Cross Levels Way, Eastbourne, East Sussex

Archaeological Evaluation Report

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Cross Levels Way, Eastbourne, East Sussex

Archaeological Evaluation Report

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Summary

In August 2019 Oxford Archaeology undertook an 18-trench evaluation at Cross Levels Way, Eastbourne, East Sussex, on behalf of Morgan Sindell Group for a proposed new Primary School. The evaluation revealed a late prehistoric landscape of field systems, enclosures, pits, postholes, trackway and a possible roundhouse. The features were found associated with a rich flint and pottery assemblage of middle-late Bronze Age date. Flints and pottery of probable Neolithic date were also present as was a limited concentration of Mesolithic lithic material. The evaluation featured very dense disturbed lithic scatters in the subsoil but did not reveal any *in situ* material. A possible buried soil was also revealed during the evaluation that may have higher potential to preserve *in situ* remains. Based on the results of the evaluation the site was the focus of middle-late Bronze Age activity possibly related to a farmstead along the edges of the former tidal inlet of the Willingdon Levels.

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The project was managed for Oxford Archaeology by Carl Champness. The fieldwork was directed by Mike Donnelly and Becky Peacock, who were supported by Simon Batsman and Annabel Johns. Survey and digitising was carried out by Simon Batsman, Gary Jones and Conan Parsons. Thanks are also extended to the teams of OA staff that cleaned and packaged the finds under the supervision of Geraldine Crann, and processed the environmental remains under the supervision of Sharon Cook.

1 INTRODUCTION

1.1 Scope of work

1.1.1 Oxford Archaeology (OA) was commissioned by Morgan Sindall Group to undertake an archaeological evaluation of the site of a proposed new primary school at Cross Levels Way, Eastbourne, East Sussex. A programme of 18 trenches and a series of geoarchaeological test pitting was undertaken across the site to assess the archaeological potential.

1.1.2 The work was undertaken to support a future planning application. A brief was set following discussion with Greg Chuter, County Archaeologist for East Sussex County Council, and a written scheme of investigation was produced by OA detailing the Local Authority's requirements for work necessary to inform the planning process (OA 2019). This document outlines the results of the evaluation.

1.1.3 All fieldwork was undertaken in accordance with Standards for Archaeological Works in Sussex (2019) and Chartered Institute for Archaeologists Guidance (CIFA 2014).

1.2 Location, topography and geology

1.2.1 The site falls within the administrative district of Eastbourne Borough Council and is located behind St Wilfred's Hospice along Cross Levels Way (NGR: TQ442201653; Fig. 1). The site is bounded to the north and west by playing fields, to the east by industrial buildings and to the south by St Wilfrid's Hospice. Historically the site was located within the Willingdon Levels, which is an area of wetland which was dominated by a tidal embayment up until land reclamation during the medieval period.

1.2.2 The British Geological Survey (BGS) records the underlying bedrock geology of the site as Gault Formation, a sedimentary bedrock formed approximately 101 to 113 million years ago during the Cretaceous Period. These deposits were formed in an environment of shallow seas (BGS 2019).

1.2.3 The site lies within an area of widespread alluvial deposits although the BGS mapping does not show any superficial (drift) deposits within the site itself. However, the BGS does record one borehole sample within the eastern area of the site, reaching a depth of 30m. The borehole recorded the top of the Gault Formation at 6.30m below ground level. The natural bedrock was overlain by a series of river gravels and alluvial deposits which were cut by an undated rubbish pit sealed by modern topsoil.

1.3 Archaeological and historical background

1.3.1 The site is located in an area of significant archaeological activity, much of which dates to the Bronze Age and the Roman period. A detailed discussion of the site background can be found in the desk-based assessment (DBA; OA 2017) and is only summarized here. This document should be read in conjunction with the DBA.

Early prehistoric 900,000–4000 BC

1.3.2 The early prehistoric period is represented in the area by a limited number of isolated findspots. The earliest remains include a Palaeolithic handaxe found at Lott's Bridge

drive, 750m from the site. No other evidence from this period has been identified within the vicinity of the site.

Neolithic (4000-2000 BC)

1.3.3 There are rare Neolithic finds recorded within the vicinity of the site. Worked stone and flint were recovered along Kings Drive, just to the south-west of Cross Levels Way (A2280). A Neolithic causewayed enclosure, with two concentric rings of banks and ditches, is located at Combe Hill, 3km to the west of the site.

Bronze Age (2000-800 BC)

1.3.4 Significant Bronze Age activity has been identified within the vicinity of the site. A possible Bronze Age tumulus was identified at Holly Grange, Hampden Park. However, the most significant evidence for this period has been found in association with the Eastbourne (Willingdon) Levels and its margins.

1.3.5 Two islands or promontories overlooking the marsh have produced evidence of extensive Bronze Age activity near to the site. A peaty layer identified during the wider excavation at Peacock Farm, north-west of the current site, produced significant quantities of Bronze Age pottery. Nationally important remains were excavated at Shinewater, 1.5km to the east of Cross Levels Way, including a large wooden platform and trackway running east-west towards Willingdon. The platform, estimated to cover an area of *c* 2000m^2, was associated with the upper peat surface and was overlain by marine silty clays. On the platform surface a 0.20m-thick accumulation of cultural material was identified dating to the late Bronze Age. Finds included several bronze axe heads and a sickle reaping hook with its wooden handle intact. Human remains were also recorded, deliberately placed on the platform. The waterlogged conditions at the site provided excellent conditions for the preservation for wooden artefacts and ecofactal remains. The site was interpreted as a harbour or quay site, perhaps used by boats crossing the Channel. Excavation of the trackway in 1996 under the new bypass revealed a trackway surface and triple row alignment of vertical timbers. The trackway would have provided safe access across the wetland zone, connecting the platform to higher dry ground. Further evidence of trackways has been found at Ditton, to the north-west of Shinewater (Greatorex 1997; Jennings *et al*. 2003).

1.3.6 There are no recorded Bronze Age remains within the site area itself. However, during the archaeological investigations carried out at St Wilfred's Hospice, evidence of a prehistoric ring-ditch was recorded (ASH 2010). During the excavations fire-cracked flint was also found, suggesting the presence of a burnt mound in the vicinity of the site.

1.3.7 Several multi-period sites have been recorded within the area. At Decoy Drive, 620m west of the site, archaeological investigations identified worked flint and a large quantity of pottery dating to the Bronze Age and Iron Age. At Pococks Field, 895m to the south of site, a programme of archaeological works found Bronze Age pottery and an unusual burial area, consisting of a chalk spur protruding into an area of wetter ground, with a holloway leading away from the cemetery north along the wetland edge.

Iron Age (800 BC-AD 43)

1.3.8 There is little evidence for Iron Age activity within the area. Large quantities of Iron Age pottery were found close to the site along Decoy Drive, but no settlement activity has been identified to date.

1.3.9 Environmental evidence indicates a period of marine transgression that would have forced settlement off the low-lying areas and on to the surrounding higher ground. This transgression led to thick layers of silt and clay sealing the Bronze Age deposits at Shinewater (Jennings *et al*. 2003).

Roman AD 43–410

1.3.10 Eastbourne has substantial evidence for Roman activity. Several Roman villa and settlement sites have been identified a short distance from the present site.

1.3.11 A Roman villa was identified east of the promenade within Eastbourne itself. A second villa site was identified at Kings Drive/Polin's Marsh during the construction of the hospital. Evidence of possible salt production was also identified along the route of Cross Levels Way during its construction.

1.3.12 There is evidence of continued agricultural use of the landscape into the Roman period. At the St Wilfred's Hospice site agricultural features from the Iron Age are cut by Roman agricultural features.

1.3.13 During archaeological investigations at Pococks Field, 895m to the south of the site, a Roman settlement was found which originated in the Iron Age. During these investigations evidence for salt-working and crop processing was also found, as well as the establishment of another cemetery with associated mausoleum/shrine. A possible Roman settlement has also been recorded 730m south of the site. Excavation here recovered a large quantity of Roman pottery, coins and brooches as well as numerous pieces of briquetage, suggesting that the area was connected with salt-working. Within the vicinity of the possible settlement, two Roman villas were recorded. Both sites were located outside of the levels, on higher ground.

Early medieval period (AD 410-1065)

1.3.14 Within an Anglo-Saxon charter there is a reference to Borne, a Saxon settlement in the area of the Old Town of Eastbourne (EH 2011). King Edward held Eastbourne prior to 1066 and it is likely that few people lived in this area, as the site lies on the cusp of the levels (Butler 2011).

1.3.15 The East Sussex HER returned two records of early medieval date within the surrounding area. An early medieval settlement was identified at Pococks Field, 895m to the south of the site, represented by five sunken-featured buildings (SFBs) with associated burials. A new holloway was also constructed during this time, which remained in use until the post-medieval period. A cremation urn dating to the Saxon period was additionally found 390m to the west of the site.

Medieval (AD 1066–1539)

1.3.16 During the medieval period the site was probably used as agricultural land. Advancing drainage techniques allowed the marsh area to be converted to farmland. The town of Eastbourne was established in the medieval period, and is mentioned in the Domesday Book belonging to Edward the Confessor, but was then in the hands of Count Moreton.

1.3.17 Medieval remains have been found in the vicinity of the site. Excavations at Pococks Field, south of the site, found evidence of large stone-built medieval buildings and ancillary structures. Along Decoy Drive, large amounts of 12th and 14th century pottery, oven tiles and bone fragments were uncovered, suggesting nearby settlement.

1.3.18 The East Sussex County Landscape Assessment states that during the medieval period there was a pattern of summer grazing and winter flooding which continued until the 20th century when industrial drainage of the levels took place (ESCC 2016).

1.3.19 The multi-period site at St Wilfred's Hospice revealed a chalky flint layer associated with salt-working. Sites relating to the salt industry are likely to have been situated on or around the edges of the levels and represent an important industry in the area (Butler 2011).

Post-medieval (AD 1540-1900)

1.3.20 The site is likely to have been used as agricultural land for the majority of the post-medieval and modern period. Historical maps from the area indicate that the site remained open land until Cross Levels Way was constructed in the late 20th century. Drainage channels are present along the eastern boundary of the site, and the Decoy Stream ran along the eastern boundary of the site until the construction of the new road. The railway line, running east of the site, was in place by 1875.

Previous archaeological investigations

1.3.21 Within the wider area there has been a total of 21 archaeological investigations and these have generally revealed evidence for Bronze Age to post-medieval activity. More recently, there has been a borehole survey carried out to the south of the site, a watching brief carried out to the east of the site, and a series of archaeological investigations that revealed a multi-period settlement area at Pococks Field to the south of the site.

1.3.22 Adjacent to the site, at St Wilfred's Hospice, there is evidence for an agricultural landscape dating from the later prehistoric to the medieval period. The extensive field system cuts into the upper alluvial deposits, which date to the Iron Age to Roman period (ASE 2010). There is also evidence of medieval salt-working in this area.

1.3.23 Key horizons from these archaeological works included an extensive layer of chalk and gravel recorded beneath the ploughsoil. This deposit was interpreted as evidence of medieval levelling or land reclamation. This deposit was recorded to a thickness of 2m in the western part of the site, lensing out to 0.30m in the east. Deposits of alluvial clay were recorded below the land reclamation layer. These deposits contained a

moderate amount of burnt daub. In one test pit a deposit of silty clay was noted. This was interpreted as a 'marshy' layer of possible prehistoric date (OA 2007).

1.3.24 Recently a programme of archaeological works was carried out at Pococks Field, 890m south of the site, comprising a geophysical survey, an evaluation and an excavation. The evaluation consisted of six test-pits. The southern part of site was covered by an 0.8m thick layer of colluvium, containing residual prehistoric, Roman, medieval and post-medieval finds. The colluvium covered earlier alluvial deposits containing prehistoric finds. The evaluation also found evidence for a relatively recent linear earthwork running east-west across site (WA 2008a).

1.3.25 The excavation identified a total of seven phases of archaeological activity dating from the late Neolithic through to late medieval period. Significant finds and features were uncovered relating to settlement, agriculture and domestic industrial activity, comprising of salt-working, bread making, crop-processing. In addition, extensive evidence for the interring human remains was also found. This comprised several cremations and a burial dating to the Bronze Age; several Iron age inhumations as well as disarticulated human remains deposited in disused salt working pits; a Roman inhumation, and a cemetery with associated shrine/mausoleum; and Anglo-Saxon burials (ASE 2015).

1.3.26 Test pits at South Downs College, to the west of the site, revealed a single ditch containing late Bronze Age pottery (WA 2008b).

2 AIMS AND METHODOLOGY

2.1 Aims

2.1.1 The general aims and objectives of the evaluation were:

i. To determine or confirm the approximate extent of any surviving remains;
ii. Determine the character, extent, date, complexity, integrity, state of preservation and quality of any archaeological remains present, therefore ensuring their preservation by record; and
iii. To provide robust baseline information to inform the scoping of any mitigation strategy, should this be required.

2.2 Specific aims and objectives

2.2.1 The specific aims and objectives of the evaluation are:

iv. To enable the protection and recording of archaeological assets discovered during the archaeological works;
v. To investigate the archaeological potential of any buried land surfaces that may be sealed underneath land reclamation deposits, alluvium and peat.
vi. To investigate the underlying alluvial sequence to provide an environmental and landscape context for any archaeological remains present;
vii. To identify and investigate any signs of burnt mounds or salt-making practices present at the site;
viii. That any below-ground archaeological deposits exposed are promptly identified; and
ix. The recording of archaeological remains, to place this record in its local context and to make the record available.

2.2.2 The programme of archaeological investigation was conducted within the general research parameters and objectives defined by the draft South East Research Framework.

2.3 Methodology

2.3.1 A programme of nineteen 30m by 2m trenches, representing a 5% sample of the development area, were laid out as shown in Figure 2 using a GPS. The trenches were excavated using a 16 tonne mechanical excavator fitted with a toothless bucket, under the direct supervision of an archaeologist. Spoil was stored adjacent to but at a safe distance from the trench edges. One of the trenches (Trench 19) could not be dug due to the presence of an overhead power cable running along the east of the site.

2.3.2 Machining was undertaken in spits down to the top of the undisturbed natural geology or the first archaeological horizon depending on which was encountered first. Once archaeological deposits were exposed, further excavation proceeded by hand and the appropriate use of a machine.

2.3.3 The exposed surface was sufficiently cleaned to establish the presence/absence of archaeological remains. A sample of each feature or deposit type was excavated and recorded. Excavation was sufficient to resolve the principle aims of the evaluation.

2.3.4 All potential features within the trenches were investigated and the trenches were then archaeologically recorded. Once discussed with and signed off by the County Archaeologist, the trenches were then backfilled.

2.3.5 A series of geo-archaeological test pits were also excavated across the site at the end of the trenches. The aims of the test pits were to investigate whether any alluvial or peat deposits were present across the site and to investigate the underlying Quaternary geology. The lack of any mapped alluvial or peat deposits at the site, meant the scope of test pitting was reduced to help protect the archaeology and to focus on investigating the underlying drift geology. These were sited in order to cover the main areas of development impact and to develop a preliminary sedimentological model for the underlying Quaternary geology. The work aimed to characterise these sediments in terms of their archaeological and palaeo-environmental potential.

3 RESULTS

3.1 Introduction and presentation of results

3.1.1 The results of the evaluation are presented below and include a stratigraphic description of the trenches that contained archaeological remains. The full details of all trenches with dimensions and depths of all deposits can be found in Appendix A. Finds data and spot dates are tabulated in Appendix B and environmental data Appendix C.

3.2 General soils and ground conditions

3.2.1 The soil sequence in the trenches was fairly uniform with a very shallow turf/topsoil horizon (100, 200, etc.) overlying a thick band of light yellow brown sandy/silty clay subsoil that was extremely rich in flints and pottery (101, 201, etc.). In general, the finds became scarcer with depth and there were no instances of flintwork in the underlying Quaternary Geology (102, 202, etc.). This natural geology was a probable loessic/alluvial horizon of light reddish brown silty and sandy clay under which were various Pleistocene solifluction/gelifluction deposits. Archaeological features were cut from below the subsoil whereas there were numerous tree-throw holes and animal burrows cutting into the top of the subsoil. This suggests that a thicker topsoil horizon may have been present here at one time and had been subsequently truncated, possibly to do with the preparation and maintenance of football and rugby pitches.

3.2.2 Ground conditions throughout the evaluation were generally good, and the site remained mostly dry. One period of rain during the second week allowed for potential features to weather out, but no additional features were identified. Some of these features were difficult to identify against the background geology but many of the middle-late Bronze Age features had very dark, finds-rich distinctive fills.

3.3 General distribution of archaeological deposits

3.3.1 Archaeological features were present in Trenches 3 and 5-18. The central part of site had the densest concentration of archaeology and the western edge had the least as well as all three empty trenches (1, 2 and 4). However, flintwork was more common in the western part of the evaluation and did not directly correlate with any underlying archaeological features. This was most likely due to the absence of associated Mesolithic and Neolithic features.

3.4 Trenches 1-8 (Figs 3 and 4; Plates 1-4)

3.4.1 Trench 1 contained only a tree-throw hole (103) of probably quite recent date alongside rugby/football concrete goalpost supports (105 and 106). Trench 2 contained no archaeological features.

3.4.2 Trench 3 contained two ditches (303 and 305) as well as probable pit 307 (Plates 1 and 2). Ditch 303 continued north-east to south-west across much of the evaluation area as ditches 505, 703 and possibly 907, while ditch 305 ran north-east to south-west and terminated near to the southern edge of this trench. Ditch 303 contained a sherd of possible late Neolithic or early Bronze Age pottery while ditch 305 contained middle-

late Bronze Age material with both ditches also containing flintwork. Pit 307 did not yield any finds.

3.4.3 Trench 4 did not contain any archaeological features but yielded a significant quantity of struck flint. It was also one of the trenches that had a geoarchaeological test pit within it in order to test the depositional sequence for the potential of buried remains, and in particular lithic scatters.

3.4.4 Trench 5 contained two ditches running broadly north-east to south-west (503 and 505), with ditch 505 corresponding to ditches 303 and 703, but was not excavated. Ditch 503 was located around 17m north of 505 and contained struck and burnt flint. This ditch did not continue in any other trench, but there is a possibility that it may have turned to form part of a field system or some other form of enclosure.

3.4.5 Trench 6 contained an isolated but very convincing square-cut posthole (603) with struck flint, and also a tree-throw hole (605) that lacked any finds.

3.4.6 Trench 7 contained ditch 703, which was a continuation of ditches 303 and 505 and also yielded struck flint. Scattered around the ditch were a number of possible features including three pits or postholes (705, 707 and 709), none of which yielded any finds.

3.4.7 Trench 8 contained ditch 805, the first of several north-west to south-east ditches in the evaluation area that most likely formed part of a second phase of superimposed field systems (Plates 3 and 4). This ditch had a rounded concave profile with struck flint and middle Bronze Age pottery in its fill, and cut a small pit (803) with struck and burnt flint only. The ditch continued into Trenches 9 and 10 as ditches 907 and 1003.

3.4.8 Despite the lack of substantial subsurface archaeology, this part of the evaluation contained the densest flint assemblages including probable Neolithic material. Early Neolithic assemblages are often found as surface midden deposits, much of which can become incorporated into later features, and it is probable that some sort of artefact spread was originally present here before being disturbed by ploughing.

3.5 Trenches 9-15 (Figs 5 and 6; Plates 5-10)

3.5.1 This part of the evaluation area held the most significant archaeological remains, most of which appeared to date to the middle-late Bronze Age. It also contained numerous struck flints from the subsoil including a large number of blade forms along the southern edge of site and had several Mesolithic finds including a late Mesolithic microlith from Trench 10.

3.5.2 Trench 9 contained a ditch (907) and two possible pits (903 and 905). The ditch was very likely to be the same feature as was found in Trenches 8 and 10 but this location also marked the intersection of ditch 303/505/703 and possible pit 903 may have in fact been the terminus of this ditch. Ditch 907 was not fully excavated but several sherds of middle-late Bronze Age pottery were recovered from its upper fill (909). Pit 903 was observed in plan as being cut by ditch 907. Pit 903 contained struck flint and had a rounded bowl-shaped profile. Pit 905 had a more irregular profile and may in fact have been a tree-throw hole.

3.5.3 Trench 10 contained several rich archaeological features, many of which ran under the western baulk. This trench was extended at the request of the County Archaeologist

and this allowed for the mapping and excavation of two pits (1017 and 1015) and three ditches (1003, 1008, 1011), as well as posthole 1013; a fourth ditch (1006) was not investigated but was excavated as ditch 1103 in Trench 11 a short distance to the south. Pit 1015 was a large feature (0.34m by 0.44m in depth) that was cut at its western end by a much smaller pit 1017 (0.7m by 0.18m in depth). Both pits contained flint and middle-late Bronze Age pottery. Posthole 1013 was oval in plan with a steep-sided and flat bottomed profile, the fill of which yielded struck flint.

3.5.4 The three ditches in Trench 10 were all quite different in character. Ditch 1011 was a wide and quite pale feature that may have not been identified elsewhere. It measured 2.14m in width but was only 0.14m deep and only yielded struck flint. In contrast to this, ditch 1003 had a very typical V-shaped profile measuring 0.92m in width and 0.44m in depth with a very rich flint and pottery assemblage of middle-late Bronze Age date. The flint comprised around 160 pieces and included two main knapping groups, both of which were very fresh and likely to be contemporary with the pottery. One of the groups was very typically later prehistoric in character but the second consisted of far higher quality flintwork. This better quality material was still likely to be middle-late Bronze Age in date but highlights the variation that can be seen in this material. Ditch 1008 was a narrower ditch orientated broadly north-south that was also present in Trenches 12 (1205) and 13 (1307). It may have formed a strip field or an enclosure with ditches 1006 and 1103 forming the opposite western edge. It had an open V-shaped profile that measured 0.73m by 0.26m in depth and did not contain any finds but was very probably part of this complex of middle-late Bronze Age ditches.

3.5.5 Archaeological features were less common in Trenches 11-13. Trench 11 contained ditch 1103 and a possible posthole (110). Ditch 1103 represented a continuation of ditch 1006 from Trench 10 and contained struck flint. Posthole 1105 did not yield any finds. Trench 12 contained two ditches, one of which (1205) was certainly part of 1008/1307, but was only partially exposed in the trench with its full width not visible, being restricted to the last few metres along its south-western edge. Ditch 1203 was orientated north-east to south-west and was in alignment with numerous ditches including ditch group 303/505/703, 903/905 and even potentially 1011, 1203 and 1408, but only yielded struck flint. The significant difference in the width and profiles of the ditches in Trenches 10, 12 and 14, is the only reason these were not believed to be a continuation of the north-east to south-west ditches in Trenches 3, 5, 7 and 9. Trench 13 contained two ditches that met at right angles (1307/1305) and a tree-throw hole (1303) that contained struck and burnt flint. Ditch 1307 appeared to cut 1305 in plan and represented a continuation of ditches 1205 and 1008 and yielded burnt flint from its surface but was not excavated. Ditch 1305 ran up to but not beyond 1307 and was found to have a very shallow dished profile at 0.07m in depth and 0.5m in width and lacked any datable finds.

3.5.6 Trench 14 contained two ditches (1405 and 1408) and a possible pit (1410). A third putative ditch at the northern end of the trench was investigated and revealed to be residual subsoil. Pit 1410 was positioned at the north-east end of ditch 1408 but the relationship between these features was not excavated. Ditch terminus 1405 was half sectioned longitudinally. Both ditches were orientated north-east/south-west but

1405 had a very shallow open profile while 1408 was steep-sided and flat bottomed with some struck flint in its fill.

3.5.7 One putative buried soil sequence was present in Trench 15 (1505/1504/1506 and 'cut' 1503) that yielded considerable amounts of flint from a series of samples taken from the profile (93 flints including 55 sieved chips). This broad feature continued beyond the western end of the trench and occupied its full width. It had a fairly gentle profile which was very broad and flat (0.7m deep and at least 4.4m wide). Whilst this was interpreted on site as being some form of ditch, a localised survival of a buried soil profile within a hollow would seem to be the more likely explanation. The soil horizons had flint from multiple periods but did include later prehistoric flintwork and also yielded middle-late Bronze Age pottery from all three layers, though 29 of 34 sherds were from upper layer 1505, only one was in middle horizon 1504 and four were from basal layer 1506. The flint mirrored this with 40, 23 and 30 pieces from contexts 1505, 1504 and 1506 respectively.

3.5.8 Trench 15 also contained three postholes (1509, 1511 and 1513) and pit 1507. The postholes formed an arc suggestive of some form of structure, potential a Sussex style roundhouse, approximately 5.2m in diameter. Posthole 1509 and pit 1507 were excavated and both yielded struck flint.

3.6 Trenches 16-18 (Figs 7 and 8; Plates 11 and 12)

3.6.1 The eastern part of the site had less residual flintwork in its subsoil contexts and most of this material appeared to be later prehistoric in date. It also contained fewer features per trench but still contained mainly middle-late Bronze Age material culture.

3.6.2 Trenches 16 and 17 both contained single ditches orientated north-east/south-west matching the alignment of the ditches in Trench 14. Ditch 1603 had an open V-shaped profile with flint and middle-late Bronze Age pottery while ditch 1703 had a rounded U-shaped profile bereft of finds. Alignment of these ditches are at 90 degrees to the ditch within Trench 8, which runs north-west to south-east. These ditches may form part of a second phase of ditch systems superimposed over an earlier phase.

3.6.3 Trench 18 contained a pair of substantial ditches, one of which terminated in the trench (1808). It also contained a slightly unusual pair of chalk rubble drains aligned at 90 degrees to each other that were investigated to confirm they were not foundations (1805). Ditch 1803 was orientated east-west and had a steep-sided V-shaped profile. Its fill yielded 17 sherds of middle-late Bronze Age pottery as well as a single flint flake. Ditch 1808 was also aligned east-west, had a similar profile but was more U-shaped and only yielded three struck flints. Ditches 1803 and 1808 were found around 6m apart and might have formed two sides of a trackway. However, the lack of dating from ditch 1808 prevents any more definitive conclusions.

3.7 Geoarchaeological test pits (Plates 13 and 14)

3.7.1 The geo-archaeological test pits proved that no Holocene alluvial or peat deposits were present across the site. Eight test pits were originally proposed within the WSI (OA 2019), but reduced in number following the discovery of significant lithic deposits in the subsoil across the site that would have been disturbed by further machine dug

pits. Therefore, a series of more targeted deeper investigations were undertaken into the underlying Quaternary geology in Trenches 4, 11 and 14, where the main development impacts were proposed. The pits revealed a sequence of loessic/fluvial deposits around 0.6m in depth, and a layer of flint cobbles in a dark brown clay matrix, 0.35m thick, which in turn sat over gelifluction/solifluction deposits containing degraded chalk in a whitish brown sandy clay matrix that extended to a depth of between 1-2m. The underlying solid geology of gault clay was identified between 4-6m in depth.

3.7.2 Previous geological modelling of the area has indicated these deposits are part of a Devensian fluvial deposit filling a periglacial meltwater channel, the catchment of which appears to have drained substantial parts of the chalk anticline to the west, as well as more local areas of older Cretaceous geology (ASE 2010). Despite potential for the recovery of Pleistocene artefacts and ecofacts, none were recovered.

3.8 Finds summary

3.8.1 This evaluation yielded two major artefact assemblages comprising flint and prehistoric pottery with small amounts of medieval pottery, and lesser quantities of ceramic building material and fired clay.

Prehistoric pottery by Alex Davies

3.8.2 Some 233 sherds of pottery weighing 1,119g was recovered from 24 contexts across evaluation. Half of the contexts were derived from the subsoil. The majority of the material dates to the middle/late Bronze Age. Most of the sherds were in a coarse flint fabric, although medium coarse and fine flint fabrics were also present, with these often belonging to thinner-walled vessels.

3.8.3 Many of the sherds showed affinities to regional Deverel-Rimbury forms; however, none of the vessels were very clearly of this style, and there were a number of thinner-walled vessels that might be more comfortably placed in the early post Deverel-Rimbury tradition. It is likely that the flint-tempered assemblage belongs broadly to a single period, and this appears to be the latter part of the Deverel-Rimbury and early part of the post Deverel-Rimbury traditions, *c* 1250-1000 cal BC.

3.8.4 The volume of prehistoric pottery was of significance as was the potential identification of grooved ware sherds, but it was the larger middle-late Bronze Age Deverel-Rimbury and post- Deverel-Rimbury material that was dominant, suggesting that further work in this evaluation area could bring to light a regionally significant pottery assemblage.

Medieval pottery by John Cotter

3.8.5 Eight medieval sherds were also recovered from subsoil contexts. They were all tempered with quartz sand, with very fine pieces of flint occasionally also present. A single diagnostic sherd was present in context 1001, and this belonged to a cooking pot dating to the 13th-14th century. The remaining medieval sherds could also date to the same period and were perhaps associated with medieval ploughing of the site.

Lithic material by Mike Donnelly

3.8.6 A very large assemblage of 1,052 pieces was recovered from the evaluation, which based on percentages, could translate to around 500,000 pieces in the entire field. It is worth stressing that the bulk of this flintwork was not *in situ*, but the putative buried soil horizons in Trench 15 may still yield some *in situ* scatters. Moreover, the main element of the subsoil assemblage belonged to the later prehistoric period and was complimented by significant assemblages from contemporary features such as ditch 1004.

3.8.7 The assemblage included a small but significant early component. This included one heavy backed blade found in subsoil horizon 701, which could belong to either the late Upper Palaeolithic or Mesolithic period, and there were also a number of large blades and a fairly massive crested blade or core tablet also from 701. Mesolithic material included a late Mesolithic microlith found in Trench 10, as well as two possible early Mesolithic preforms from contexts 501 and 701. In addition to this a microburin was also found in 701, an adze from 601 and a probable adze sharpening flake from 901. Some blade cores, core tablets and crested bladelets were also probably of this date although they could also be early Neolithic.

3.8.8 Neolithic activity was also present and included several fine tools such as the broken leaf-shaped arrowhead from 101 or a very crude chisel arrowhead from 901.

3.8.9 The largest component of the assemblage belonged to the middle-late Bronze Age (or later). This included several large assemblages from features including 169 pieces from ditch fill 1004 which was sampled (sampled material accounted for 89 of the pieces including 58 fine sieved chips) and pit 1015 had 62 flints from both its fills (56 pieces were from samples, 39 of which were fine sieved chips). Most of the middle-late Bronze Age features on site contained at least some flintwork, and a probable buried soil sequence in Trench 15 yielded 93 flints from contexts 1504, 1505 and 1506, 61 of which were from samples (55 were fine sieved chips) and all three contexts included material typical of middle-late Bronze Age industries. This assemblage included many highly expedient tools such as scrapers, denticulates, piercers and simple retouched flakes and naturally backed knifes that are typical of this period.

Ceramic building material and fired clay by Cynthia Poole

3.8.10 A small assemblage of fired clay was also found in features associated with middle-late Bronze Age pottery. Although the material is undiagnostic, small fragments of fired clay of the type found on the site are likely to be domestic in origin, derived from ovens or hearths for cooking or heating.

3.8.11 The ceramic building material was all found in subsoil layers and probably relates to agricultural activity, probably introduced into the soil during arable cultivation of the fields during the medieval and post-medieval period.

3.9 Environmental summary

3.9.1 A fairly limited assemblage of charcoal and charred plant remains were recovered from the feature fills. Fragments of charred grain were recovered from Trenches 15 and 10, from Bronze Age features. A single damaged grain of wheat (*Triticum* sp.) was recovered from Trench 15, ditch 1503. Barley (*Hordeum* sp.) and a fragment of hazelnut (*Corylus avellana*) were recovered from Trench 10, ditch 1003. Both charred and uncharred (probably modern) weed seeds were also recovered from the samples. All the sample residues produced pottery and a quantity of both burnt and worked flint.

3.9.2 No animal bone was recovered from the evaluation and it is assumed that soil conditions were not conducive to its preservation.

4 DISCUSSION

4.1 Reliability of field investigation

4.1.1 The conditions during the evaluation were generally good. The archaeological features identified here were a mix of obvious and sometimes quite subtle differences against the background geology. Many of these features have been tested through archaeological intervention and have yielded dateable material that has provided a relatively coherent narrative of past activities on this site.

4.1.2 The geoarchaeological test pitting was reduced in scope in order to help minimise the impact on lithic assemblages and archaeological features identified within the trenches. Sufficient test pits were completed in main development impact areas in order to assess the Palaeolithic potential of the underlying Quaternary geology. Combined with the previous geoarchaeological and geotechnical investigations, sufficient information was obtained to characterise the underlying sequence.

4.1.3 The vast majority of the trenches were dug within their proposed positions and achieved good coverage of the site. The high density of archaeological remains is therefore considered to be a representative sample of the overall potential of the site.

4.2 Geoarchaeological test pit results

4.2.1 The underlying geology of the site is recorded as geliflucted/soliflucted material occupying a Pleistocene meltwater channel, underlying alluvial/loessic sands. The site developed into the edge of tidal wetland sequence during the onset of the Holocene through rising sea-levels at the end of the last glaciation. The geo-archaeological investigations have helped characterised the site as representing an area of relatively high free-draining land on the margins of the coastal marshes of the Willingdon Levels overlooking an important wetland sequence in late prehistory.

4.3 Evaluation objectives and results

4.3.1 One of the main aims of this evaluation was to establish if potential *in situ* deposits such as structures, knapping floors or midden deposit were present on site associated with any buried land surfaces at the edge of the levels. This was largely not realised during the evaluation due to absence of the cover deposits like alluvium or colluvium across the site that would have helped to preserve the integrity of any lithic scatters. Evidence of medieval ridge and furrow and later cultivation across the site may help to explain the disturbed nature of the lithic scatters. However, there is some likelihood that horizon 1504-1506 in Trench 15 may relate to a localised hollow in which a buried landscape element has been preserved. Although no *in situ* scatters were identified in the evaluation, they could potentially still exist elsewhere in the evaluation area.

4.3.2 The evaluation did identify a significant focus of middle-late Bronze Age activity across the site of moderate to high density. This produced a significant concentration of both pottery and flintwork that is potentially of regional importance.

4.4 Interpretation

4.4.1 The earliest evidence from this evaluation took the form of struck flints largely recovered from the subsoil. There was no evidence of flintwork of Pleistocene age from the drift geology, but two or three flints were recovered that could potentially be late Upper Palaeolithic. Mesolithic flintwork was definitely present and included a very fine backed point late Mesolithic microlith from subsoil 1001. In addition to this, a number of possible microlith preforms likely to be early Mesolithic in date were also recovered. Neolithic flintwork was found including a broken leaf-shaped arrowhead and appeared to be concentrated in the western part of the site with a more general spread of later prehistoric flintwork throughout the entire evaluation area.

4.4.2 The negative cut features identified appeared to represent a coherent landscape with fields, a possible trackway in Trench 18, and a concentration of domestic features such as postholes, artefact-rich pits and ditch segments with very rich assemblages in and around the central part of the evaluation. In nearly every case, datable pottery from these features belonged to the middle or late Bronze Age. The field system appeared to have two distinct orientations and could indicate at least two or possibly three phases of activity. The putative trackway in Trench 18 appeared to run from the main domestic focus towards the Willingdon Levels where the contemporary waterlogged timber platform of Shinewater was constructed (Greatorex 1997). This does strongly suggest a very comprehensive and integrated landscape was present during the middle-late Bronze Age in the area and this would include features found in nearby excavations and evaluations including burnt mounds.

4.5 Significance

4.5.1 This evaluation has revealed significant remains on the site. The prehistoric landscape identified here has strong domestic elements rather than simply representing field systems set away from the settlement area. Ditches, pits and postholes contained significant artefactual assemblages that consistently indicated a middle-late Bronze Age date. Activity prior to these periods was represented by Mesolithic and Neolithic flint concentrations in the west and central part of the evaluation area and also by several putative late Neolithic or early Bronze Age pottery sherds. Overall, there is a strong indication of a coherent and largely single-period archaeological landscape with the potential for further discoveries such as Neolithic pit clusters or *in-situ* Mesolithic/Neolithic knapping floors.

APPENDIX A TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 1						
General description					**Orientation**	NNW-SSE
Trench contained one tree-throw hole and the remains of a pair of rugby/football goalposts. Like almost all trenches here, it contained numerous struck flints from its subsoil, especially at the interface with the very thin topsoil/turf horizon that formed the current football pitches. Natural brickearth type deposit did not contain any flints.					**Length (m)**	30
					Width (m)	1.9
					Avg. depth (m)	0.47
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
100	Layer	-	0.09	Topsoil	-	-
101	Layer	-	0.38	Subsoil light yellowish brown sandy silty clay	Flint, burnt flint	PH
102	Layer	-	?	Natural, brickearth like clayey sand	-	-
103	Cut	1.06	0.17	Cut of treethrow	-	Roman
104	Fill	1.06	0.17	Dark reddish brown clayey sand fill of 103	-	-
105	Structure	1.2	1.4	Large concrete block with central goal post	-	modern
106	Structure	1.2	1.4	Large concrete block with central goal post	-	modern

Trench 2						
General description					**Orientation**	ENE-WSW
Trench did not contain any archaeology but did contain numerous struck flints from its subsoil, especially at the turf/subsoil interface. Natural brickearth type deposit did not contain any flints.					**Length (m)**	30
					Width (m)	1.9
					Avg. depth (m)	0.44
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
200	Layer	-	0.13	Topsoil	-	-
201	Layer	-	0.31	Subsoil light yellowish brown sandy silty clay	Flint, burnt flint	
202	Layer	-	-	Natural, brickearth like clayey sand	-	-

Trench 3						
General description					**Orientation**	NNW-SSE
Trench contained a small pit and two ditches as well as numerous struck flints from its subsoil. Natural brickearth type deposit did not contain any flints.					**Length (m)**	30
					Width (m)	1.9
					Avg. depth (m)	0.40
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
300	Layer	-	0.12	Topsoil	-	-

301	Layer	-	0.28	Subsoil light yellowish brown sandy silty clay	Flint, burnt flint	-
302	Layer	-	?	Natural, brickearth like clayey sand	-	-
303	Cut	0.72	0.29	Open 'V' shaped ditch cut orientated ENE-WSW, same as 303 and 703	-	MBA
304	Fill	0.72	0.29	Dark reddish brown clayey sand fill of 303	Flint, pottery	MBA
305	Cut	0.63	0.34	Possible ditch terminus with steep-sided 'V' shaped profile	-	MBA
306	Fill	0.63	0.34	Greyish brown silty clay fill of 305	Flint, burnt flint and pottery	MBA
307	Cut	0.6d	0.14	Circular pit cut with an open bowl-shaped profile.	-	-
308	Fill	0.6d	0.14	Soft light brownish grey clayey fine sand fill of 307	-	-

Trench 4

General description					**Orientation**	ENE-WSW
Trench did not contain any archaeology but did contain numerous struck flints from its subsoil. Natural brickearth type deposit did not contain any flints. Test pit placed at west end of trench to test the natural here.					**Length (m)**	30
					Width (m)	1.9
					Avg. depth (m)	0.25
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
400	Layer	-	0.09	Topsoil	-	-
401	Layer	-	0.16	Subsoil	Flint, burnt flint	-
402	Layer	-	0.61	Natural, brickearth like clayey sand	-	-
403	Layer	-	0.34	Flint cobbles and pebbles in a dark brown clay	-	-
404	Layer	-	?	Solufluction deposit with degraded chalk pebbles in a whiteish brown sandy clay	-	-

Trench 5

General description					**Orientation**	NNW-SSE
Trench contained two ditches orientated E-W, one of which remained unexcavated (but was dug in trenches 3 and 7) and had numerous struck flints in its subsoil. Natural brickearth type deposit did not contain any flints.					**Length (m)**	30
					Width (m)	1.9
					Avg. depth (m)	0.40
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
500	Layer	-	0.12	Topsoil	-	-
501	Layer	-	0.28	Subsoil	-	-
502	Layer	-	?	Natural, brickearth like clayey sand		

503	Cut	0.56	0.22	E-W orientated steep sided flat bottomed ditch cut	-	-
504	Fill	0.56	0.22	Greyish brown silty clay fill of 503	Flint, burnt flint	-
505	Cut	1.12	?	E-W orientated ditch, unexcavated, same as 303 and 703	-	-
506	Fill	1.12	?	Dark reddish brown clayey sand fill of 505	-	-

Trench 6						
General description					**Orientation**	ENE-WSW
Trench contained one posthole and a tree-throw hole and had numerous struck flints in its subsoil. Natural brickearth type deposit did not contain any flints.					**Length (m)**	30
					Width (m)	1.9
					Avg. depth (m)	0.38
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
600	Layer	-	0.11	Topsoil	-	-
601	Layer	-	0.27	Subsoil	Flint, burnt flint	-
602	Layer	-	-	Natural, brickearth like clayey sand	-	-
603	Cut	0.45	0.36	Rectangular posthole cut with near vertical sides and a flat base.	-	-
604	Fill	0.45	0.36	Yellowish brown sandy clay fill of 603	Flint	-
605	Cut	1.28	0.18	Oval treethrow cut with open shallow dished profile	-	-
606	Fill	1.28	0.18	Greyish brown silty sand	-	-

Trench 7						
General description					**Orientation**	NNW-SSE
Trench contained one ditch, two pits and a posthole, and had numerous struck flints in its subsoil. Natural brickearth type deposit did not contain any flints.					**Length (m)**	30
					Width (m)	1.9
					Avg. depth (m)	0.48
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
700	Layer	-	0.12	Topsoil	-	-
701	Layer	-	0.36	Subsoil	Flint, burnt flint	-
702	Layer	-	?	Natural, brickearth like clayey sand	-	-
703	Cut	1.43	0.48	E-W orientated ditch with open 'V' shaped profile, same as 303 and 505, cuts pit 705	-	MBA
704	Fill	1.43	0.48	Hard yellowish grey sandy clay fill of 703	Flint, pottery	MBA

705	Cut	1.04	0.65	Semicircular pit cut with steep sides and a rounded base	-	-
706	Fill	1.04	0.65	Brownish grey sandy clay fill of 705, cut by ditch 703	-	-
707	Cut	0.36d	0.19	Circular open U-shaped cut of probable posthole	-	-
708	Fill	0.36d	0.19	Soft light yellowish grey clayey sand fill of 707	-	-
709	Cut	0.82	0.21	Oval pit cut with concave sides and a flat base	-	-
710	Fill	0.82	0.21	Soft brownish grey sandy clay fill of 709	-	-

Trench 8						
General description					**Orientation**	ENE-WSW
Trench contained an intercutting ditch and pit as well as another goalpost concrete base and numerous struck flints from the subsoil. Natural brickearth type deposit did not contain any flints.					**Length (m)**	30
					Width (m)	1.9
					Avg. depth (m)	0.50
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
800	Layer	-	0.15	Topsoil	-	-
801	Layer	-	0.35	Subsoil	Flint, burnt flint	-
802	Layer	-	?	Natural, brickearth like clayey sand	-	-
803	Cut	1.1	0.26	Semicircular cut of pit with steep sides and a flat base.	-	-
804	Fill	1.1	0.26	Soft yellowish brown silty clay fill of 803, cut by 805	Flint, burnt flint	?
805	Cut	0.3	0.25	NE-SW orientated ditch cut with concave sides and a round base, cuts pit 803	-	MBA
806	Fill	0.3	0.22	Firm greyish brown silty clay fill of 805	Flint, burnt flint, pottery	MBA
807	Structure	0.9	0.35	Large concrete block with central goal post	-	modern

Trench 9						
General description					**Orientation**	NNW-SSE
Trench contained one ditch, two pits and had numerous struck flints in its subsoil. Natural brickearth type deposit did not contain any flints.					**Length (m)**	30
					Width (m)	1.9
					Avg. depth (m)	0.5
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
900	Layer	-	0.18	Topsoil	-	-
901	Layer	-	0.32	Subsoil	Flint, burnt flint	-
902	Layer	-	?	Natural, brickearth like clayey sand	-	-

903	Cut	0.98	0.33	Semicircular pit with rounded bowl-shaped profile	-	?
904	Fill	0.98	0.33	Brownish grey silty clay fill of 903, cut by 907	Flint	?
905	Cut	0.95	0.16	Semicircular cut of probable pit or tree-throw hole, mostly under the baulk, with irregular shallow profile	-	-
906	Fill	0.95	0.16	Mid greyish brown silty clay fill of 905	-	-
907	Cut	1.1	?	NW-SE orientated ditch, unexcavated, same as 1003	-	MBA
908	Fill	-	?	Light brownish grey silty clay fill of 907, unexcavated	-	MBA
909	Fill	-	?	Mid greyish brown silty clay fill of 907, unexcavated	Pottery	MBA

Trench 10						
General description					**Orientation**	NE-SW
Trench expanded with additional 10m by 5m punchout on its east-central side. It contained four ditches, two pits and two other small features, and had numerous struck flints in its subsoil. Natural brickearth type deposit did not contain any flints.					**Length (m)**	30
					Width (m)	1.9-4.5
					Avg. depth (m)	0.60
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
1000	Layer	-	0.15	Topsoil	-	-
1001	Layer	-	0.45	Subsoil	Flint, burnt flint, pottery	-
1002	Layer	-	?	Natural, brickearth like clayey sand	-	-
1003	Cut	0.92	0.36	NW-SE aligned linear with regular sided 'V' shaped profile, same as 805 and 907	-	MBA
1004	Fill	0.92	0.32	Firm brownish grey silty clay with numerous finds (sampled), upper fill in 1003	Flint, burnt stone, pottery	MBA
1005	Fill	0.65	0.05	Firm yellowish brown silty clay primary fill in 1003	-	MBA
1006	Cut	0.65	?	N-S aligned narrow linear cut, unex, same as 1103	-	?
1007	Fill	0.65	?	Brownish grey silty clay, fill of 1006, unexcavated	-	?
1008	Cut	0.73	0.26	Narrow NNW-SSE aligned linear with open 'V' shaped profile, same as 1205 & 1307	-	?
1009	Fill	0.73	0.26	Yellowish brown silty clay	Flint, burnt flint	?
1010	Layer	-	0.45	Subsoil (re-numbered for flint quantification purposes)	Flint, burnt flint	

1011	Cut	2.14	0.16	Linear NE-SW aligned slightly sinuous cut of probable ditch	-	-
1012	Fill	2.14	0.16	Firm pale greyish brown silty clay fill of 1011	Flint	?
1013	Cut	0.52	0.06	Oval steep-sided and flat-bottomed cut of posthole	-	-
1014	Fill	0.52	0.06	Firm yellowish brown silty clay fill of 1013	Flint	-
1015	Cut	1.34	0.44	Oval steep-sided pit with slightly irregular base	-	MBA
1016	Fill	1.14	0.12	Firm dark brownish grey silty clay upper fill in 1015, cut by 1017	Flint, burnt flint, pottery	MBA
1017	Cut	0.70	0.18	Oval cut with rounded bowl-shaped profile, cuts 1016	-	?
1018	Fill	0.70	0.18	Firm greyish brown silty clay upper fill in 1017	?	?
1019	Fill	1.34	0.42	Firm greyish brown silty clay basal fill in 1015	Flint, pottery	MBA

Trench 11

General description					**Orientation**	ENE-WSW
Trench contained one ditch and a posthole, with numerous struck flints in its subsoil. Natural brickearth type deposit did not contain any flints.					**Length (m)**	30
					Width (m)	1.9
					Avg. depth (m)	0.64
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
1100	Layer	-	0.26	Topsoil	-	-
1101	Layer	-	0.38	Subsoil	Flint, burnt flint, pottery	-
1102	Layer	-	?	Natural, brickearth like clayey sand	-	-
1103	Cut	0.34	0.22	Liner NNW-SSE ditch with rounded 'V' shaped profile, same as 1006	-	?
1104	Fill	0.34	0.22	Firm reddish brown clayey silt fill of 1103	Flint	?
1105	Cut	0.26	0.14	Probable truncated posthole cut with steep-sided and flat bottomed profile	-	-
1106	Fill	0.26	0.14	Light reddish brown clayey silt	-	-

Trench 12

General description	**Orientation**	NNW-SSE
Trench contained one ditch and a posthole, with numerous struck flints in its subsoil. Natural brickearth type deposit did not contain any flints.	**Length (m)**	30
	Width (m)	1.9
	Avg. depth (m)	0.52

Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
1200	Layer	-	0.18	Topsoil	-	-
1201	Layer	-	0.34	Subsoil	Flint, burnt flint, pottery	-
1202	Layer	-	?	Natural, brickearth like clayey sand	-	-
1203	Cut	1.26	0.14	E-W aligned ditch with very shallow dished profile	-	?
1204	Fill	1.26	0.14	Yellowish brown silty clay fill of 1203	Flint	?
1205	Cut	?	?	NNW-SSE aligned ditch, unex, same as 1008 and 1307	-	-
1206	Fill	?	?	Mid reddish brown silty clay fil of 1205	-	-

Trench 13						
General description					**Orientation**	ENE-WSW
Trench contained two ditches and a tree-throw hole with numerous struck flints in its subsoil. Natural brickearth type deposit did not contain any flints.					**Length (m)**	13
					Width (m)	1.9
					Avg. depth (m)	0.60
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
1300	Layer	-	0.15	Topsoil	-	-
1301	Layer	-	0.45	Subsoil	Flint, burnt flint, pottery	-
1302	Layer	-	?	Natural, brickearth like clayey sand	-	-
1303	Cut	0.44	0.26	Semicircular tree-throw hole cut with an open 'V' shaped profile	-	-
1304	Fill	0.44	0.26	Soft greyish brown silty clay fill of 1303	Flint, burnt flint	-
1305	Cut	0.5	0.07	Linear ENE-SWS aligned cut with very shallow dished profile, runs up to but not beyond ditch 1306	-	-
1306	Fill	0.5	0.07	Light greyish brown silty clay fill of 1305	-	-
1307	Cut	0.8	?	Linear NW-SE aligned cut, unex, same as 1008 and 1205	-	-
1308	Fill	0.8	?	Pale greyish brown silty clay fill of 1307	Burnt flint	-

Trench 14		
General description	**Orientation**	NNW-SSE
Trench contained two ditches and a possible pit with numerous struck flints in its subsoil. Natural brickearth type deposit did not	**Length (m)**	30
	Width (m)	1.9

contain any flints. Relationship between pit 1410 and ditch 1408 not examined due to pressures of time.					**Avg. depth (m)**	0.45
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
1400	Layer	-	0.15	Topsoil	-	-
1401	Layer	-	0.40	Subsoil	Flint, burnt flint, pottery	-
1402	Layer	-	0.55	Natural, brickearth like clayey sand	-	-
1403	Layer	0.55	0.25	Flint cobbles and pebbles in a dark brown clay	-	-
1404	Layer	0.55	?	Solufluction deposit with degraded chalk pebbles in a whiteish brown sandy clay	-	-
1405	Cut	0.45	0.1	NE-SW aligned ditch terminus with very shallow profile	-	-
1406	Fill	0.45	0.1	Yellowish brown silty clay fill of 1405	-	-
1407	Layer	na	0.05	Residual subsoil thought to be a possible ditch	Flint	-
1408	Cut	0.5	0.18	NE-SW aligned linear cut with steep sided regular 'V' shaped profile	-	-
1409	Fill	0.5	0.18	Reddish brown silty clay fill of 1408	Flint	-
1410	Cut	1.6+	?	Unexcavated possible pit cut added on to north end of ditch 1408	-	-
1411	Fill	1.6+	?	Reddish brown silty clay fill of 1410	-	-

Trench 15						
General description					**Orientation**	ENE-WSW
Trench contained four small puts or postholes and a large feature at its western end that might in fact have been a buried soil sequence preserved in a hollow at one end of the trench. The subsoil had numerous struck flints, but these absent from the underlying natural brickearth type deposit.					**Length (m)**	15
					Width (m)	1.9
					Avg. depth (m)	0.76
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
1500	Layer	-	0.24	Topsoil	-	-
1501	Layer	-	0.52	Subsoil	Flint, burnt flint, pottery	-
1502	Layer	-	-	Natural, brickearth like clayey sand	-	-
1503	Cut?	4.38+	0.69	Possible ditch or working hollow not fully exposed,	-	-

				potentially a natural hollow with buried soil sequence preserved therein.		
1504	Fill/layer	3.92+	0.14	Reddish grey silty clay middle horizon in 1503	Flint, burnt flint, pottery	-
1505	Fill/layer	4.38+	0.37	Firm dark blackish grey silty clay upper horizon in 1503	Flint, pottery	
1506	Fill/layer	3.74+	0.15	Dark yellowish brown silty clay	Flint	
1507	Cut	0.75d	0.17	Circular pit cut with an open rounded bowl profile	-	-
1508	Fill	0.75d	0.17	Soft brownish grey silty clay fill of 1507	Flint	-
1509	Cut	0.42d	0.09	Circular steep sided and flattened base of posthole cut	-	-
1510	Fill	0.42d	0.09	Soft brownish grey silty clay fill of 1509	Flint	-
1511	Cut	0.4d	?	Probable posthole cut, unex	-	-
1512	Fill	0.4d	?	Soft brownish grey silty clay fill of 1511	-	-
1513	Cut	0.26d	?	Probable posthole cut, unex	-	-
1514	Fill	0.26d	?	Soft brownish grey silty clay fill of 1513	-	-

Trench 16

General description					**Orientation**	NW-SE
Trench contained a ditch, with numerous struck flints in its subsoil. Natural brickearth type deposit did not contain any flints.					**Length (m)**	30
					Width (m)	1.9
					Avg. depth (m)	0.52
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
1600	Layer	-	0.22	Topsoil	-	-
1601	Layer	-	0.30	Subsoil	Flint, burnt flint, pottery	-
1602	Layer	-	?	Natural, brickearth like clayey sand	-	-
1603	Cut	0.5	0.16	NE-SW aligned cut with open 'V' shaped profile	-	-
1604	Fill	0.5	0.16	Reddish brown silty clay fill of 1603	Flint, pottery	-

Trench 17

General description	**Orientation**	ENE-WSW
Trench contained a ditch terminus, with numerous struck flints in its subsoil. Natural brickearth type deposit did not contain any flints.	**Length (m)**	30
	Width (m)	1.9
	Avg. depth (m)	0.52

Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
1700	Layer	-	0.18	Topsoil	-	-
1701	Layer	-	0.34	Subsoil	Flint, burnt flint, pottery	-
1702	Layer	-	-	Natural, brickearth like clayey sand	-	-
1703	Cut	0.56	0.26	NE-SW aligned cut with open 'U' shaped profile that shelved off at terminus	-	-
1704	Fill	0.56	0.26	Reddish brown silty clay fill of 1603	-	-

Trench 18						
General description					**Orientation**	NW-SE
Trench contained two ditches one of which terminated and two chalk block filled drains that were recorded as a precaution in case they represented foundations. The subsoil had numerous struck flints in it while the natural brickearth type deposit did not.					**Length (m)**	30
					Width (m)	1.9
					Avg. depth (m)	0.33
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
1800	Layer	-	0.09	Topsoil	-	-
1801	Layer	-	0.24	Subsoil	Flint, burnt flint, pottery	-
1802	Layer	-	-	Natural, brickearth like clayey sand	-	-
1803	Cut	0.61	0.39	E-W aligned linear cut with steep-sided and deep 'V' shaped profile	-	-
1804	Fill	0.61	0.39	Firm brownish grey sandy clay fill of 1803	Flint, pottery	M-LBA
1805	Cut	0.27	0.32	Box shaped linear cut for drain with chalk block fill	-	Modern?
1806	Structure	0.25	0.30	Chalk rubble structure	-	Modern?
1807	Fill	0.27	0.32	Soft yellowish brown sandy clay backfill in 1805	-	Modern?
1808	Cut	1.02	0.25	E-W aligned linear cut with steep-sided flat-bottomed 'U' shaped profile	-	?
1809	Fill	1.02	0.25	Soft greyish brown clayey sand fill of 1808	Flint	?

APPENDIX B FINDS REPORTS

B.1 Pottery

By Alex Davies

Introduction

B.1.1 Some 233 sherds of pottery weighing 1119g was recovered from 24 contexts across 18 trenches. Half of the contexts were subsoil.

B.1.2 The pottery can be split into three groups based on the fabrics: grog tempered, flint tempered and quartz sand tempered. An insignificant number of sherds fall outside of one of these groups, including a single early post-medieval sherd from the subsoil. The grog-tempered sherds are probably late Neolithic but might be as late as the early Bronze Age. Only one of these sherds is featured, and this cannot be immediately paralleled. The flint-tempered sherds are middle/late Bronze Age. The quartz-sand-tempered sherds are medieval. All of the medieval sherds and virtually all of the late Neolithic-early Bronze Age material was recovered from the subsoil, with just one context (304) spot-dated to the late Neolithic-early Bronze Age. The remaining contexts date to the middle/late Bronze Age.

Methodology

B.1.3 The pottery was quantified by context, with the sherds from each context given a spot-date. Nine contexts, all being subsoil, were recorded as containing material of mixed dates, mostly comprising prehistoric and medieval pottery. Due to the method of quantification, exact weights and numbers of sherds for each phase is not available, although in the mixed contexts middle/late Bronze Age material was the most frequent, followed by medieval, then late Neolithic-early Bronze Age.

Late Neolithic-early Bronze Age

B.1.4 Grog-tempered pottery was found in seven subsoil contexts (Trenches 6-10, 15, 18), and one non-subsoil context (304). All of the material was highly abraded. There was a single feature sherd, from 1001, consisting of a complex moulded cordon with a central protruding element with minor moulded decorative features above and below. It was not clear if the cordon was horizontal or vertical. The identification of the sherd is uncertain, although late Neolithic Grooved Ware is perhaps the strongest possibility. A possible undecorated and highly abraded grog tempered incurving rim in context 304 may also be Grooved Ware. A late Neolithic date accords with the grog tempering, although grog continued into the early Bronze Age. Due to the uncertainty of the identification, all of the grog tempered sherds have been assigned a broad late Neolithic-early Bronze Age date (*c* 3000-1700 BC), although it is thought that a date towards the beginning of this range is most likely. If further excavation can confirm the presence of Grooved Ware at the site, this would be of some significance as the pottery style is rare in the county (Longworth and Cleal 1999, 196; Mepham 2008).

Middle/late Bronze Age

B.1.5 The majority of the material dates to the middle/late Bronze Age. This appeared in 11 of the 12 non-subsoil contexts, and nine of the 12 subsoil contexts. Most of the sherds were in a coarse flint fabric, although medium coarse and fine flint fabrics were also present, with these often belonging to thinner-walled vessels.

B.1.6 Feature sherds were rare, meaning that the spot-dates assigned are not entirely confident. Two rims were present, both plain and slightly incurving, probably belonging to barrel shaped vessels. There were four shoulder sherds, three very slight, and a pinched cordon. Many of the sherds showed affinities to regional Deverel-Rimbury forms; however, none of the vessels were very clearly of this style, and there were a number of thinner-walled vessels that might be more comfortably placed in the early post Deverel-Rimbury tradition. It is likely that the flint-tempered assemblage belongs broadly to a single period, and this appears to be the latter part of the Deverel-Rimbury and early part of the post Deverel-Rimbury traditions, *c* 1250-1000 cal BC.

B.1.7 The nationally important late Bronze Age timber platform at Shinewater is located 1.5km to the east of the site. Published data about the site is limited, although the available information suggests that Shinewater belongs mainly or entirely to the latter part of the late Bronze Age, the 9th century BC (Greatorex 1997; Seager Thomas 2008, 38-43). The pottery at Cross Levels Way dates to before the 9th century, with activity at the site probably preceding that at Shinewater.

Medieval and post-medieval (with John Cotter)

Context	Sherds	Weight (g)	Spot-date	Notes
301	6	14	Med	Subsoil. Mixed – M/LBA; Med. Mostly Med
304	2	13	LN-EBA	Incurving rim?
306	1	4	M/LBA	
401	7	23	PMed	Subsoil. Mixed – Pmed; M/LBA
501	4	10	Med	Subsoil.
601	8	45	Med	Subsoil. Mixed – LN-EBA; M/LBA; Med
701	7	29	Med	Subsoil. Mixed – LN-EBA; M/LBA; Med
801	5	21	M/LBA	Subsoil. Mixed – LN-EBA; M/LBA
806	2	5	M/LBA	
901	5	25	Med	Subsoil. Mixed – LN-EBA; M/LBA; Med
909	8	36	M/LBA	
1001	8	57	Med	Subsoil. Mixed – LN-EBA; M/LBA; Med. Grog sherd has cordon – Grooved Ware?
1004	71	451	M/LBA	Slight shoulder
1016	4	25	M/LBA	Shoulder
1019	13	53	M/LBA	Slightly incurving, plain rim
1201	3	21	Med	Subsoil. Mixed – M/LBA; Med
1401	1	2	Med	Subsoil.
1501	2	9	LN-EBA	Subsoil.

1504	1	13	M/LBA	Fingertipped slight shoulder
1505	29	95	M/LBA	Incurving rim/barrel shaped
1506	4	4	M/LBA?	Crumbs
1604	17	33	M/LBA	Thin walled, fine
1801	8	35	M/LBA	Subsoil. Mixed – LN-EBA; M/LBA
1804	17	96	M/LBA	

B.1.8 Medieval sherds were recovered from eight subsoil contexts. They were all tempered with quartz sand, with very fine pieces of flint occasionally also present. A single diagnostic sherd was present in context 1001, and this belonged to a cooking pot dating to the 13th-14th century. The remaining medieval sherds could also date to the same period.

B.1.9 The sole post-medieval sherd was from subsoil context 401. This dates to the 16th-17th century.

B.2 Flint

By Michael Donnelly

Introduction

B.2.1 The evaluation brought to light a very large assemblage of 1052 struck flints and a selected collection of 622 fragments of burnt unworked material weighing 5891g. Most of this flintwork was recovered during stripping operations conducted by a flint specialist. Because this allowed for burnt worked pieces to be properly identified, burnt unworked flint was not intentionally collected but was recovered from features and from samples. The assemblage provided good evidence for early prehistoric activity, including a possible late Upper Palaeolithic or early Mesolithic backed blade, a late Mesolithic microlith and a microburin. Early and late Neolithic finds were also present but the majority of the flintwork was later prehistoric in date. This included several flint-rich features with atypical later prehistoric flintwork some of which was very well executed. The flintwork showed some spatial patterning with a suggestion of more flint-related activity around the western half and particularly at the southern margin of the evaluation area. It is highly probable that the evaluated area and the field it is in (approximately twice as large) would contain in order of 500,000-1,2000,000 struck flints making it a very considerable assemblage representing highly intensive flint use across most of the prehistoric part of the Holocene period.

CATEGORY TYPE	Number
Flake	580
Blade	53
Bladelet	22
Blade index	11.45% (75/655)
Irregular waste	58
Chip	1
Microburin	1
Janus flake	1
Adze/axe working flake	1
Adze sharpening flake	1
Ground implement flake	1
Sieved chip	185

Core tablet	3
Crested piece	5
Core rejuvenation flake	7
Core single platform bladelets	2
Core opposed platform bladelets	2
Core other blades	1
Core single platform flakes	9
Core multi-platform flakes	12
Core levallois non-discoidal	4
Core keeled flakes	3
Core on a flake	6
Core tested nodule	3
Core fragment	9
Scraper end	16
Scraper side	2
Scraper side+end	5
Scraper disc	1
Scraper thumbnail	2
Scraper other	3
Microlith	1
Arrowhead leaf-shaped	1
Arrowhead chisel	1
Adze	1
Burin	1
Backed blade	1
End truncation	4
Microdenticulate	3
Saw	2
Denticulate	5
Heavy borer	1
Awl	4
Piercer	6
Notch	1
Backed knife	3
Retouched blade	3
Retouched flake	9
Retouch other	5
Retouch miscellaneous	1
Total	1052

Burnt unworked (representative total)	622/5891g
No. burnt (%)	39/1052 (3.71%)
No. broken (%)	273/966 (28.26%)
No cores and core dressing (%)	66/966 (6.83%)
No. retouched (%)	82/966 (8.49%)

B.2.2 The assemblage included a small but significant early component. One heavy backed blade was found in subsoil horizon 701 (all contexts ending 01 are subsoil horizons), and could belong to either the late Upper Palaeolithic or Mesolithic period and there were also a number of large blades and a fairly massive crested blade or core tablet also from 701. Mesolithic material included a late Mesolithic microlith found in a sample from 1001 in Trench 10, as well as two possible early Mesolithic preforms from contexts 501 and 701. In addition to this a microburin was also found in 701, an adze from 601 and a probable adze sharpening flake from 901. Some blade cores, core tablets and crested bladelets were also probably of this date although they could also be early Neolithic.

B.2.3 Neolithic activity was also present and included several fine tools such as the broken leaf-shaped arrowhead from 101 or a very crude chisel arrowhead from 901. Several keeled (701, ditch fill 1004, 1301) and levallois (301, 701, 901, 1001) cores were also probably dated to this period (or perhaps the early Bronze Age) and there were also many flakes with faceted platforms. As mentioned above, an unknown quantity of the blade debitage is also probably dated here, particularly towards the earlier part of the Neolithic.

B.2.4 In addition to this, numerous scrapers were found in this assemblage and a considerable number are examples that are typical of the Neolithic or early Bronze Age (101, 301, 501, 701 (3), 1201, 1501) including several from Trenches 3, 7 and 16, however, it is quite probable that material from 201 has been mislabelled 1601 and this would make a very considerable concentration of scrapers in and around Trenches 2 and 3 suggestive of a domestic focus.

B.2.5 The largest component of the assemblage belonged to the middle-late Bronze Age (or later). This included several large assemblages from features including 169 pieces from ditch fill 1004 which was sampled (sampled material accounted for 89 of the pieces including 58 fine sieved chips) and pit 1015 had 62 flints from both its fills (56 pieces were from samples, 39 of which were fine sieved chips). Most of the middle-late Bronze Age features on site contained at least some flintwork and a probable buried soil sequence in Trench 15 yielded 93 flints from contexts 1504, 1505 and 1506, 61 of which were from samples (55 were fine sieved chips) and all three contexts included material typical of middle-late Bronze Age industries.

B.2.6 This assemblage included many highly expedient tools such as scrapers, denticulates, piercers and simple retouched flakes and naturally backed knifes that are typical of this period, as were many of the less-complex flake co4reews often with ungainly platform spurs. However, much of the flintwork found in ditch 1004 was actually of a fairly good standard and much thinner than is typical of middle-late Bronze Age knapping. This feature had several knapping groups and refits were identified. The larger of the two groups contained many thin and quite regular flakes but they often featured attributes such as cortical platforms and hinge terminations that are very common in later prehistoric industries. The second main knapping group from this feature contained very poor quality flintwork clearly indicating later prehistoric knapping and both groups were very fresh.

B.2.7 In terms of spatial patterning, there is a clear drop of material towards the eastern end of the evaluation area with a marked concentration in the western half including most of the Mesolithic and Neolithic finds. Tool percentages would increase towards the western half of the site (figures of between 9% and 24% compared to figures of between 0% and 17% in the east) but was be due in part to the tool-light typical debitage assemblages found in and around the centre-east part of the evaluation (Trenches 9-15) resulting in lower overall tool (and core) figures.

B.2.8 In contrast to this, figures for cores and related debitage show the opposite pattern with higher figures in the east than the west (between 2.63% and 8.61% in the east compared to 5.11% to 15.19% in the east). Blade technology showed a prevalence in the central-southern fringe of the site (between 13.64% and 18.52% in Trenches 7, 10,

11 and 15) but with Trench 14 providing an outlier with figures of 31.57% (albeit from a small and less statistically valid assemblage). Immediately east of this the figure for blades dropped to 0% in Trenches 17 and 18. The north-central part of site had a low figure of between 5.71% for Trench 9 and 8.92% for Trench 10, but this was probably due to the very large flake-rich assemblages found in middle-late Bronze Age feature there. Blade figures in the western part of site were all very similar at between 10% and 13.89% and are indicative of Neolithic industries.

B.2.9 These patterns suggest that the western and central part of site may have saw the earlier activity, possibly with a Neolithic focus in the west and a Mesolithic phase on the south-central area. The eastern part of site was more typically later prehistoric, and this material was also present throughout the remainder of the evaluation area.

B.2.10 One of the more interesting aspects is the concentration in later prehistoric material, particularly given the proximity of the site to the very important Shinewater excavations in the Willigdon levels (Greatorex 2003). It is possible that flint assemblages such as the one we have recovered here belonged to communities living on the water and utilising all surrounding dryland locations for their domestic and rural activities. There is some suggestion at Bexhill to Hastings that the very important middle-late Bronze Age activity there may have featured settlement in the wetland area, none was found on dry land where numerous burnt mounds were discovered alongside a complex field system (OA 2019). The recovery of a considerable flint assemblage of later prehistoric character especially artefacts from secure contexts, would allow for a very detailed study of the various flint-related activities practised by these communities included various craft activities and may offer insights into aspects of daily life only rarely recovered (such as at Must Farm).

B.2.11 Perhaps the most surprising thing about this evaluation is the volume of flintwork recovered. Working out how many flints would be present in the evaluation area is difficult; we had assumed at the time of the evaluation that even with small 50mm passes with the machine bucket that we would identify around 1 in 20 significant flints (not including fine knapping debris). Such a figure would have amounted to around 270,000 significant flints from the evaluation area (666 (recovered flints) x 20 (recovery rate) x 20 (5% evaluation)) and around 520,000 significant flints from the entire field. The total including sieved chips would have been in the order of 500,000-800,000 for the evaluation area and many more for the entire field (@ 800,000-1,200,000). However, figures obtained from two control samples taken from the subsoil in Trenches 4 and 10 suggest figures of around 320,000-380,000 total flints from the evaluation area (and approximately 580,000-680,000 from the entire field) although this was only based on two bulk samples and this figure should be considered a rough estimate.

B.2.12 The topsoil was very thin or absent in many places but the interface between the turf and the subsoil featured (probably) modern tree-throws and numerous mole holes and burrows. It was noted during the evaluation that this interface contained most of the flintwork. Samples were taken from the subsoil proper so the figures given above may be an underestimation. Whatever the case may be, what is certain is that this field contains a mass of flintwork and that the evaluation indicates that much of it belongs to the alter prehistoric period. To put this into context, a much larger surface area at

Bexhill to Hastings Link Road (including a gridded and spit dug element large than the evaluation area produced around 470,000 flints and it may be that this field has a denser flint concentration than that remarkable buried landscape. This field will certainly contain more significant pieces than were recovered at Bexhill, however, it is very important to note that these flints are not *in-situ* and are therefore of far less intrinsic value than the assemblage from any *in-situ* sites such as at Bexhill.

CATEGORY TYPE	Total	%
Ditches	221	21.01
Pits	66	6.27
Postholes	6	0.57
Topsoil/subsoil	666	63.31
Buried soils	93	8.84
Total	1052	[100]

Methodology

B.2.13 The artefacts were catalogued according to OA South's standard system of broad artefact/debitage type (Anderson-Whymark 2013; Bradley 1999), general condition noted and dating was attempted where possible. The assemblage was catalogued directly onto an Open Office spreadsheet. During the assessment additional information on condition (rolled, abraded, fresh and degree of cortication), and state of the artefact (burnt, broken, or visibly utilised) was also recorded. Retouched pieces were classified according to standard morphological descriptions (eg Bamford 1985, 72-77; Healy 1988, 48-9; Bradley 1999). Technological attribute analysis was initially undertaken and included the recording of butt and termination type (Inizan *et al*. 1999), flake type (Harding 1990), hammer mode (Onhuma and Bergman 1982), and the presence of platform edge abrasion.

B.3 Stone

By Ruth Shaffrey

Introduction

B.3.1 Six pieces of stone were retained and submitted for analysis. These comprise three pieces of burnt sandstone (1505, 16g), two pieces of unworked stone (501, 1401), and one rounded flat pebble (1016, 32g) that shows no signs of wear, but which could have had some use as a smoother.

B.4 Fired clay and ceramic building material

By Cynthia Poole

Introduction

B.4.1 A small quantity of ceramic building material (CBM) amounting to three fragments weighing 163g and seven fragments of fired clay (FC) weighing 24g was recovered from Trenches 1, 9, 10, 14 and 15. The assemblage consists of fairly small, poorly preserved fragments, with a mean fragment weight of 54g for the CBM and 3.5g for the fired clay. The assemblage has been spot dated and a brief record made in the table below.

Fired clay

B.4.2 The fragments of fired clay (1004, 1016, 1504) were undiagnostic and were either amorphous or had a single moulded surface. The surface was burnt or fired to grey on pieces from 1016 suggesting they were oven or hearth floor. Other pieces are of indeterminate function but are also most likely to derive from oven or hearth structures. The fired clay cannot be dated and could have been in use at time from the prehistoric to medieval period and are reliant on any associated dated artefacts for their phasing.

Ceramic building material

B.4.3 One fragment of brick from 901 made in a red sandy clay retained only a small area of smooth finely striated surface and measured over 47mm thick. It is post-medieval most probably 18th-19th century in date.

B.4.4 Two fragments of medieval-post-medieval flat roof tile were found in contexts 101 and 1401. They were neatly finished with even surfaces and measured 13 and 14mm thick. They are not closely dateable, but the regular finish perhaps points to a later post-medieval date.

Table 1: Record of the CBM & fired clay assemblage

Ctx	Nos	Wt g	Date	Mat	Fabric	Form	Description
101	1	67	C15-C19	CBM	Orange with purple core; frequent medium-coarse rounded quartz sand ≤0.5mm; coarse moulding sand	Roof: flat	Smooth even surfaces. 14mm thick. Abrasion: low-mod
901	1	86	C18-C19	CBM	Wealden clay: red, fine sandy clay containing dark red ironstone grits 1-16mm	Brick	Smooth finely striated upper surface. >47mm thick. Abrasion: low
1004	2	4	-	FC	Buff orange, fine sandy clay with red iron oxide <1mm	Indet	Amorphous. Abrasion: high
1016 <8>	4	15	-	FC	Reddish brown, black; fine sandy micaceous clay.	Indet	Some pieces with flat even moulded surface burnt black; some amorphous. Th: 6-16mm; size 15-30mm
1401	1	10	C16-C19	CBM	Wealden clay: pinkish orange with cream streaks, fine sandy-silty with small ironstone grits ≤2mmFine moulding sand.	Roof: flat	Smooth even surfaces, edge slightly rough. 13mm thick

1504	1	5	-	FC	Buff-orange with cream mottles and laminations, fine silty clay.	Indet	One flat even moulded surface. 13mm thick. Heavily abraded.
Total	10	187					

Conclusions

B.4.5 The CBM was all found in subsoil layers and probably relates to agricultural activity, probably introduced into the soil during arable cultivation of the fields during the post-medieval period.

B.4.6 The fired clay was found in features associated with middle-late Bronze Age pottery and it is probably contemporary with the pottery. Although the material is undiagnostic, small fragments of fired clay of the type found on the site are likely to be domestic in origin derived from ovens or hearths for cooking or heating.

Recommendations

B.4.7 The value of the assemblage lies in providing supplementary dating evidence for the contexts and evidence of activities on site. The material has little additional intrinsic research value, apart from providing evidence of the fabrics that were in use in the area at different periods. In general, the record is sufficient should the assemblage be considered in any wider research encompassing the site. The assemblage may be discarded upon completion of the project prior to archiving.

APPENDIX C ENVIRONMENTAL REPORTS

C.1 Environmental samples

By Richard Palmer

Introduction

C.1.1 Nine bulk samples were taken from the evaluation, primarily for the retrieval and assessment of charred plant remains (CPR) and the recovery of bones and artefacts.

Method

C.1.2 Seven samples were processed in their entirety at Oxford Archaeology using a modified Siraf-type water flotation machine. The flots were collected in a 250µm mesh and heavy residues in a 500µm mesh and dried. The residue fractions were sorted by eye and with the aid of a magnet while the flot material was sorted using a low power (x10) binocular microscope to extract cereal grains and chaff, smaller seeds and other quantifiable remains.

C.1.3 The remaining two samples were taken from subsoil contexts exclusively for the recovery of flint. These were wet sieved to 2mm and the resulting residue fractions dried and sorted by eye.

Results

C.1.4 The details of the seven floated samples is presented in Table 1.

Trench 4

C.1.5 The only sample taken from this trench, sample 7, comprising 40L of subsoil 401, was wet sieved for exclusively for flint recovery. A fairly small quantity of burnt and worked flint was recovered and details will be included in the relevant specialist report.

Trench 10

C.1.6 Sample 1 came from fill 1004 of ditch 1003 which has been spot dated as middle/late Bronze Age. *Cecilioides acicula*, a burrowing snail that is often intrusive and is thought to be a medieval introduction (Evans 1972, 168), was present but the shells have not been quantified. Some mineral encrustation is present on the charcoal fragments but preservation of material is otherwise fair to good. Identified grain is barley (*Hordeum* sp.) and a fragment of hazelnut (*Corylus avellana*) is also present. Weed seeds are a mixture of charred and uncharred (probably modern) goosefoots (*Chenopodium* sp.). The residue produced pottery and a quantity of both burnt and worked flint.

C.1.7 Sample 8 is from the upper fill, 1016, of pit 1015 spot dated as middle/late Bronze Age. Mineral encrustation on the charcoal fragments means that further identification is likely to be limited. No whole cereal grains were present and the score provided in Table 1 is of fragments rather than whole specimens. Weed seeds consist solely of charred goosefoots (*Chenopodium* sp.). Large quantities of burnt and worked flint were recovered along with a few fragments of pottery and fired clay.

C.1.8 Sample 9 is from the lower fill, 1019, of pit 1015 also dated as middle/late Bronze Age. Charred material consisted of charcoal fragments, none of which were larger than 4mm. Pottery and some burnt and worked flint were recovered from the residue.

C.1.9 A large quantity of burnt and some worked flint was recovered from sample 6, from 40L of subsoil 1001.

Trench 12

C.1.10 Sample 2, from fill 1204 of ditch 1203, is undated. The flot consists of a large quantity of modern roots, molluscs and limited charred material. Predominant molluscs are *Discus rotundatus*, a shade-loving species, and the catholic species *Triculus hispadus*, with the presence of *Cecilioides* being noted but not quantified. Weed seeds are predominantly modern (uncharred) goosefoots (*Chenopodium* sp.). Burnt and worked flint was recovered in limited amounts from the residue.

Trench 15

C.1.11 Sample 3 is from fill 1504 of ditch 1503, spot dated as middle-late Bronze Age. Limited charred material is present with no material being greater than 4mm in size. The only charred weed seed is a single example of common fumitory (*Fumaria officinalis*) which is common to both cultivated and waste ground. Burnt and worked flint were recovered from the residue.

C.1.12 Sample 4 is from fill 1505 of ditch 1503, spot dated as middle-late Bronze Age. Charcoal was recovered but little in the way of other charred material was present. Pottery and flint were both recovered from the residue, including 25+ fragments of burnt flint.

C.1.13 Sample 5 is from fill 1506 of ditch 1503 which probably also middle-late Bronze Age. Beyond charcoal the only identifiable material present is a single damaged grain of wheat (*Triticum* sp.). *Cecilioides* was present but the shells were not quantified. Burnt and worked flint in modest quantities were recovered from the residue.

Discussion

C.1.14 Recovery of charred plant material from this site is fairly limited in both quantity and interpretive value beyond the suggestion of agricultural activity occurring on or close to the site. This could be a consequence of the features sampled as ditches tend to have limited charred material if they are not near an area of occupation. Generally, however, the remains are consistent with the development of agriculture in the middle-late Bronze Age in this area, which took place alongside some limited collection of wild resources (SERF 2008). The presence of charred goosefoot seeds may indicate the utilisation of an edible foodstuff, fat hen (*Chenpodium album*); the leaves and seeds of this plant are edible and the plant may have been cultivated in later prehistoric times (Stokes and Rowley-Conwy 2002). The presence of uncharred seeds suggests, however, that goosefoot had been growing locally as a weed in more recent times.

C.1.15 Preservation of material varies across the site with the barley in sample 1 being in good condition unlike the grain present in sample 8 which was heavily fragmented. Varying degrees of mineral encrustation are present on some of the charcoal fragments,

suggestive of a fluctuating water table and iron precipitation, whilst internal structure is visible on other fragments and these may be identifiable.

C.1.16 A quantity of molluscs was recovered from the flot of sample 2 but this was not replicated elsewhere on site. This could suggest a localised deposit, but the presence of molluscs in this area should be borne in mind for any future excavation, as molluscan remains can provide valuable palaeoenvironmental information and may require a special sampling strategy.

C.1.17 Burnt and worked flint was recovered from all of the samples, and this will have implications for any future sampling strategy.

Recommendations

C.1.18 In general, if further excavation is carried out it is recommended that sampling should take place, ideally from a range of features across the site. This sampling should be carried out in accordance with the most recent sampling guidelines (eg. Oxford Archaeology 2017; English Heritage 2011).

C.1.19 The flots warrant retention until all works on the site are complete although at this stage it is not expected that further work will be required on the material.

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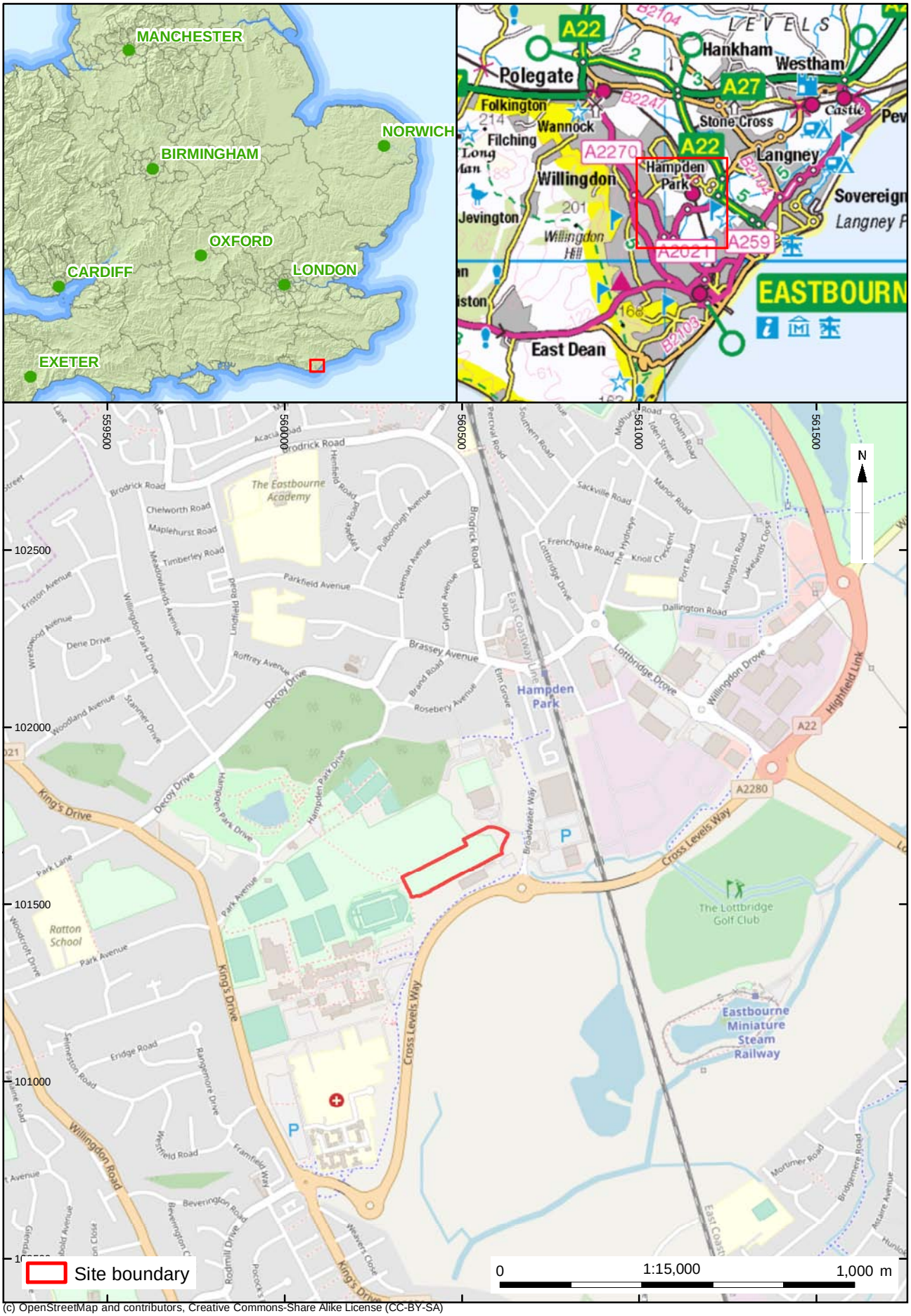
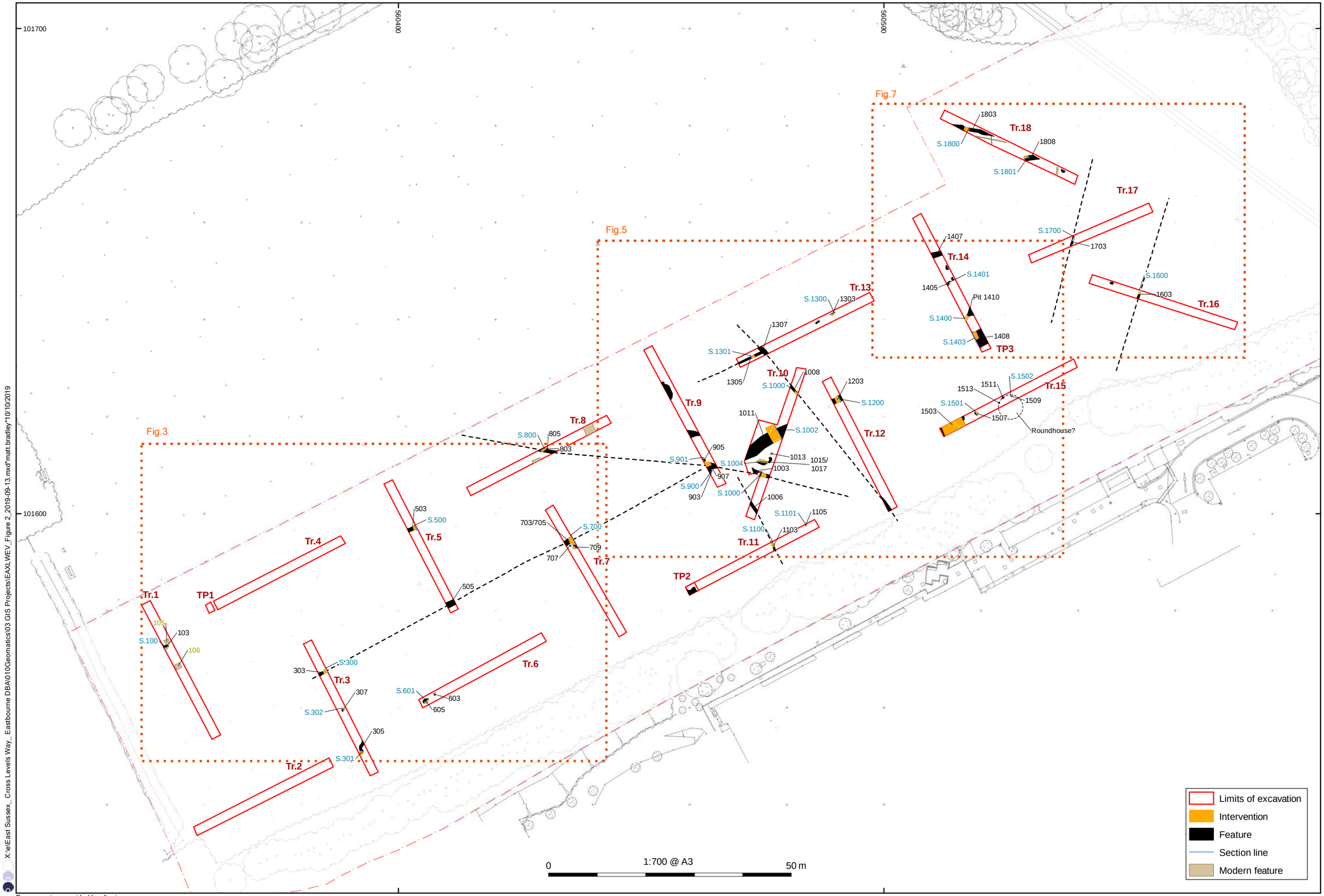
APPENDIX E SITE SUMMARY DETAILS / OASIS REPORT FORM

Site name:	Cross Levels Way, Eastbourne, East Sussex
Site code:	HE: 2019.170
Grid Reference	TQ 60442 01653
Type:	Evaluation
Date and duration:	August 2019
Area of Site	1.4ha
Location of archive:	The archive is currently held at OA, Oxford Archaeology South, Janus House, Osney Mead, Oxford, and will be deposited with Eastbourne Heritage Service in due course, under the following accession number: HE: 2019.170
Summary of Results:	In August 2019 Oxford Archaeology undertook an 18-trench evaluation at Cross Levels Way, Eastbourne, East Sussex, on behalf of Morgan Sindell Group for a proposed new Primary School. The evaluation revealed a late prehistoric landscape of field systems, enclosures, pits, postholes and a possible trackway. The features were found associated with a rich flint and pottery assemblage of middle-late Bronze Age date. Flints and pottery of probable Neolithic date were also present as was a limited concentration of Mesolithic lithic material. The evaluation featured very dense disturbed lithic scatters in the subsoil but did not reveal any *in situ* material. A possible buried soil was also revealed during the evaluation that may have higher potential to preserve *in situ* remains. Based on the results of the evaluation the site was the focus of middle-late Bronze Age activity possibly related to a farmstead along the edges of the former tidal inlet of the Willingdon Levels.



X:\e\East Sussex_ Cross Levels Way_ Eastbourne DBA\010Geomatics\03 GIS Projects\EAXLWEV_Figure 1_2019-09-17.mxd*matt.bradley*17/09/2019

Figure 1: Site location



X:\e\East Sussex_ Cross Levels Way_ Eastbourne DBA\010Geomatics\03 GIS Projects\EAX\WEV_Figure 2_2019-09-13.mxd*matt.bradley*10/10/2019

Basemapping provided by client

Figure 2: Trench locations and sections

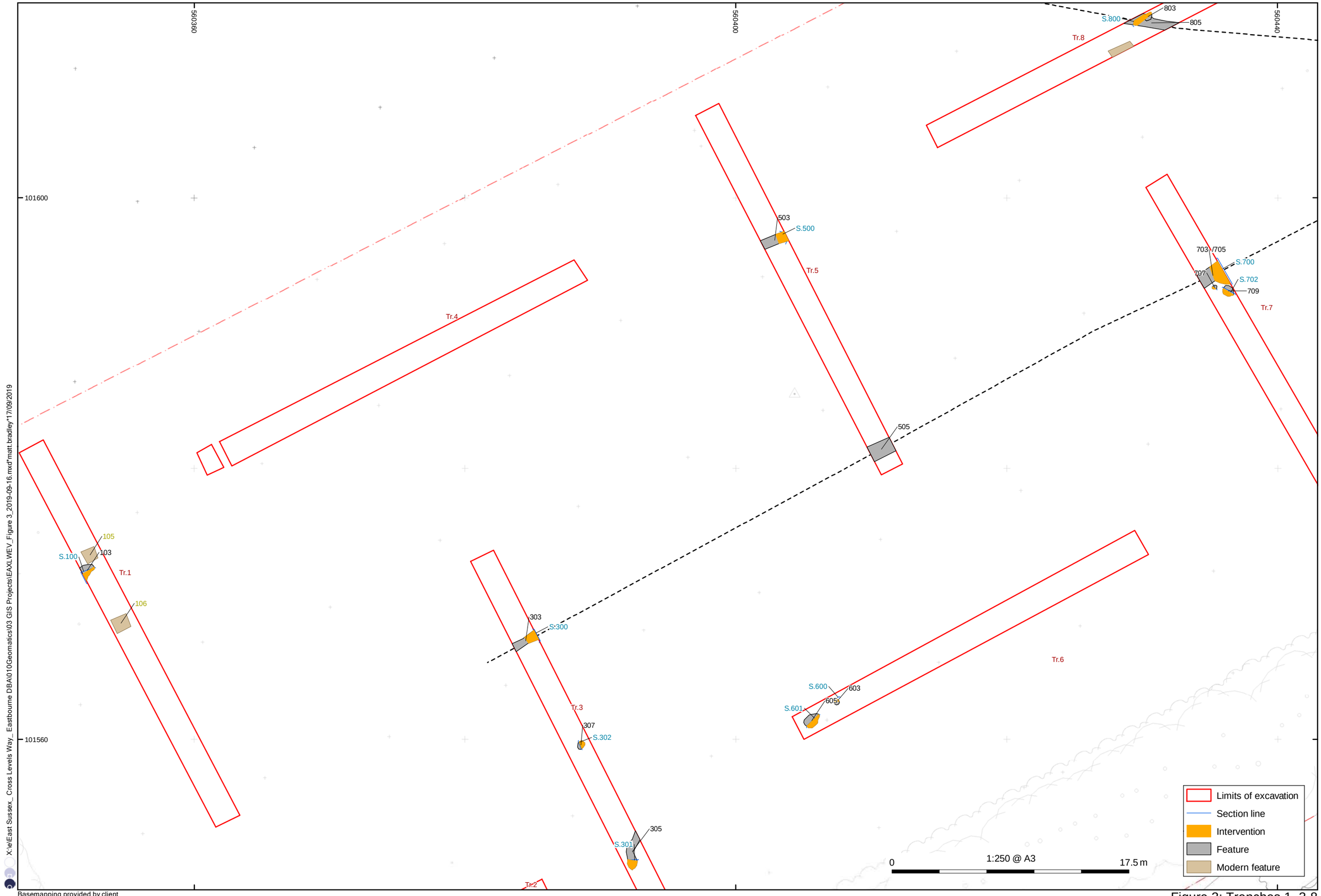


Figure 3: Trenches 1, 3-8

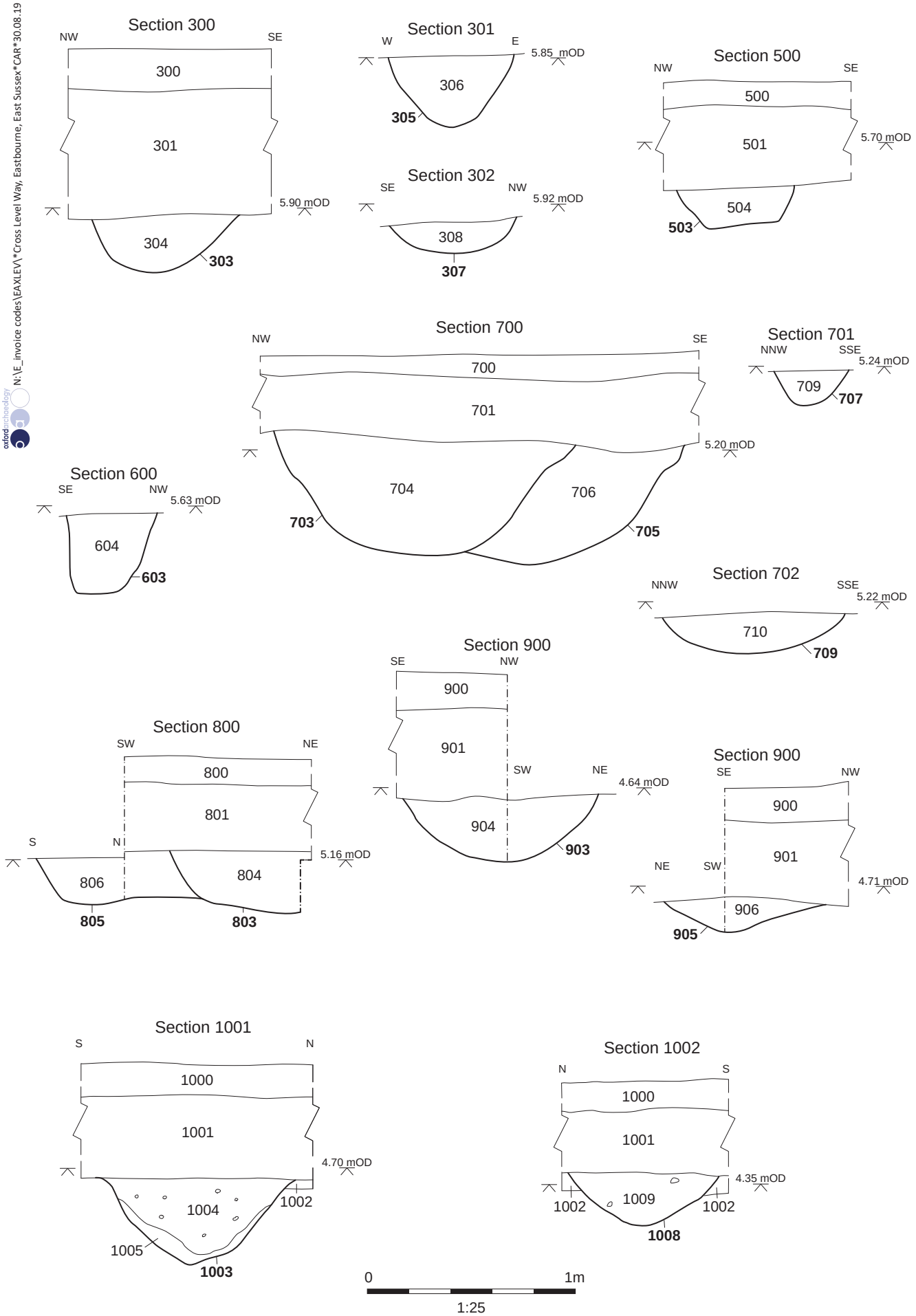


Figure 4: Sections, Trenches 3, 5, 6, 7, 8, 9 and 10

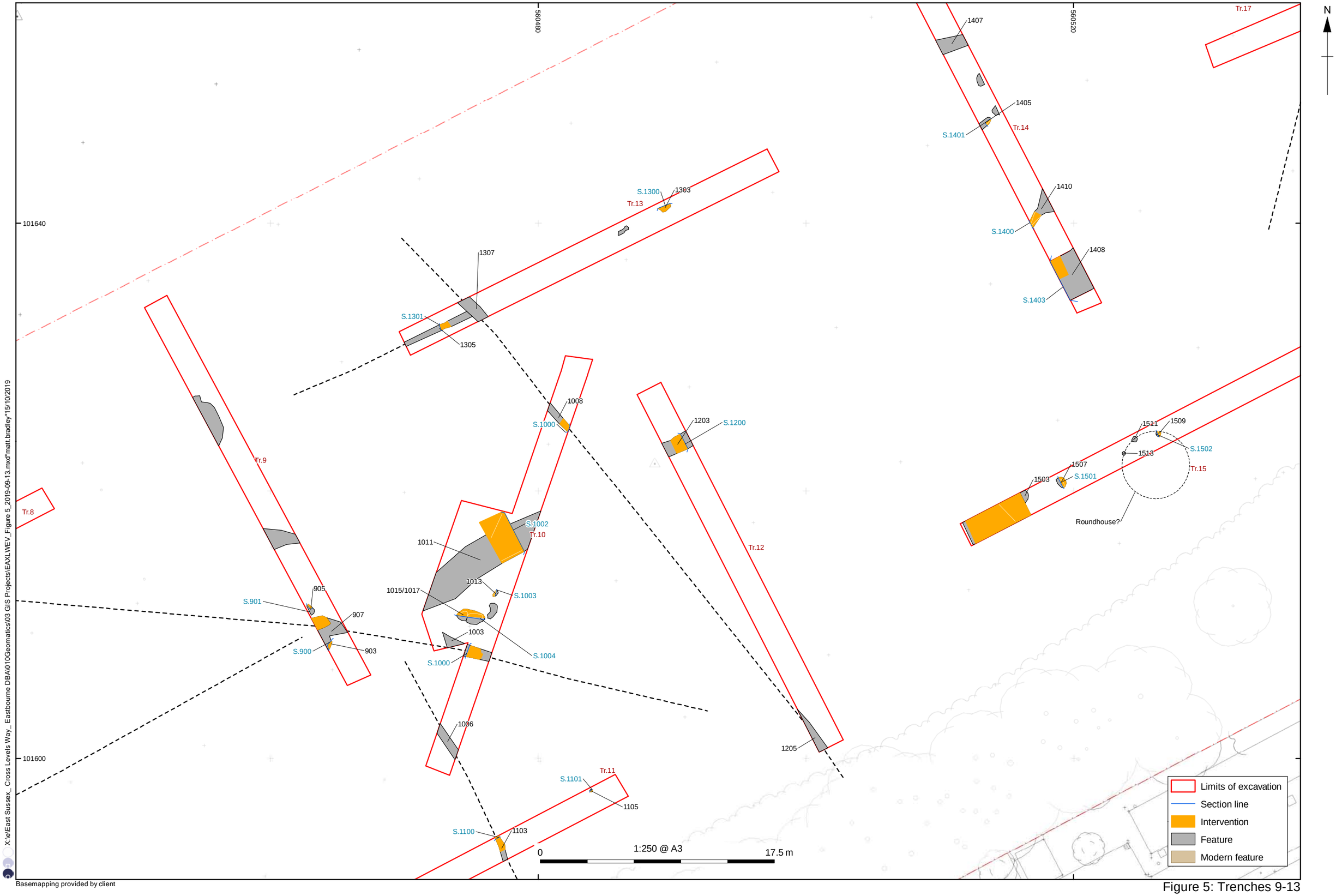


Figure 5: Trenches 9-13

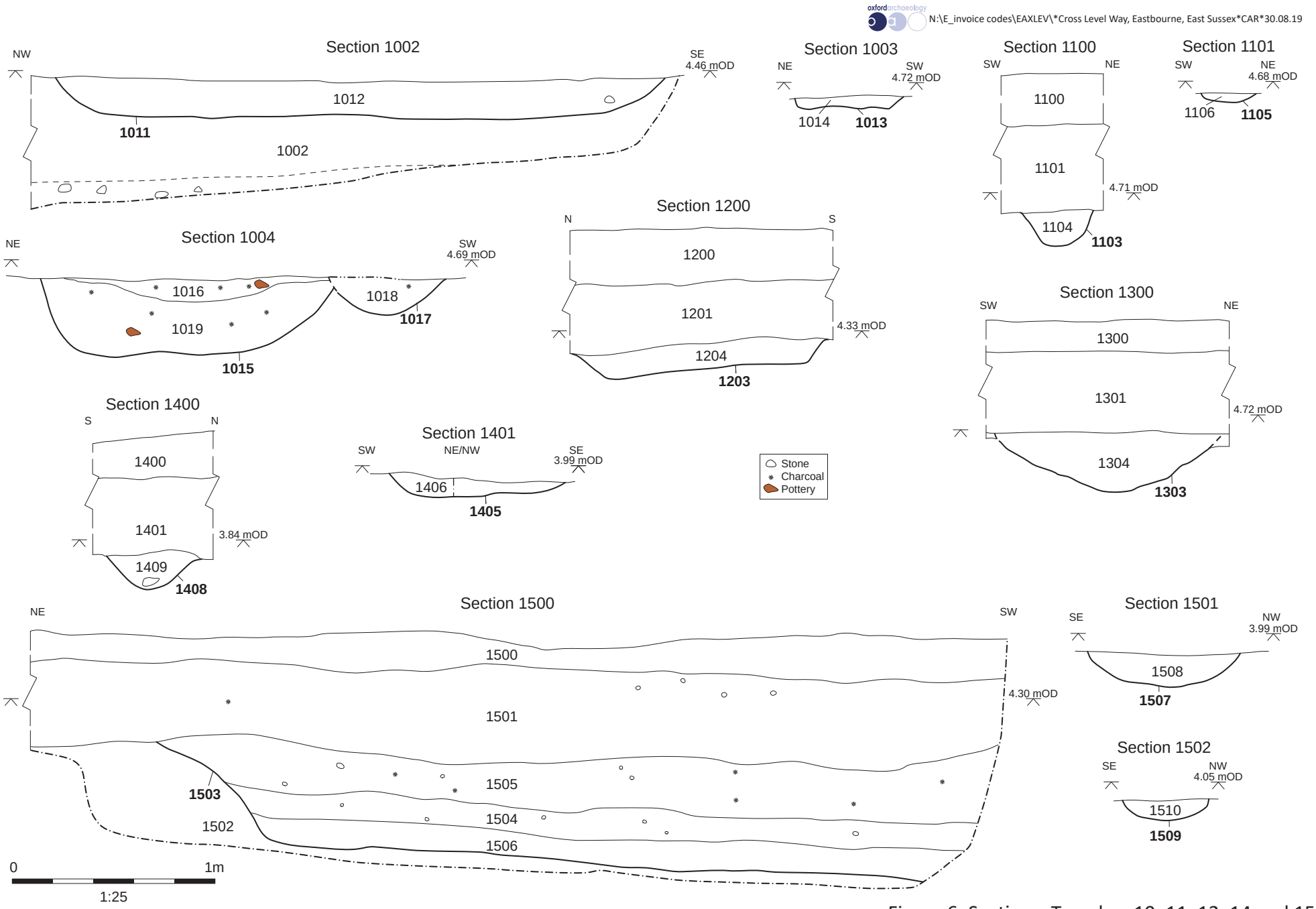


Figure 6: Sections, Trenches 10, 11, 12, 14 and 15

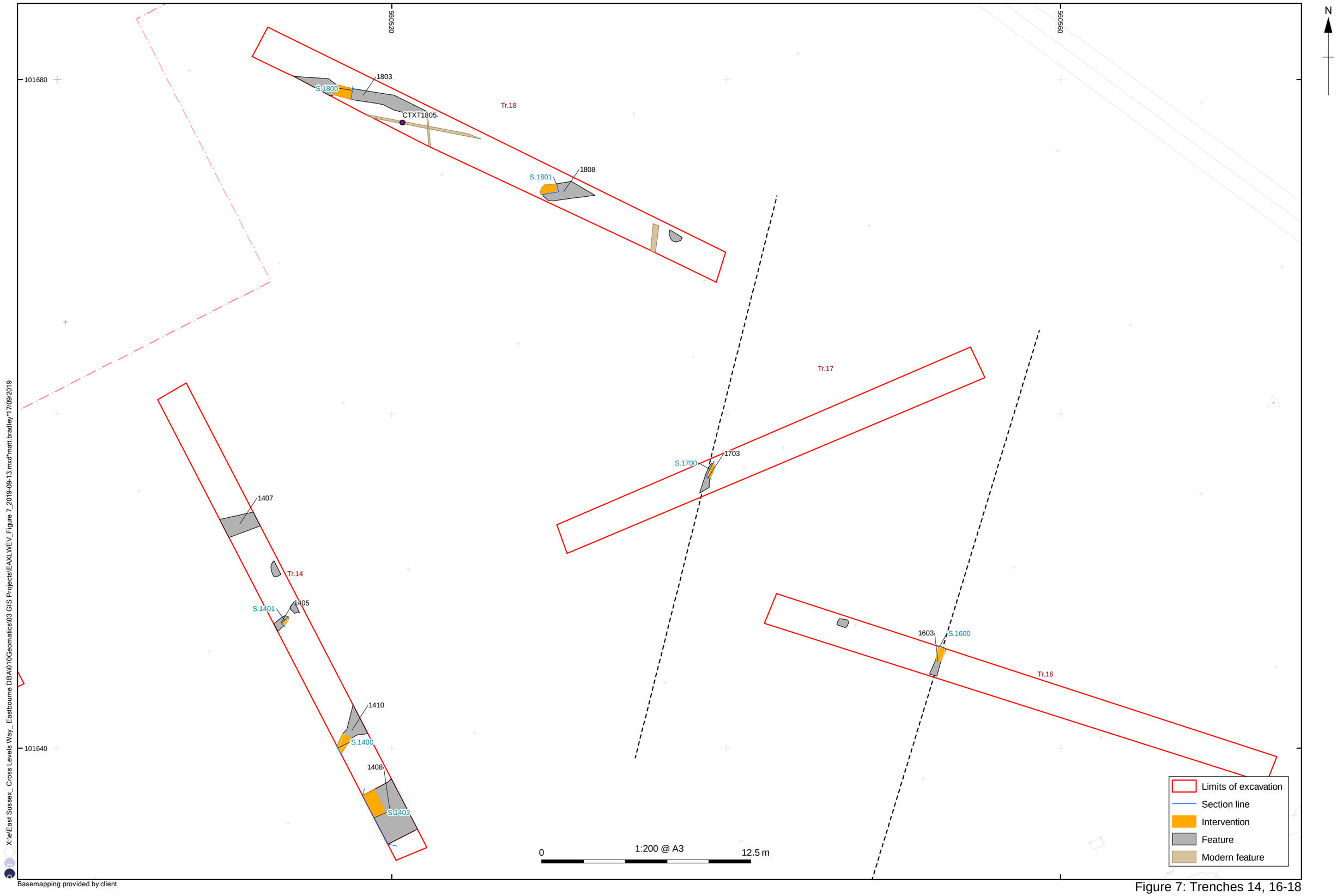


Figure 7: Trenches 14, 16-18

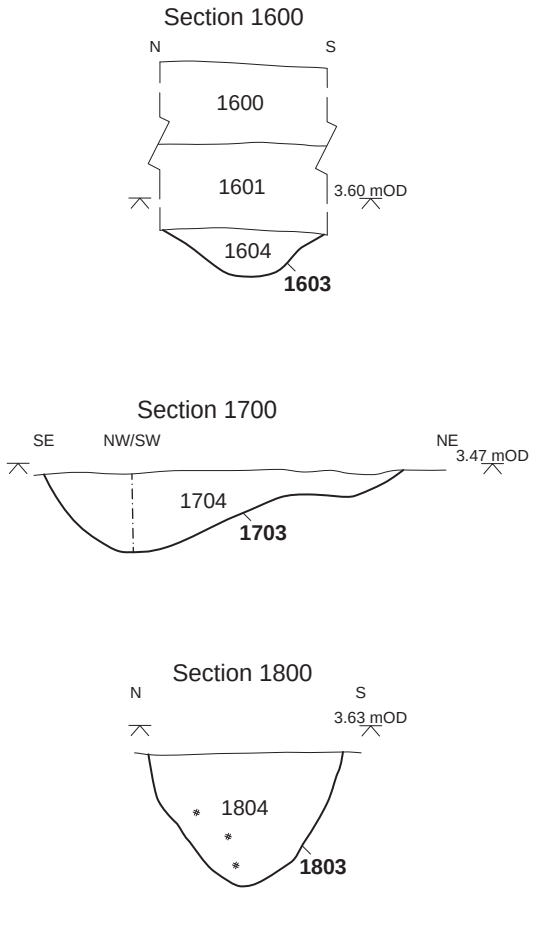


Figure 8: Sections, Trenches 16, 17 and 18

Plate 1: Trench 3, view to north-west

Plate 2: Ditch 303 Trench 3, view to north-east

Plate 3: Trench 8, view to north-east

Plate 4: Ditch 805 and pit 803, Trench 8, view to north-west

Plate 5: Trench 10, view to north

Plate 6: Ditch 1003, Trench 10, view to east

Plate 7: Pits 1015 and 1019, Trench 10, view to south-east

Plate 8: Trench 10 extension, view to south

Plate 9: Trench 14, view to north-east

Plate 10: Ditch 1403, view to north-west

Plate 11: Trench 18, view to NW

Plate 12: Ditch 1803, Trench 18, view to east

Plate 13: Test pit 1, Trench 4

Plate 14: Test pit 3, Trench 14

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