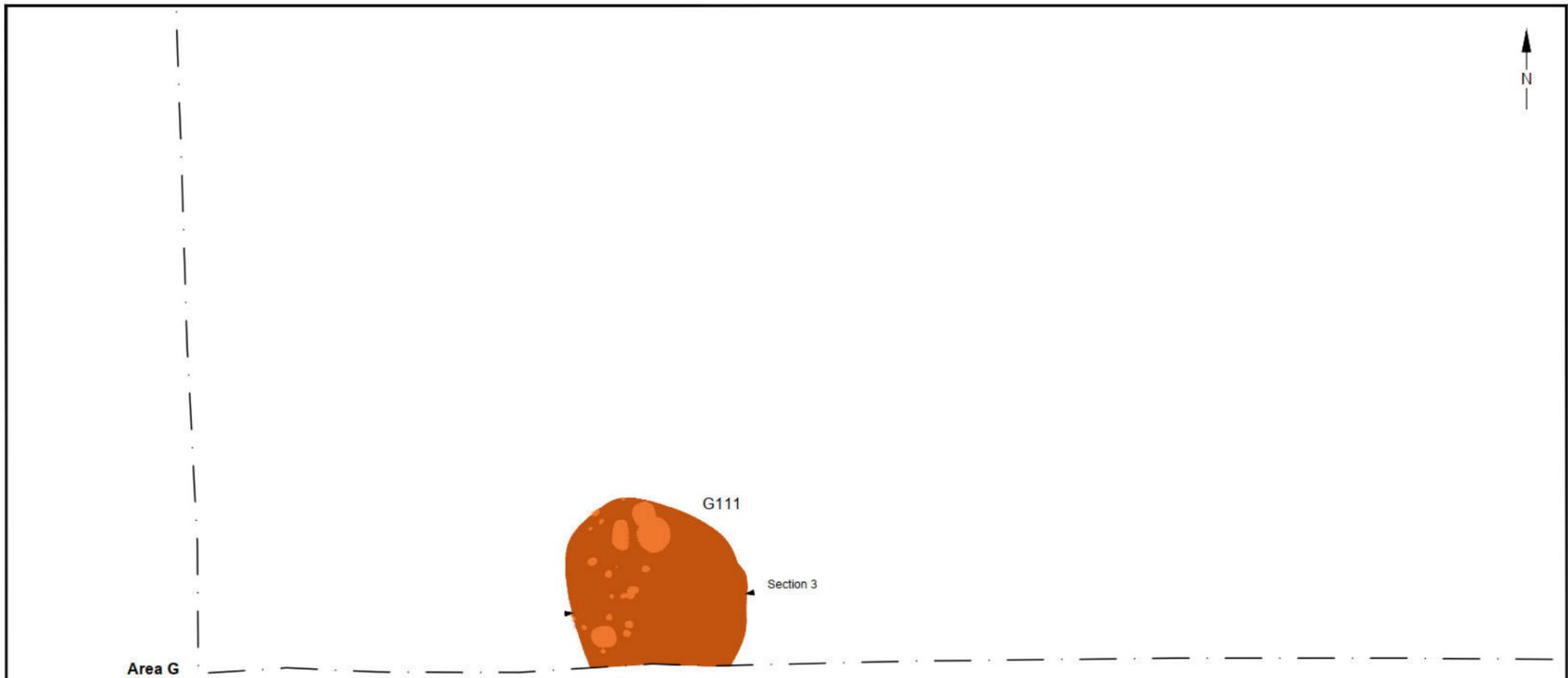


5512 (G110) looking north



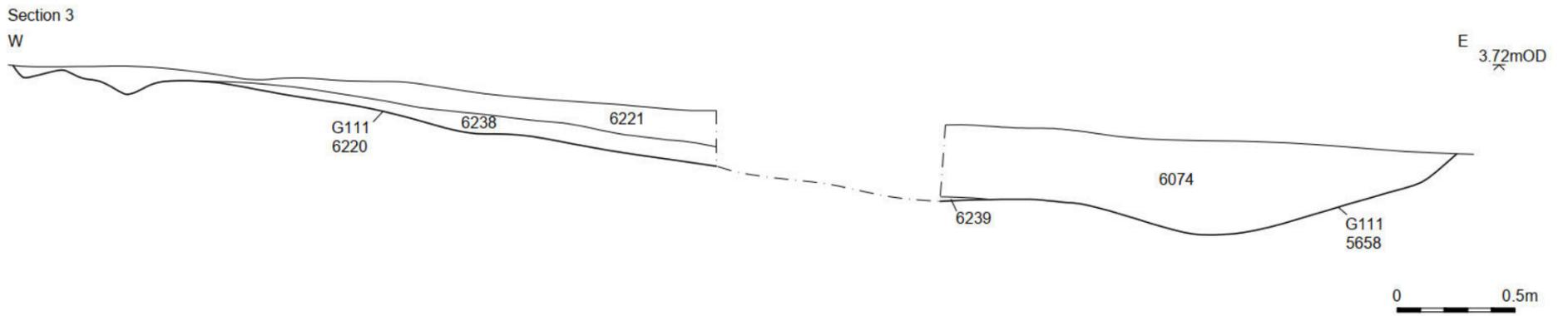
5518 (G110) looking east



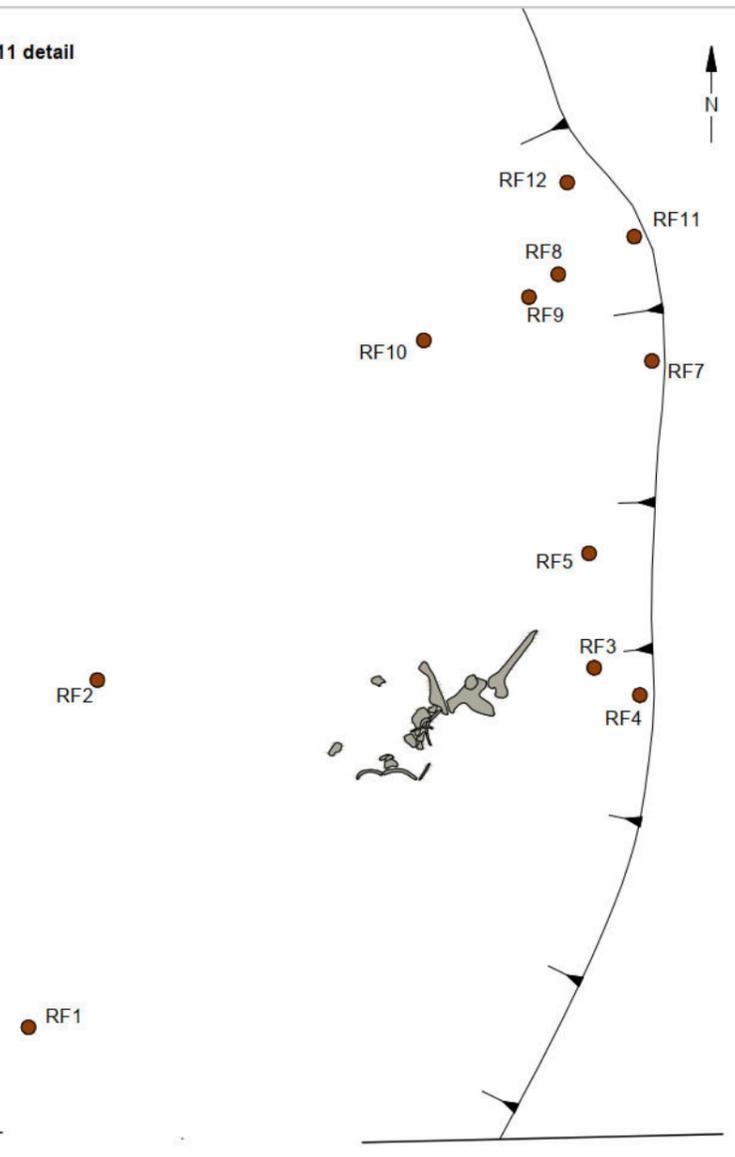


Period 6: Middle Bronze Age

0 10m

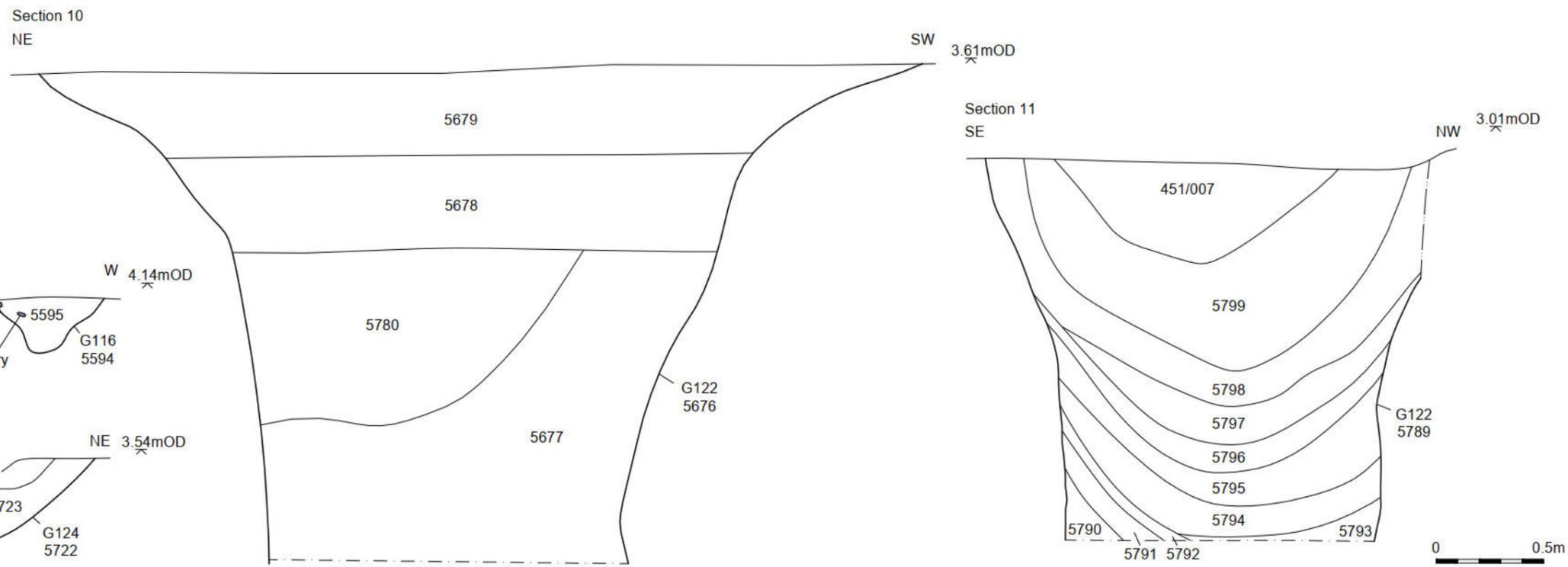
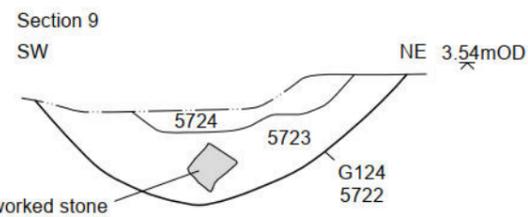
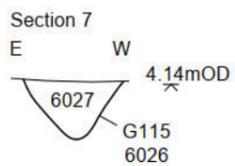
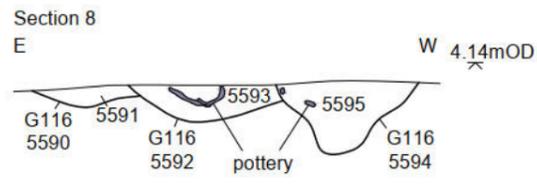
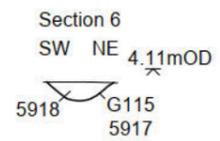
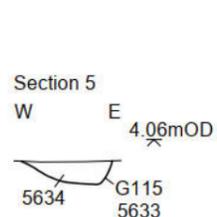
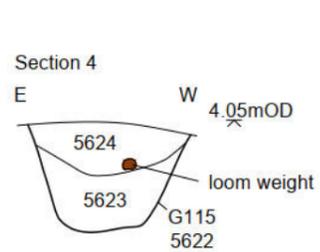
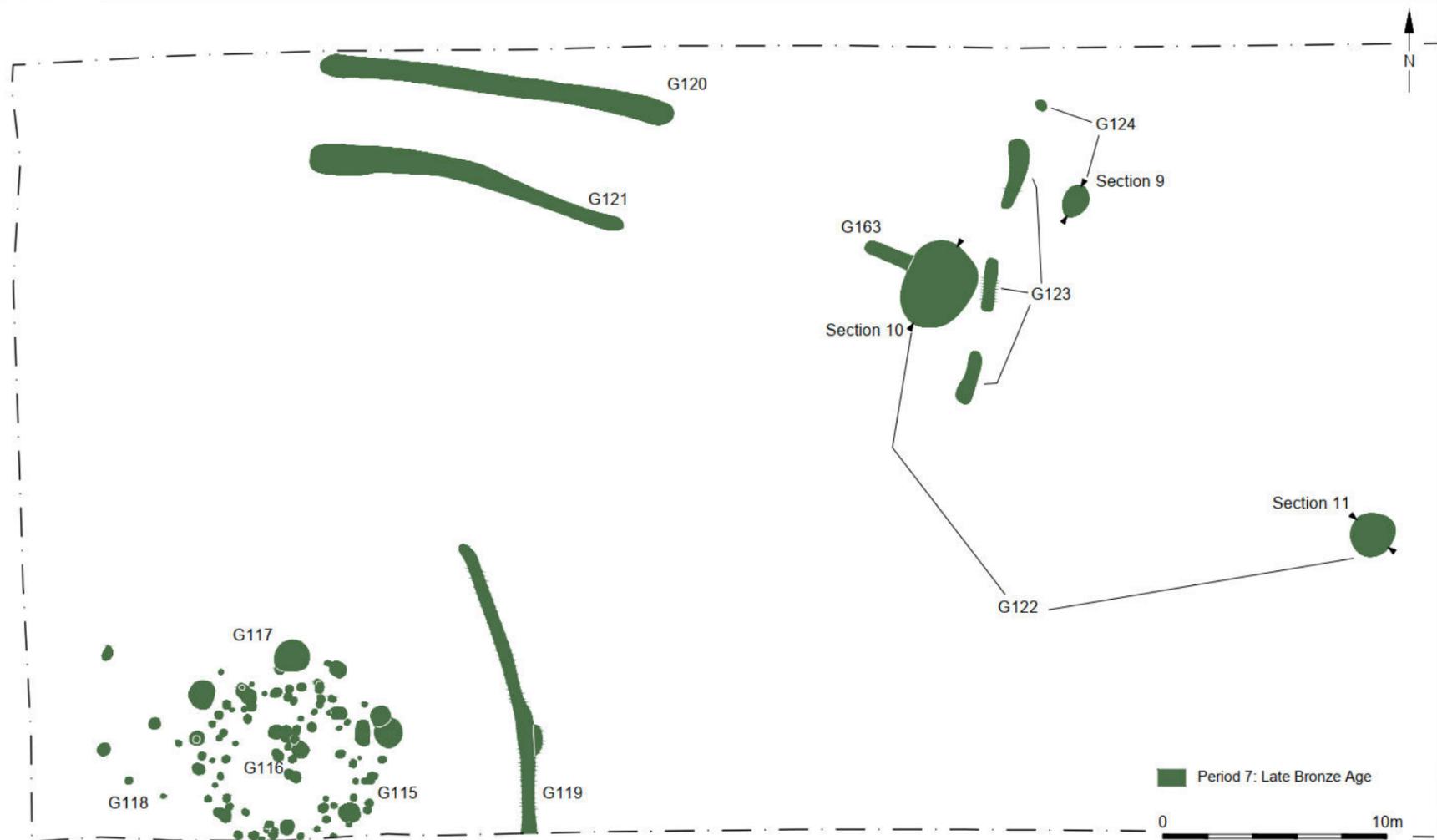
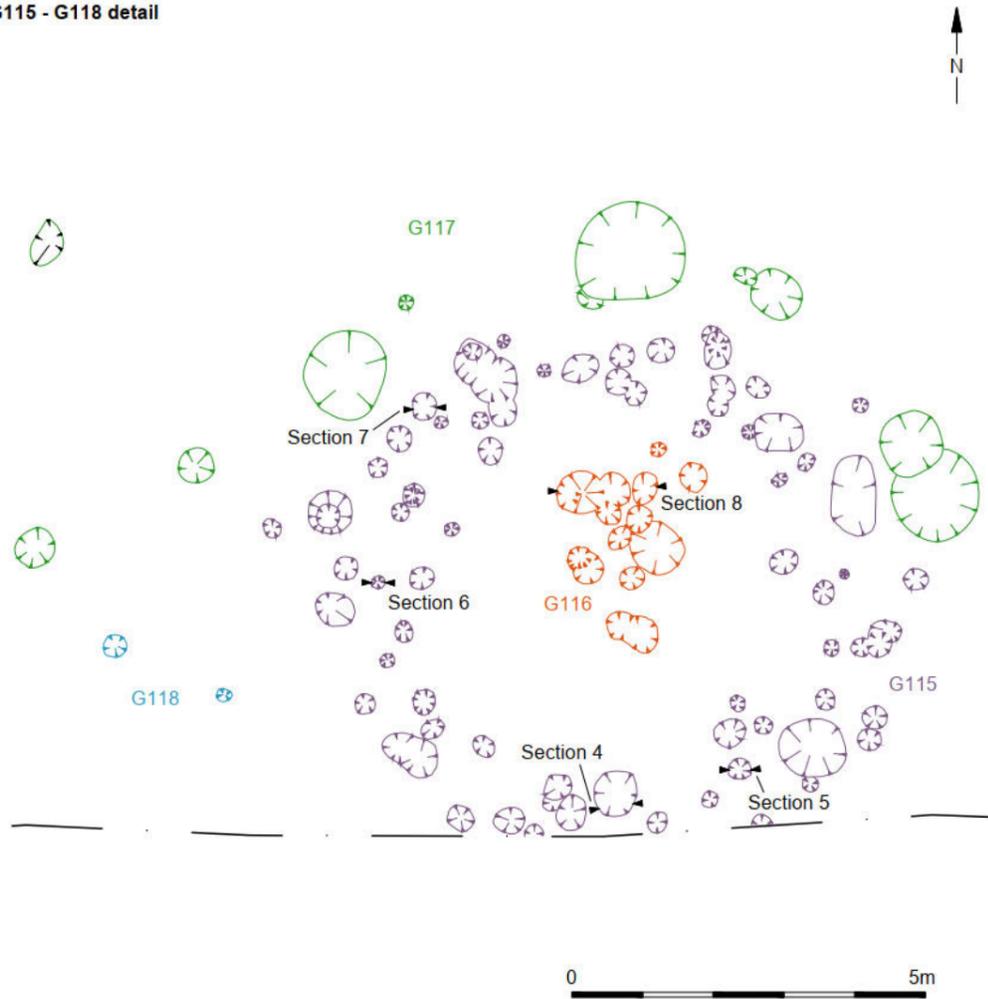


G111 detail



Articulated partial remains in G111

G115 - G118 detail





Aerial photograph of circular post-built structure



Posthole 5622 looking south



Postholes 5590, 5592 and 5594 (G116) looking south



Posthole 5633 (G115) looking north



Well 5676 (G122) looking south



Posthole 5917 (G115) looking north



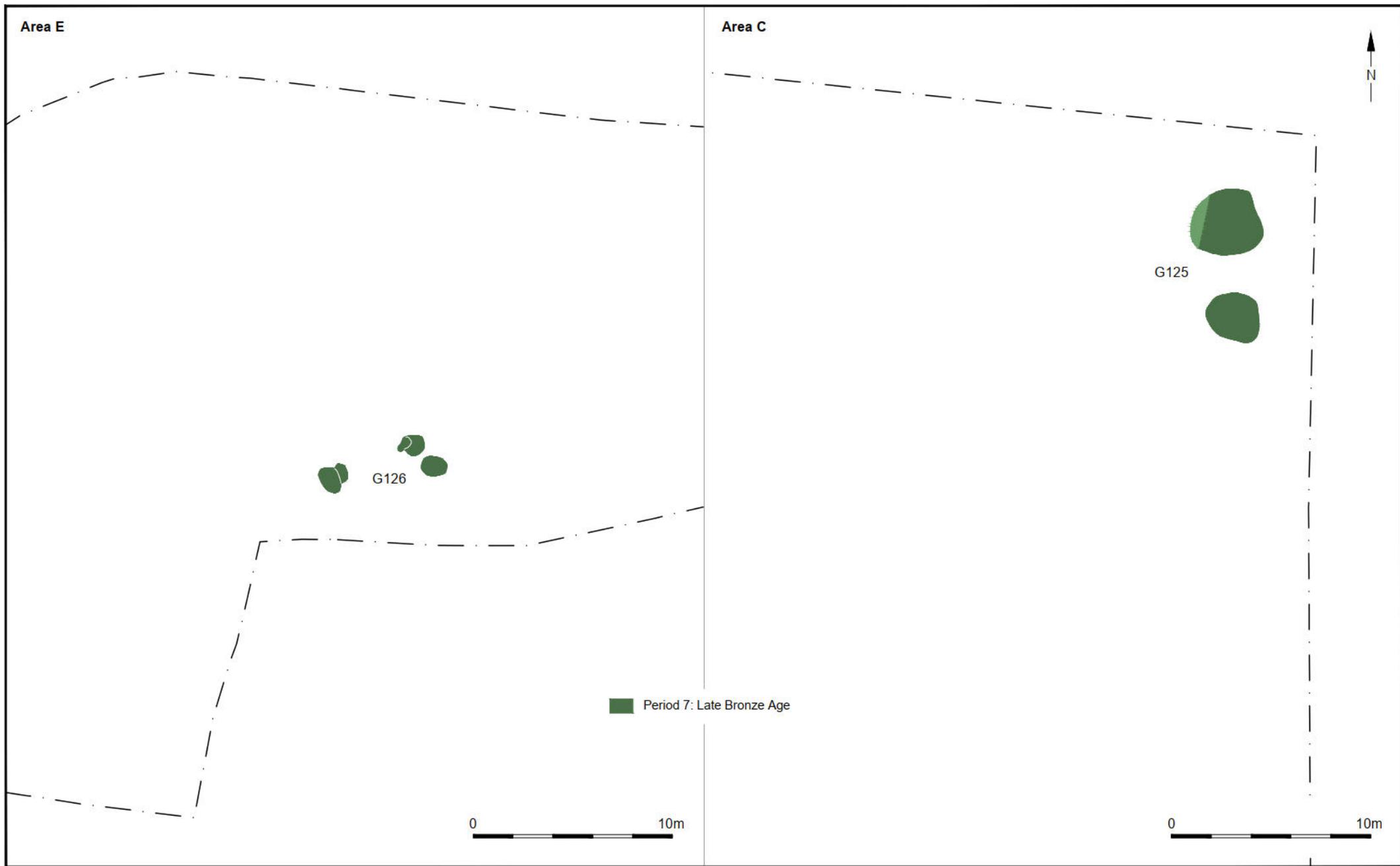
Well 5789 (G122) looking south-west



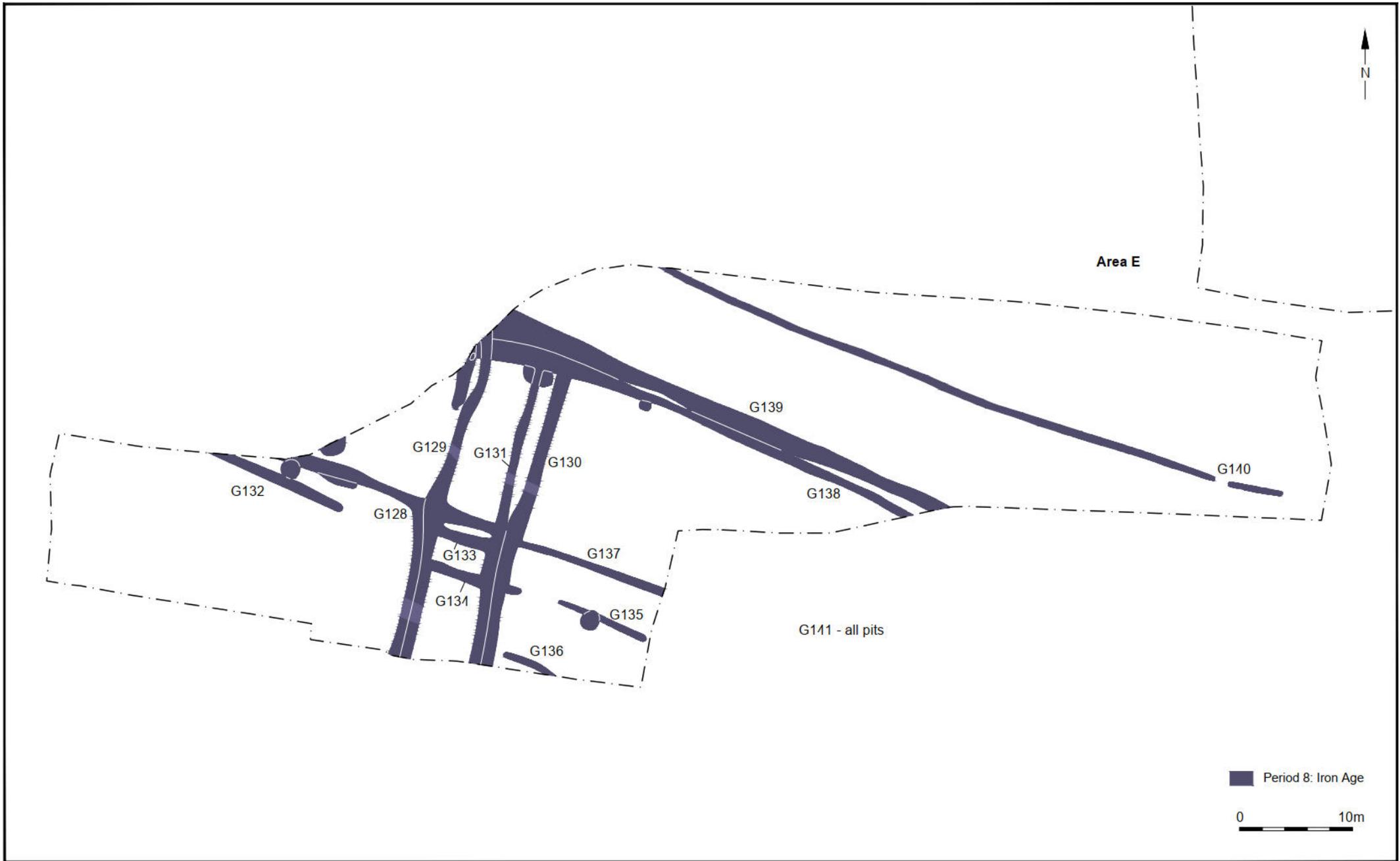
Posthole 6026 (G115) looking south



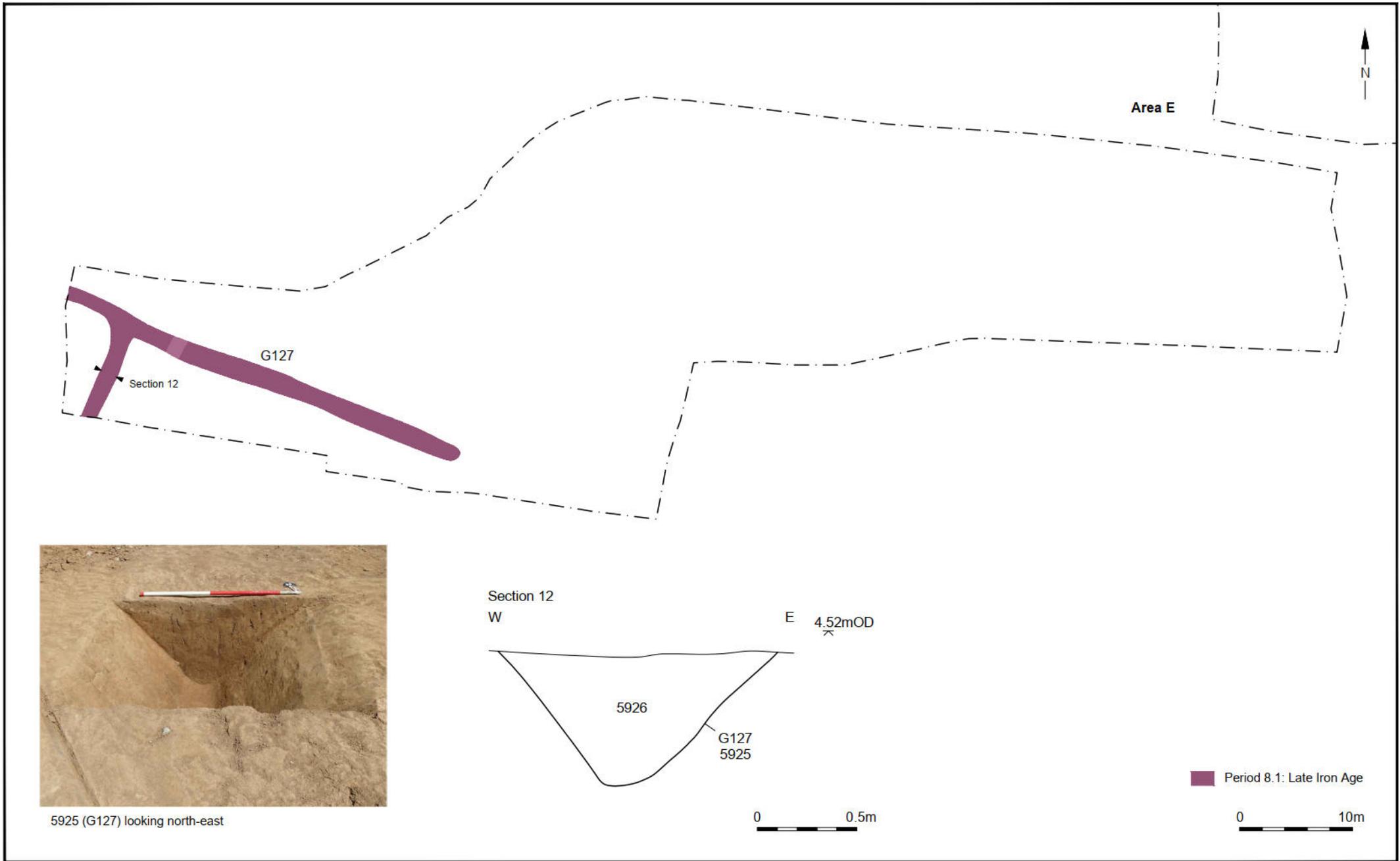
Pit 5722 (G124) looking north-west



© Archaeology South-East		Land at Toddington Lane - AP6, Littlehampton, West Sussex	Fig.9
Project Ref: 180315	October 2019	Period 7: Late Bronze - Earliest Iron Age , Areas E and C plans	
Report Ref: 2019066	Drawn by: LG		

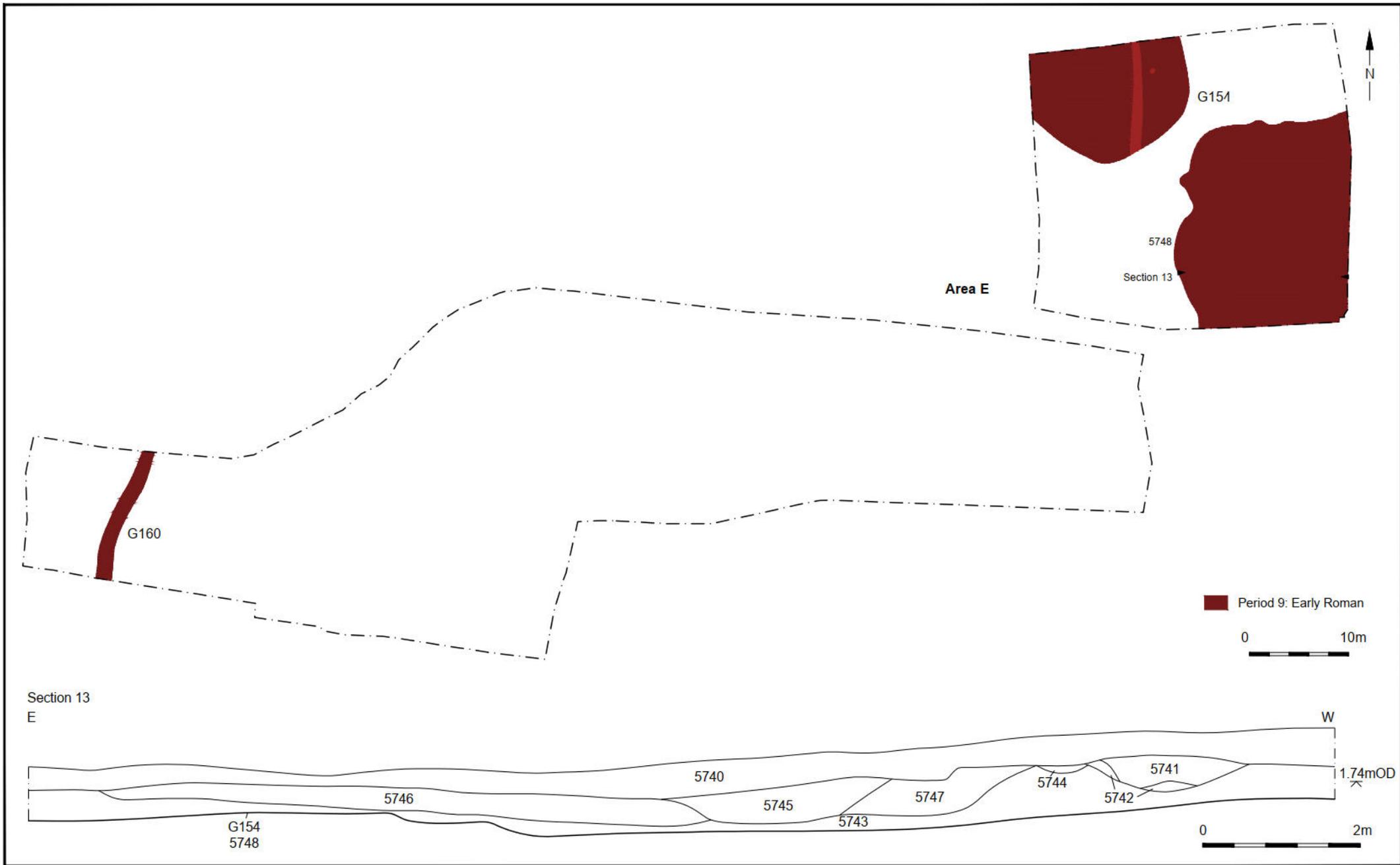


© Archaeology South-East		Land at Toddington Lane - AP6, Littlehampton, West Sussex	Fig.10
Project Ref: 180315	October 2019	Period 8: Iron Age , Area E plan	
Report Ref: 2019066	Drawn by: LG		



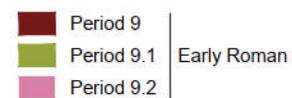
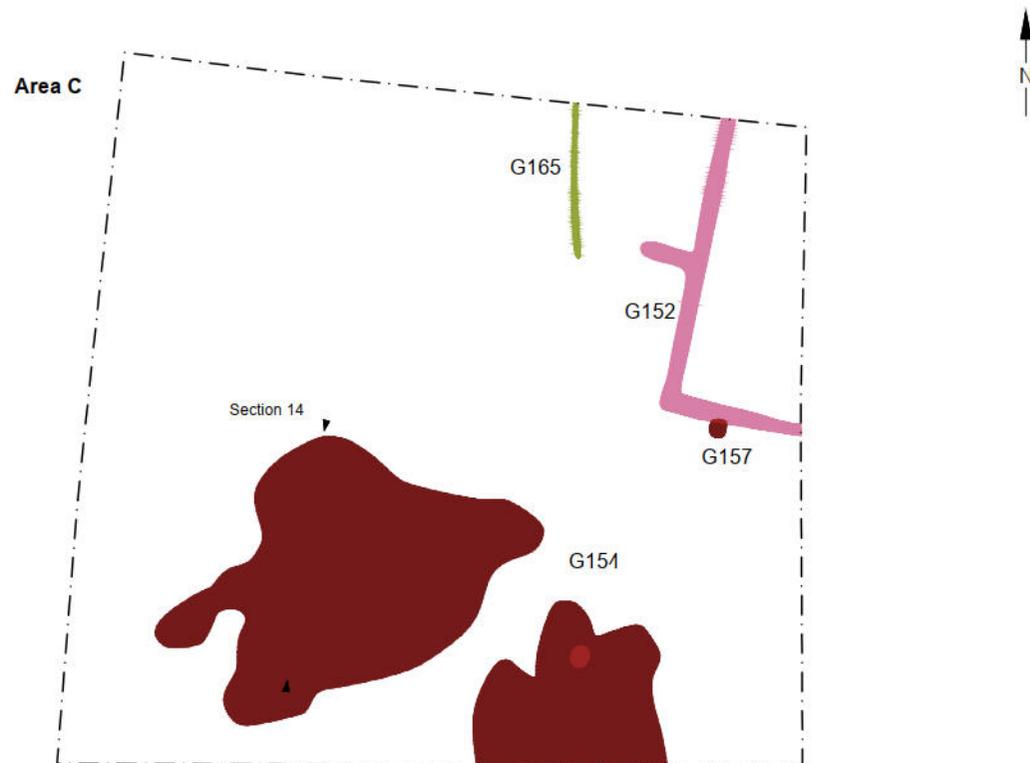
5925 (G127) looking north-east

© Archaeology South-East		Land at Toddington Lane - AP6, Littlehampton, West Sussex	Fig.11
Project Ref: 180315	October 2019	Period 8.1: Late Iron Age , Area E plan, selected section and photograph	
Report Ref: 2019066	Drawn by: LG		

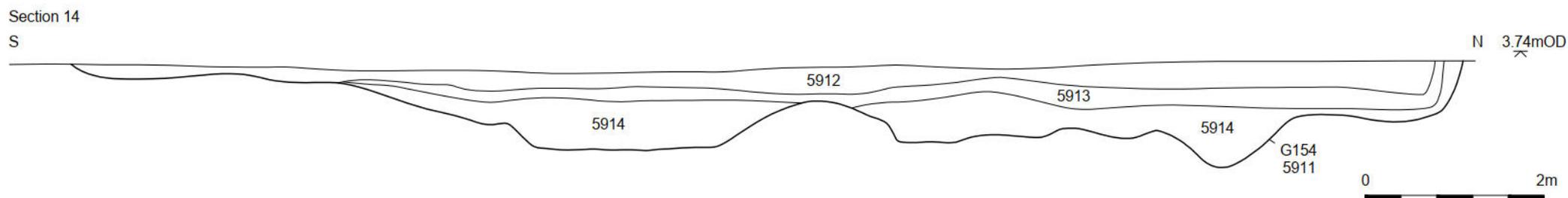




Quarry 5911 (G151) looking north-west

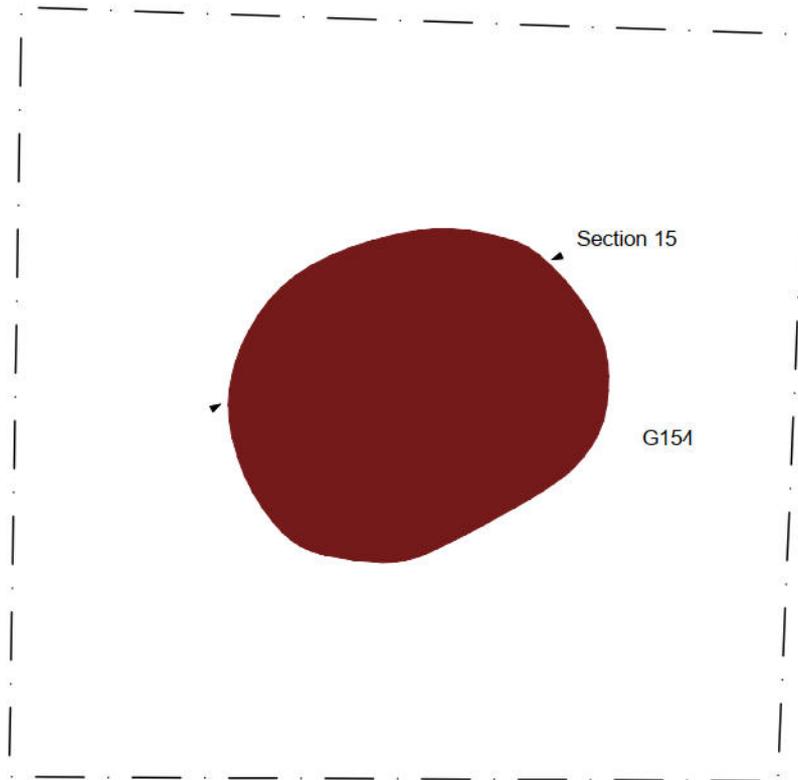


Early Roman



© Archaeology South-East		Land at Toddington Lane - AP6, Littlehampton, West Sussex	Fig.13
Project Ref: 180315	October 2019	Periods 9, 9.1 and 9.2: Early Roman, Area C plan, selected section and photograph	
Report Ref: 2019066	Drawn by: LG		

Area A



Period 9: Early Roman

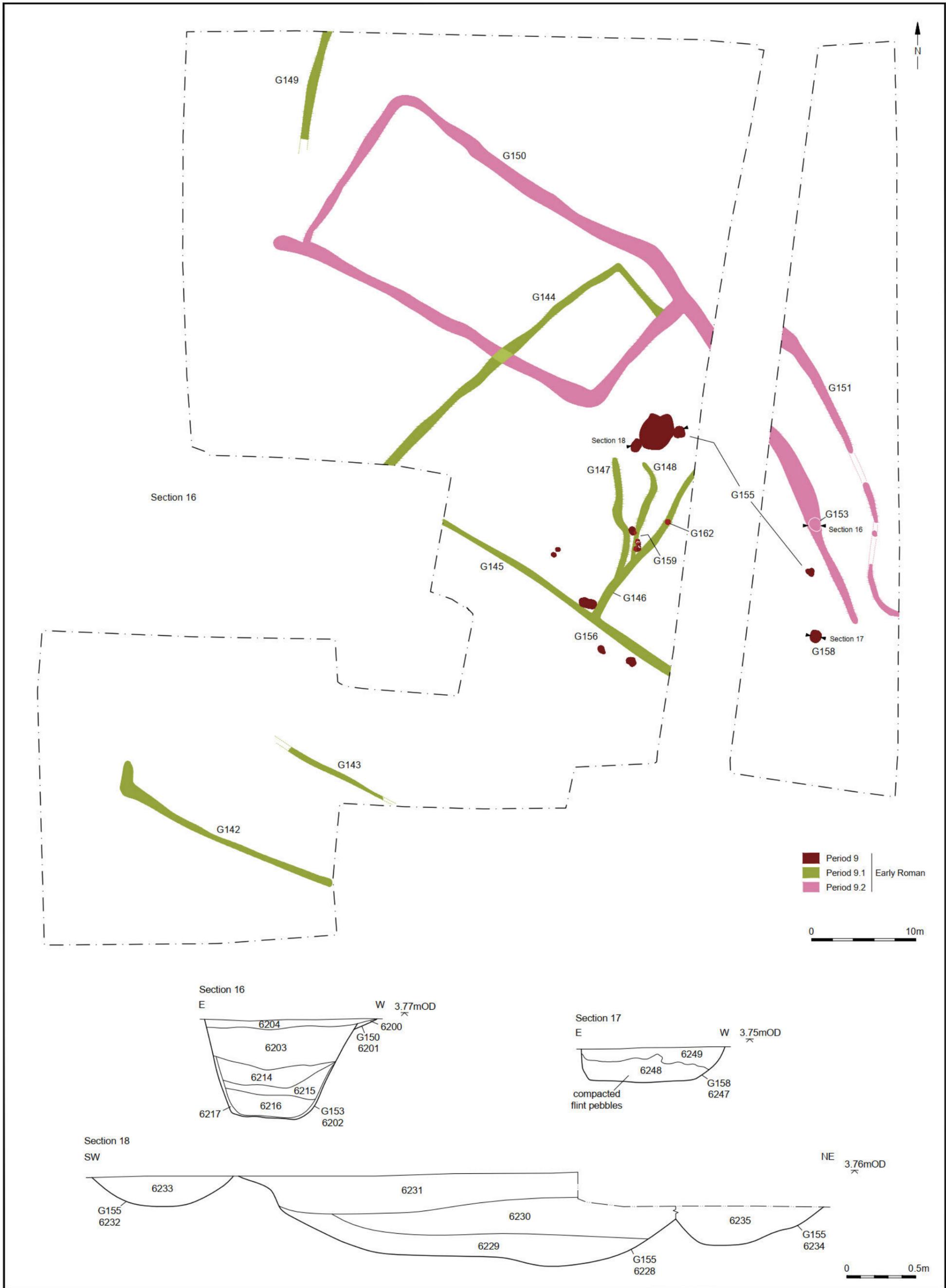
0 10m

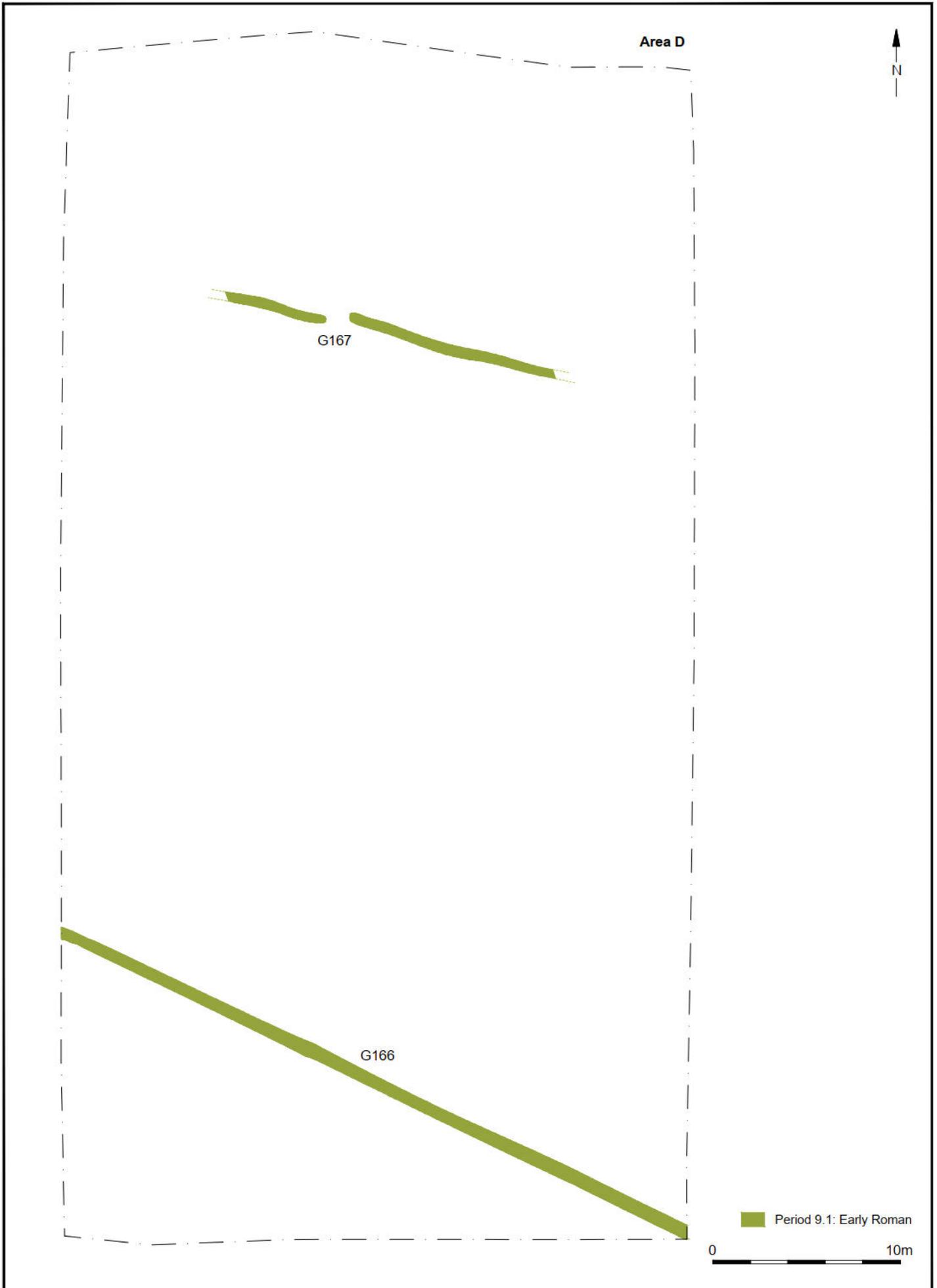


Quarry 5939 (G154) looking north

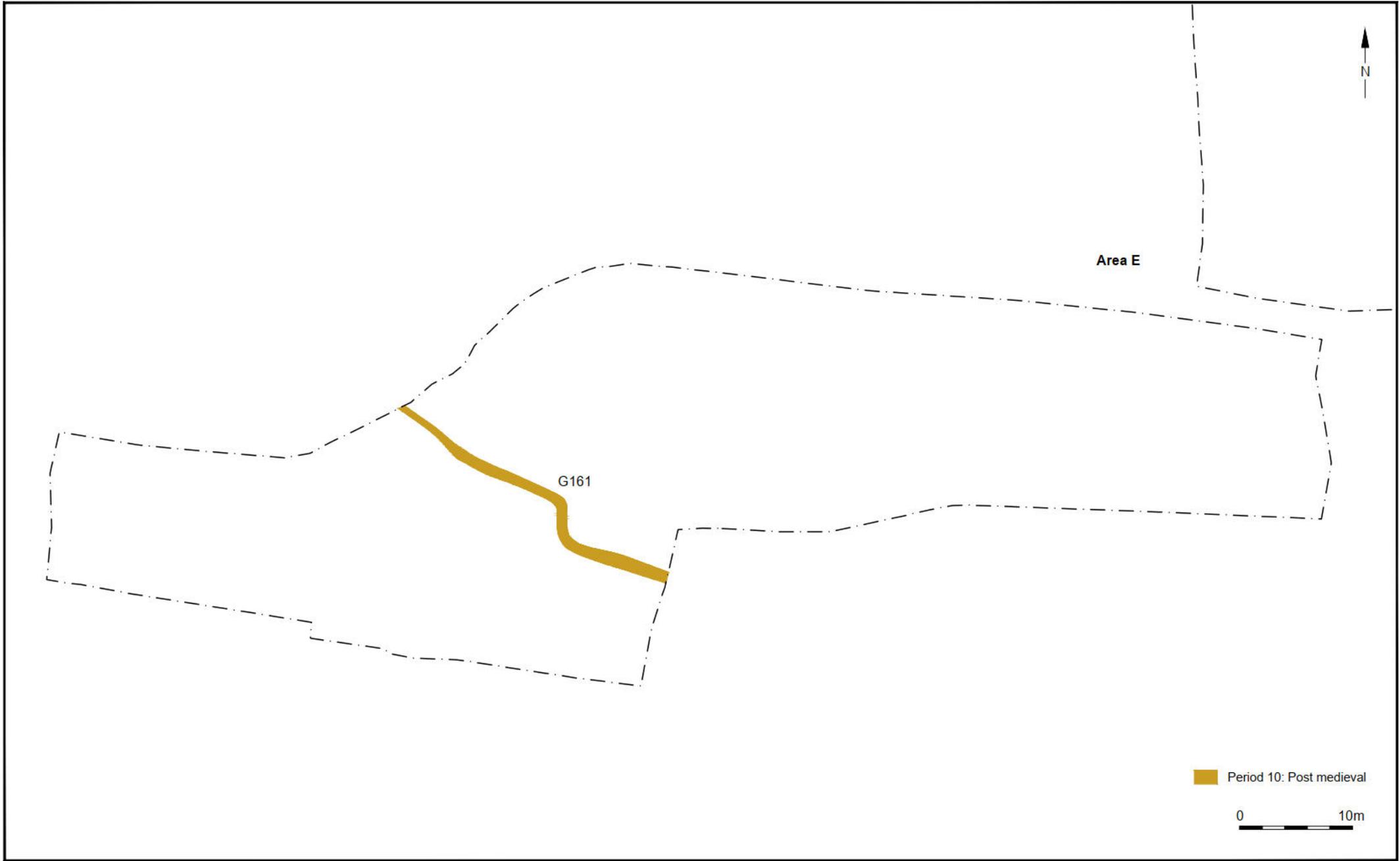
Section 15
SW



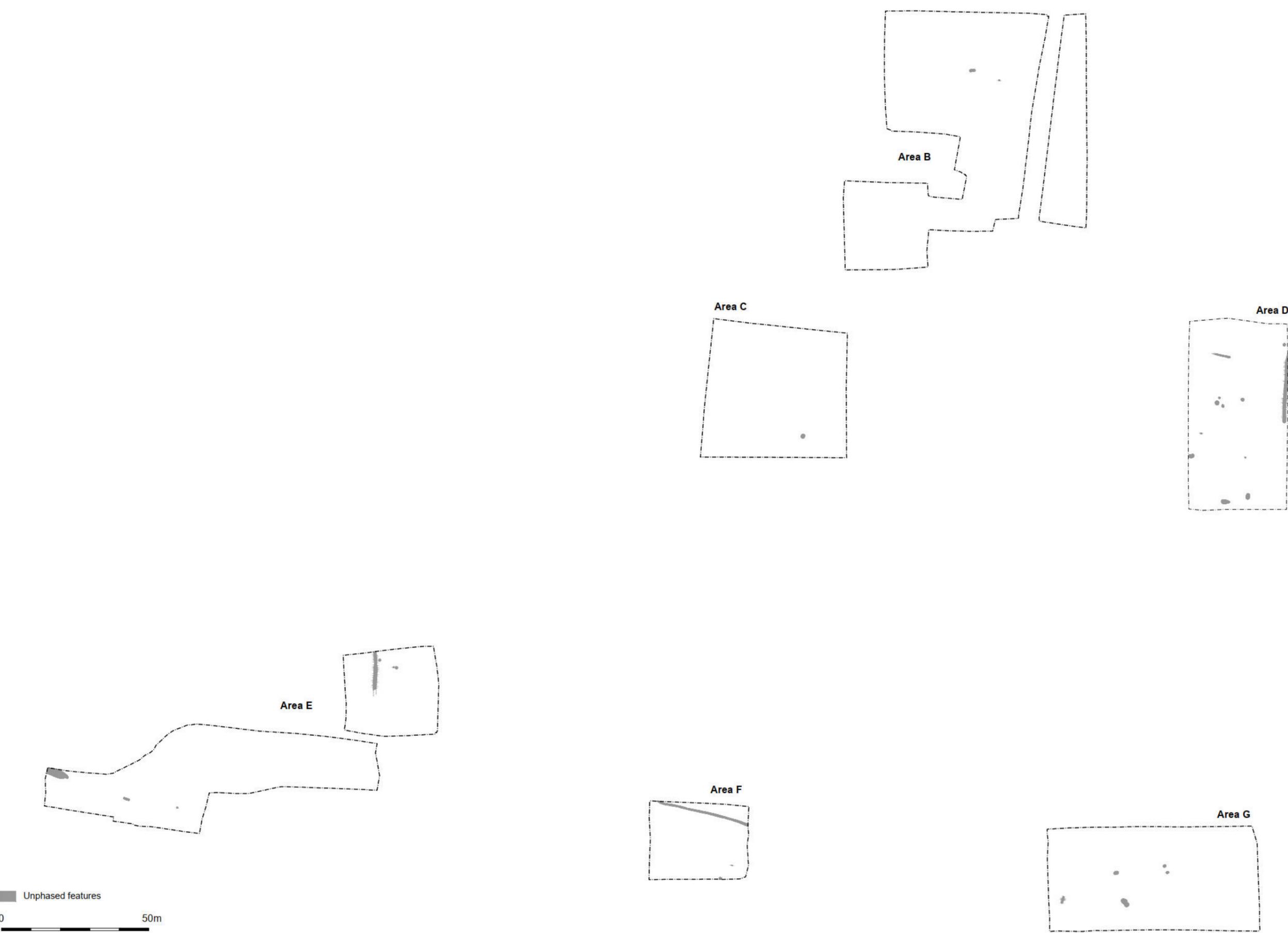




© Archaeology South-East		Land at Toddington Lane - AP6, Littlehampton, West Sussex	Fig.16
Project Ref: 180315	October 2019	Period 9.1: Early Roman, Area D plan	
Report Ref: 2019066	Drawn by: LG		



© Archaeology South-East		Land at Toddington Lane - AP6, Littlehampton, West Sussex	Fig.17
Project Ref: 180315	October 2019	Period 10: Post medieval , Area E plan	
Report Ref: 2019066	Drawn by: LG		



Sussex Office

Units 1 & 2
2 Chapel Place
Portslade
East Sussex BN41 1DR

Essex Office

27 Eastways
Witham
Essex
CM8 3YQ

London Office

Centre for Applied Archaeology
UCL Institute of Archaeology
31-34 Gordon Square
London WC1H 0PY

