

**ARCHAEOLOGICAL SCHEME OF WORKS REPORT:**

**LAND AT BOURNE GRAMMAR SCHOOL, SOUTH ROAD, BOURNE, LINCOLNSHIRE**

Planning Reference: S16/0854

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*Cover image: The head pot*

## Executive Summary

- Allen Archaeology Limited was commissioned by Grayling Thomas Architects Limited to undertake an archaeological scheme of works comprising a strip, map and record exercise and a programme of archaeological monitoring on land at Bourne Grammar school, South Road, Bourne, Lincolnshire, as a condition of a planning application prior to erection of a laboratory block, creation of a new car park and change of use of land to a playing field.
- The site is archaeologically sensitive, lying in an area of archaeological interest and potential. Archaeological remains dating from the prehistoric to the post-medieval periods have been identified within the town and previous archaeological works within the school grounds identified extensive evidence of Roman activity, including a pottery kiln. There is also extensive evidence of ditches and land divisions of a Romano-British date in the surrounding area.
- The results of the archaeological scheme of works indicate that the site is of local significance, revealing extensive evidence of Romano-British activity, broadly consistent with the results of previous excavations.
- Four phases of activity, spanning from the late 1<sup>st</sup> century to the 4<sup>th</sup> Century AD, were identified, allowing for a relatively clear narrative to be constructed for the site and indicating that, it was not until the 3<sup>rd</sup> and 4<sup>th</sup> century that the site began to develop (Phase 3), with the establishment of a series of boundary ditches and clay extraction pits. A rare 4<sup>th</sup> century head pot, representing a female face, was recovered from the fill of a pit and may have been part of a structured deposit. The site saw a decline in the late 4<sup>th</sup> century.
- There was limited evidence of medieval activity, represented by an undated linear feature sitting on the same alignment as a medieval furrow identified during an earlier excavation at the site.
- The eastern half of the site was truncated by modern features and drainage.
- This results support the conclusions of previous work on the site which suggests that during the Romano-British period Bourne was a small but important settlement, with multiple phases of activity and land division. The site was most likely located on the periphery of the Roman town.
- In the medieval period the site appears to have been farmland, with little further evidence of activity until the modern development of Bourne took place.

## 1.0 Introduction

- 1.1 Allen Archaeology Limited (AAL) was commissioned by Grayling Thomas Architects Limited to undertake an archaeological scheme of works comprising an open area strip, map and record and a programme of archaeological monitoring on land at Bourne Grammar School, South Road, Bourne, Lincolnshire, as a condition of a planning permission for the erection of a two storey laboratory block, creation of additional car park area and change of use of land to playing field.
- 1.2 The excavation, recording and reporting conformed to current national guidelines, as set out in the Chartered Institute for Archaeologists '*Standard and guidance for archaeological field evaluations*' (ClfA 2014), and the English Heritage document '*Management of Research Projects in the Historic Environment*' (Historic England 2016). Local guidelines, outlined in the '*Lincolnshire Archaeological Handbook*' (LCC 2012), and a specification for the works prepared by this company (AAL 2016), were also followed.
- 1.3 The documentary and physical archive will be submitted to The Collection Museum, Lincoln, where it will be stored under the museum accession code LCNCC: 2016.206. As the works took longer than anticipated the deposition date has passed, so AAL will arrange a new deposition date with the museum shortly.

## 2.0 Site Location and Description

- 2.1 Bourne is situated 27km northwest of Peterborough within the administrative district of South Kesteven, Lincolnshire. The development site is located to the south of the town centre, on the west side of South Road and centres on NGR TF 09748 19603. The site is within the grounds of Bourne Grammar School and comprises approximately 0.28 hectares of grassed sports field (Figure 1).
- 2.2 The local bedrock geology comprises Kellaways Clay Member Mudstone, with no superficial geology record (<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>).

## 3.0 Planning Background

- 3.1 Planning Permission has been granted for '*the erection of 2 story laboratory block, creation of additional car park area and change of use of land to playing field*' (Planning Reference S16/0854). Planning was granted with conditions including:

*'Condition 3. No development shall take place within the application site until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted to and approved by the Local Planning Authority.'*

*Reason: In order to provide a reasonable opportunity to record the history of the site and in accordance with Policy EN1 of the adopted South Kesteven Core Strategy (July 2010).'*

- 3.2 The programme of archaeological works comprised a strip, map and sample of the main area of groundworks, and monitoring and recording of all other groundworks. These works are intended to mitigate the effects of the development upon the archaeological resource across the site.

- 3.3 The approach adopted is consistent with the recommendations of the National Planning Policy Framework (NPPF), with the particular chapter of relevance being '*Chapter 12: Conserving and enhancing the historic environment*' (Department for Communities and Local Government 2012).

#### 4.0 Archaeological and Historical Background

- 4.1 Bourne is situated in an area of high archaeological potential, with archaeological remains dating from the prehistoric to the post-medieval periods identified within the town.
- 4.2 Prehistoric activity in the area is limited, with possible prehistoric cropmark enclosures identified via aerial photography to the north of the present day settlement (Lincolnshire HER (LHER) number 38909). Investigations to the northeast of the town have also located the remains of significant Late Iron Age and Roman settlements (LHER number 34835; Tipper 1995). Find spots of worked flint have been identified at Eastgate, c.400m to the northeast of the site (LHER number 35133), and Mill Drove, approximately 1km to the northeast of the site (LHER references 34159 and 34949), amongst others.
- 4.3 During the Romano-British period Bourne was a small but important settlement, being situated on the Fen edge and producing numerous archaeological finds and settlement remains, with the Roman road, King Street, passing immediately to the east of the site (known as South Road today). The route of King Street once connected *Durobrivae* (Water Newton, Cambridgeshire) to Ancaster (Margary 1973, 232).
- 4.4 The development site lies c.400m to the west of the Car Dyke (LHER monument number 35018), which is believed to be of Roman date, and which connects the River Witham with the River Nene (Whitwell 1970, 57), although its exact purpose is debatable. Previous investigations have shown the original channel to be approximately 2m deep by 13m wide at the surface, with flanking banks up to 5m wide (Simmons and Cope-Faulkner 1997).
- 4.5 Investigations to the south of the town (Johnson 2000), have revealed a number of Romano-British features including pits, ditches and oven bottoms. Finds and industrial residues recovered from the site indicate that not only was domestic settlement present, but also iron working and possibly salt making.
- 4.6 The site lies south of a housing development, on South Road, where archaeological excavations in 1997 revealed extensive evidence of Roman clay extraction pits with later occupation remains (McDaid 1997). Evidence of 3<sup>rd</sup> century Romano-British clay extraction was also identified to the northwest of the development site (Albone and Field 2000).
- 4.7 In 1959 remains of a Roman pottery kiln were found in the grounds of the Grammar School, c.50m to the northeast of the site (Fennell 1959). The structure survived to c.0.5m in height. Large quantities of pottery were recovered during the associated excavation, including 3<sup>rd</sup> to 4<sup>th</sup> century AD large, red, calcite gritted storage jars, dishes and candlesticks (LHER number 33196). Among the finds on site were also a stamped mortarium rim, dating to between AD65 and 90.
- 4.8 Archaeological monitoring conducted on the site in 1995 also recorded numerous pits and ditches of 1<sup>st</sup>–3<sup>rd</sup> century date. Iron ore and charcoal recovered during excavation suggest industrial activity, possibly metalworking or iron smelting, was occurring (APS 1995).
- 4.9 Further archaeological interventions at the school in 2001 and 2002, revealed evidence of Roman drainage ditches containing pottery of probable 1<sup>st</sup> and 2<sup>nd</sup> century AD date (earlier than

the date conventionally given for the kiln site); a Roman burial (Williams 2001); and a possible palaeochannel of Romano-British date (Snee 2002).

- 4.10 Excavations on the site in 2004 showed that the Roman ditch system recorded in 2000 continued, with return ditches to the west defining additional parcels of land. The scarcity of Roman finds suggests that the excavation site was away from the focus of the pottery production recorded in 1959 and on the limits of any settlement. Also present were the remains of 13<sup>th</sup>–14<sup>th</sup> century ridge and furrow (LAS 2004).
- 4.11 The place-name Bourne is believed to derive from the Old Norse '*brunnr*' meaning a spring or stream (Cameron 1998). Bourne is also referred to in the Domesday Survey of 1086 as *Brune*, which records that Bourne was owned by Ivo Taillebois, Alfred of Lincoln, Oger the Breton, Robert of Stafford and Colegrim, and contained a church with a priest, four watermills, 49 acres of meadow and extensive tracts of woodland (Morris 1986).
- 4.12 The town grew into a significant settlement in the medieval period. Part of the Augustinian Abbey founded in the 12<sup>th</sup> century survives as the Church of St. Peter and St. Paul, lying c.350m north of the site (Snee 2002). The earthwork remains and scheduled monument of Bourne Castle are located to the west of the church, c.450m to the northwest of the site (1005023, LHER 30043). At one time the castle, constructed in the early 11<sup>th</sup> century by Baldwin FitzGilbert, would have consisted of a motte with two baileys and a possible stone gatehouse. It was destroyed after being used by Cromwell's troops in 1645, but traces of the enclosed mound and inner and outer moats still survive (Cathcart-King 1980).
- 4.13 Pottery was manufactured in the town throughout the medieval and post-medieval periods, with evidence for production being recovered from various sites to the east of the town, c.600m to the east of the site (Kerr 1975). Numerous kilns have been found within the town, including one on Cherry Holt Road, c.850m to the east of the site, and one at Victoria Place, c.550m to the northeast; with evidence of clay extraction pits backfilled with kiln wasters dating to the 14<sup>th</sup> century identified on Spalding Road (Herbert 1998a). Investigations at Potters Close, approximately 700m to the east-northeast of the site, recovered further evidence of pottery production including two complete 16<sup>th</sup> and 17<sup>th</sup> century jugs (Herbert 1996 and 1998b).

## 5.0 Aims and Objectives

- 5.1 The purpose of the scheme of works was to mitigate the effects of the proposed development upon the archaeological resource and to create a permanent record of the features and deposits exposed, in advance of development. Evidence was gathered to establish the presence/absence, nature, date, depth, quality of survival and importance of any archaeological deposits.

## 6.0 Methodology

- 6.1 The archaeological scheme of works took place in two phases (Figure 2). The first comprised a strip, map and record exercise within an area measuring approximately 79m x 11.5m. The second phase of work comprised archaeological monitoring of footings and associated drainage excavated for the new science block.

### ***Strip, Map and Record***

- 6.2 The strip, map and record area was broadly rectangular, measuring approximately 70m long by 12m wide (Figure 2). A tracked excavator fitted with a 1.6m wide toothless ditching bucket was used to remove topsoil, subsoil and underlying non-archaeological deposits in spits no greater than 0.1m in thickness. This process was repeated down to the formation depth for the development, or to the first archaeological horizon which varied from approximately 0.75m to 1.0m below current ground level. All further excavation was then undertaken by hand.
- 6.3 Machine excavation was monitored at all times by an experienced field archaeologist from AAL and excavation was undertaken by a team of experienced AAL archaeologists from 12<sup>th</sup> December to 31<sup>st</sup> January 2016.
- 6.4 A full written record of the archaeological deposits was made on standard AAL context recording sheets. Archaeological deposits were drawn in plan and section at an appropriate scale (1:20 and 1:50), with OD heights being displayed on each class of drawing. Colour photography formed an integral part of the recording strategy, with all photographs incorporating scales, an identification board and directional arrow, as appropriate.
- 6.5 Each deposit or layer was allocated a unique identifier (context number), and accorded a written description, a summary of these are included in Appendix 5. Four-digit numbers within square brackets reflect cut features, e.g. pit [1004].
- 6.6 Finds of all classes were collected, other than obviously modern material, and were bagged and labelled with the appropriate deposit context number. All finds were processed (cleaned, marked and labelled as appropriate) at the offices of AAL, prior to assessment by approved specialists.

### ***Archaeological Monitoring***

- 6.7 The archaeological monitoring comprised the footings for the new Science Block, measuring 69m x 21m and a service trench to the south measuring ca 114m long x 0.9m wide. All monitoring took place between 1<sup>st</sup> February and 24<sup>th</sup> August 2017.
- 6.8 The monitored areas were excavated using a tracked mechanical excavator fitted with a 0.9m wide toothless bucket, except when removal of concrete or tarmac surfaces or obstructions necessitated the use of a hydraulic breaker or toothed bucket. Recording methods followed those outlined above.

## **7.0 Results**

- 7.1 The stratigraphic sequence proved to be broadly consistent across the site, comprising a 0.3–0.4 m thick topsoil layer, 1000, which overlay a 0.4m thick subsoil layer of firm mid yellowish brown silty clay, 1001. This in turn sealed the underlying geological deposit, a mid orange clay with occasional patches of clayey sand and occasional limestone fragments, 1002, which was encountered at between 9.7m and 9.9.m OD, approximately 0.75m below the existing ground surface.
- 7.2 Four broad phases of activity, from the late 1<sup>st</sup> century to the 4<sup>th</sup> century AD, were identified, with a concentration of activity focussed on the 3<sup>rd</sup> and 4<sup>th</sup> centuries AD (Figure 3). Twenty-nine undated features were also identified.



**Phase 1: Late 1<sup>st</sup> to early 2<sup>nd</sup> century AD (Figure 5 and Figure 6)**

- 7.3 Three features could be dated to the late 1<sup>st</sup> to early 2<sup>nd</sup> century AD. A northwest to southeast orientated, curvilinear gully, [1022]/[1117]/[1123], with steep sides was located towards the east boundary of the site (Plate 1). It was filled with friable clayey silt which contained a sherd of 2<sup>nd</sup> century Bourne shell-gritted bowl as well as two fragments of animal bone. Approximately 8.8m to the southwest was the terminal of gully [1076], the silty clay fill contained a shell and grog-gritted pottery sherd. The third feature, sub-oval pit [1166], was located in the west of the site and extended beyond the limit of excavation towards the north. The fill of this pit, 1165, contained two sherds of native and traditional shell-gritted wares.



*Plate 1: South-facing section of [1022] showing truncated profile of pit [1024]. Looking north, 1m scale*

**Phase 2: 2<sup>nd</sup> century AD (Figure 7 and Figure 8)**

- 7.4 In the centre of the site and truncating curvilinear ditch [1022]/[1117]/[1123], was an east to west oriented silty clay filled ditch ([1047]/[1051]/[1091]) (Plate 2). It measured 1.5m wide by 0.47m deep and contained a small assemblage of pottery sherds dating to the 2<sup>nd</sup> century, as well as two fragments of animal bone. A sample taken of fill 1049 was found to contain evidence of charred emmer/spelt wheat and crop weeds.



*Plate 2: West-facing section of ditch [1051], truncating curvilinear ditch [1123]/[1022] and pit [1121], scales 1m and 0.4m*

- 7.5 To the south of the site were four pits. The features appear to be heavily truncated and as such very little material evidence was recovered, however a small assemblage of 2<sup>nd</sup> century pottery was retrieved from pit [1045], including a sherd from a samian cup, a local shell-gritted jar and Nene Valley grey ware. Approximately two metres to the west of this was pit [1104]. It contained a sherd from a samian bowl or plate and a Nene Valley grey ware sherd. A further 6.5m to the south were two intercutting pits: [1061] from which a single sherd of samian ware was recovered and [1074] containing two sherds from a shell-gritted jar and a burnt samian sherd along with a fragment of furnace slag, indicating that metalworking had taken place in the vicinity of the site.

**Phase 3: 3<sup>rd</sup> to 4<sup>th</sup> century AD (Figure 9 and Figure 10)**

- 7.6 The largest number of features dated to this phase. In the south part of the site was a semi-circular pit [1090]. The sandy clay fill contained nine sherds of pottery from flagons or jars. Almost immediately to the northwest was a northwest to southeast aligned ditch [1064]/[1082]/[1098] that contained silty clay and produced a small assemblage of animal bone and 3<sup>rd</sup> to 4<sup>th</sup> century pottery. The pottery included Nene Valley grey ware and a heavily abraded rim sherd from a colour coated beaker which had a cross fit with pottery retrieved from oblong pit [1058]/[1053], located 5m to the north, suggesting that these two features were broadly contemporary. The pit may be a fragmented and heavily truncated continuation of the southern ditch. Smaller, circular pit [1055] has also been ascribed to this phase.
- 7.7 Although pit [1080]/[1084] cut a 1<sup>st</sup> century gully, [1076], it has been ascribed to Phase 3 as it lay on the same alignment and is of similar width as ditch [1082]. On the same basis, the parallel gully or ditch [1105], located approximately 4m to the east, has also been ascribed to this phase. Soil samples from silty clay fill 1079, pit [1080], contained traces of a charred grain, and provided the only other indication of crop material surviving on site. It also showed traces of crop weed (sheep's sorrel) and ash.

- 7.8 Between pits [1084] and [1057] was a circular, 1.7m diameter pit, [1072]. The loose clayey silt contained two sherds of pottery including a colour coated sherd from a folded jar or large beaker.
- 7.9 A large cluster or group, [1190], of intercutting clay extraction pits ([1093], [1108], [1110], [1112], [1114], [1125], [1127], [1189], [1196] and [1198]), measuring approximately 9m x 4m and extending to 1m deep, cut second century ditch [1051]/[1047]/[1091] and produced residual pottery of 2<sup>nd</sup> century date as well as a cattle scapula that displayed evidence of butchery (from pit [1108]).
- 7.10 A narrow, shallow and undated east-northeast and west-southwest aligned gully, [1017], was recorded c.2m west of the extraction pits and extended beyond the limit of excavation to the west. Southeast of the gully were two oblong and highly truncated pits [1013]/[1031] and [1029]. These three features are thought to be related, although their function is unknown, and appear to have been maintained into the 4<sup>th</sup> century by slight relocation to the south.
- 7.11 An east-northeast and west-southwest aligned boundary or land division, [1008]/[1135]/[1145], was recorded further to the north, it measured c.0.60–0.95m wide and 0.18–0.45m deep and is presumed to have extended across the width of the site (Plate 3). Fill 1137, of dark silty clay within cut [1135], contained two colour coated jug or flagon sherds. This feature also contained a fragment of Roman ceramic building material (CBM). A second and potentially contemporary boundary, [1012], ran parallel with [1008] approximately 8.4m to the north. It was truncated by a modern land drain and appeared to terminate as it was not observed further to the west.



*Plate 3: East-facing section of ditch [1008], scales 1m and 0.5m*

- 7.12 During archaeological monitoring, a large pit, [1140] was encountered in the northwest corner of the site. It measured 20m across and 0.73m deep and extended beyond the limit of excavation to the west and the north. Two clay fills were recorded, 1142 and 1141, the earlier fill contained a large, shell-gritted pottery sherd from a 3<sup>rd</sup> to 4<sup>th</sup> century jar, and the later fill contained cattle and horse bone.

**Phase 4: 4<sup>th</sup> century AD (Figure 11 and Figure 12)**

- 7.13 Towards the south of the site was a 1.6m long by 1.3m wide pit [1004], which contained a 0.35m thick deposit of friable clayey silt, 1003 (Plate 4). The feature was truncated to the east by modern drainage and it is uncertain whether it continued beyond the limit of excavation. The most significant discovery during the excavation was a head pot in Parchment ware (SF2) found within the fill of this feature. The head pot was found with two other Roman pottery sherds and a copper alloy circular plate cast disc brooch (SF1). Environmental samples from the presumed pit showed the presence of wood charcoal from oak, pomoideae, birch and ash. These are most likely to represent the different types of fuel gathered from open woodland and surrounding hedgerows. There were also traces of common crop weeds such as stinking chamomile.



*Plate 4: West-facing section of pit [1004], looking east (arrow incorrect), scales 1m and 0.3m*

- 7.14 The remaining features within Phase 4 are located 27m to the northwest. An L-shaped gully [1043]/[1015]/[1027] is likely to represent a continuation of the activity represented by features [1017], [1013] and [1029] in Phase 3 and were truncated by [1043]. Dating evidence was recovered from the clay fill of this gully or ditch, comprising a mid-late 4<sup>th</sup> century *nummus* of the house of Constantine (SF3). Although undated it is likely that the east-northeast and west-southwest orientated gully, [1039], situated to the south is also associate with the same, unknown, activity. These features may represent a small enclosure with a possible entrance to the southeast.
- 7.15 Undated pit, [1066], has been tentatively ascribed to Phase 4 due to its close proximity to L-shaped gully, [1043], its irregular shape and the fact that it truncates large parts of gully [1017]. However, it is possible that this may be a much later feature.

**Undated features (Figure 13)**

- 7.16 Across the extent of the site were series of discreet pits and ditches which contained no artefactual evidence.
- 7.17 Pits [1024], [1119] and [1121], located towards the east end of the site, were undated but were truncated by Phase 1 gully [1022]. It is likely these features are early Roman, but they could be

of even earlier date. Likewise, pit [1096] was truncated by several other pits in the southeast corner of the site. The earliest of these features, pit [1061], dated to Phase 1 and this again suggests that pit [1096] is of a contemporary date or older.

- 7.18 A potential continuation of the second century ditch [1051]/[1047]/[1091] recorded during the first phase of work, may be seen in the west half of the site as undated features [1171] and [1162].
- 7.19 Two small, semi-circular pits [1086] and [1102] were truncated by 2nd and 3rd century features and so can be no later than this themselves. The function of these pits is unknown, but soil samples taken from the fill of [1102] showed traces of the crop weed stinking chamomile. Within a 2m radius there were other isolated or intercutting semi-circular pits: [1100], [1035], [1033] and [1037]. It is not unreasonable to assume that the pits in the southeast area, including [1020] and [1042], were of Roman date. Pit [1143] in the northwest of the site dates from the 3rd century or earlier as it is cut by boundary ditch [1145]. Pit [1088], in the southeast corner of the site, is no later than 3<sup>rd</sup> or 4<sup>th</sup> century as it was truncated by Phase 3 pit [1090].
- 7.20 Undated pits [1006], [1010]; [1192] and [1194] were uncovered during the first phase of works in the northeast of the site, approximately 0.75m below current ground level.
- 7.21 The monitoring and second phase of work encountered many more undated pits ([1129], [1131], [1133], [1138], [1143], [1147], [1149], [1151], [1153], [1155], [1157], [1159], [1164], [1171], [1172], [1176], [1179], [1181] and [1185]), and linear features ([1162], [1167], [1183] and [1185]). It would seem likely that these represent further evidence of Roman activities and continue to the north and the west. Previous work has shown that this landscape continues to the south (Figure 4).
- 7.22 Northwest to southeast oriented linear feature, [1187], appears to correspond to a 13<sup>th</sup>–14<sup>th</sup> century furrow, identified in the 2004 scheme of works, immediately to the south of the site (LAS 2001) (Figure 4). The same work identified a number of undated pits following a northwest to southeast alignment along the western boundary: an alignment which pit [1179] appears to follow.

### ***Modern Features***

- 7.23 The eastern half of the site was heavily truncated with 14 land drains, modern drainage and a modern pit [1174].

## **8.0 Discussion**

- 8.1 The archaeological scheme of works has demonstrated that activity took place within the site throughout the Roman period, with a concentration of activity in the 3<sup>rd</sup> and 4<sup>th</sup> centuries AD. Forty-one undated features were also recorded.
- 8.2 The earliest identified phase of activity (Phase 1) occurred during the late 1<sup>st</sup> to early 2<sup>nd</sup> century and consisted of two gullies [1076] and [1117]/[1121]/[1123] and pit [1166], all of unknown function. There were three further pits ([1121], [1119] and [1024]), truncated by gully [1117], which are likely to be of early Roman date but could be prehistoric. Pit [1096] was also an early Roman or prehistoric feature.

- 8.3 Second century AD activities (Phase 2) were similarly represented with boundary ditch [1051]/[1047]/[1091] crossing the width of the eastern half of the site and (undated) feature [1171] and [1162] further to the west. A sample taken from the fill of the boundary ditch was one of only two features on site which generated any evidence of crop material, and is an assemblage typically found in the Roman period. Pits [1104], [1045], [1061] and [1074] were observed to the south. The last of these features contained the only fragment of iron smelting slag recovered from the site. The closest known Roman metal working site is situated 350m further to the southeast (LHER 35291).
- 8.4 There were a handful of undated pits truncated by 2<sup>nd</sup> and 3<sup>rd</sup> century features and thus either contemporary or of earlier date ([1086], [1102], [1100], [1035], [1033] and [1037]). Other undated pits are also likely to be Roman.
- 8.5 Phase 3 encompassed activities identified as 3<sup>rd</sup> to 4<sup>th</sup> century in date. The largest number of features dated to this phase and they included boundaries [1012] and [1008]/[1135]/[1145] and two parallel gullies or ditches [1105] and [1082] with a possibly associated pit [1080]/[1084] to the southeast. Soil samples from the fill of pit [1080] provided the other indication of crop material surviving on site.
- 8.6 Gully [1017], with associated pits [1013] and [1029], may represent the drip gully for a wooden structure or the remains of a small enclosure and provides the only likely structural evidence in the Roman period.
- 8.7 Further pits were dug in the southeast corner of the site ([1090], [1072], [1057] and [1055]) and an area of probable clay extraction was characterised by a cluster of intercutting pits [1190]. A large pit [1140] in the northwest corner of the site was identified during monitoring and may represent a second area of extraction. Similar features were identified during excavations to the north of the site, where extensive evidence of Romano-British settlement remains, dating to the 2<sup>nd</sup> and 4<sup>th</sup> century AD was identified, as well as evidence of 3<sup>rd</sup> century clay extraction pits (McDaid 1997, Albone and Field 2000).
- 8.8 A single fragment of cattle scapula recovered from probable extraction pit [1108] displayed evidence of butchery and, although poor preservation of plant remains may have been a factor, together the environmental and animal bone assemblages do not offer any support for the area having been extensively farmed and provide little evidence of core settlement activities.
- 8.9 The pottery present was dominated by Nene Valley grey wares with a small quantity of the local shell-gritted wares produced at the Grammar School kiln. The absence of sandy grey wares, common on other Roman sites in Bourne (e.g. South Fields 1997) is likely to be the result of the few identified late 3<sup>rd</sup>–4<sup>th</sup> century features. The scattered distribution of domestic pottery again suggests that the site was outside of the settlement main focus with no concentrations of disposal identified.
- 8.10 It is believed that that Bourne pottery industry reached its peak during the later 2<sup>nd</sup> and 3<sup>rd</sup> centuries and, although no evidence of pottery kilns was identified during this phase of works, evidence of ancillary activity in the form of a large 3<sup>rd</sup> century clay extraction pit [1190] (and potentially also pit [1140] and the many smaller, scattered pits) appears to support this interpretation. The area saw an increase in activity during this period, followed by a decline in the 4<sup>th</sup> century and this is mirrored in the distribution of features on this site.
- 8.11 The last phase of Roman activity is ascribed to the 4<sup>th</sup> century AD (Phase 4). The remains of a possible structure or enclosure, identified in Phase 3, appears to have been maintained and is

represented by L-shaped gully [1043] and [1039]. Pit [1066] is also thought to be of similar date. Towards the south end of the site were the remains of a feature, probably a pit, [1004], which contained a 4<sup>th</sup> century head pot.

- 8.12 Head pots have their origins in the eastern Mediterranean, and probably arrived in Britain in the early 3<sup>rd</sup> century, most likely with incoming military units (Swan and Monaghan 1993). However, the British tradition of head pots bear very little resemblance to their North African counterparts, and they form an unusual feature of Romano-British pottery, not seen in the adjacent Roman provinces across the channel (Braithwaite 2007). It is likely that this type of vessel was made to order by individual potters rather than being mass-produced (Darling 2014). They can be split into two main types: the northern style, which are largely manufactured from oxidised coarse wares and have a broadly military connection; and the southern tradition, which was broadly centred on the Nene Valley using painted Parchment ware and of which the Bourne pot is an example. Nene Valley head pots have largely been accepted to be ritual vessels, with other ritual or 'cult' vessels such as these have been found at other roadside settlements in Lincolnshire such as Navenby and at Lincoln (Darling 2011; 2014; Darling and Precious 2014). However, unlike comparable examples from Water Newton; Lincoln; Cambridgeshire; Colchester (Braithwaite 1984, fig 12: 1–3, 6), and York (*ibid.* fig 11: 4), which are male, the Bourne head pot appears to represent a female. She is formed of dark- and mid-brown painted Parchment ware and the treatment of her 'hair' is particularly unusual, comprising a prominent applied frilled strip which extends down from the forehead to below the chin. This is comparable to a group of face-neck flagons, also from Lincolnshire, which were produced in the Swanpool kilns, and have a finger-impressed strip to denote hair (Darling 2011, 95, fig 4.11: 2).
- 8.13 Some head pots have been used as cremation urns whilst others are thought to have been used as votive offerings (particularly those found in near complete condition). There are examples found in temples but many have come from shrines associated with houses or workshops, and a particular association with smithing has been suggested (Darling 2015). No structures were positively identified on site, however the condition of the head pot would suggest it was found where it had been originally deposited. This may suggest that the site lies on the fringes of a settlement or an industrial area in a location considered to need an extra blessing from a god. The head pot may have formed part of a structured deposition, comprising the 'ritual' vessel, a 2<sup>nd</sup> century copper alloy brooch (SF1), and fragments of horse bone.
- 8.14 The interpretation of the Roman activity on the site supports the conclusions of previous investigations (APS 1995, APS 2003, LAS 2001 and LAS 2004) (Figure 4). This work identified a series of Roman pits and gullies, with iron ore inclusions in two fills being interpreted as evidence of nearby industrial activity (APS 1995). In 2000 and 2004 excavations identified intersecting boundary ditches defining enclosures, one of which contained a number of both Roman and undated pits (LAS 2004). A large east-west orientated ditch seen in 2004 appears to be a continuation of features noted in 1995 (Figure 4). Further north-south and east-west aligned drainage ditches, extending to the south of the current site were identified in 2001 together with an isolated Roman burial and a large modern pit (LAS 2001).
- 8.15 There was limited evidence of medieval activity on the site. A 13<sup>th</sup>–14<sup>th</sup> century furrow recorded during the 2004 excavations to the south (LAS 2004), appears to be aligned with an undated linear feature [1187] recorded during archaeological monitoring.
- 8.16 Much of the eastern half of the site was truncated by modern drainage features and pit [1174].

## 9.0 Conclusions

- 9.1 The archaeological scheme of works was undertaken to assess the potential for archaeological remains on the site and to understand the impact of the development on any underlying archaeological remains. It has identified evidence of Romano-British activity of local significance, broadly consistent with the findings of previous excavations across the site.
- 9.2 The stratigraphic and material evidence recovered allows for a relatively clear narrative to be constructed. Although there is some evidence of late 1<sup>st</sup> to 2<sup>nd</sup> century AD activity (Phase 1), it was not until 3<sup>rd</sup> and 4<sup>th</sup> century that the site began to develop (Phase 3), with the establishment of a series of boundary ditches and clay extraction, before its eventual decline in the latter part of the 4<sup>th</sup> century AD (Phase 4).
- 9.3 This interpretation largely supports the conclusions of previous work on the site which suggests that during the Romano-British period Bourne was a small but important settlement, with multiple phases of activity and land division. The site was most likely located on the periphery of the Roman town, with indications that the area was dedicated to industry.
- 9.4 In the medieval period the site appears to have been farmland, with little further evidence of activity until the modern development of Bourne took place.

## 10.0 Effectiveness of Methodology

- 10.1 The methodology employed during the scheme of works was appropriate to the nature and extent of the proposed development. It has revealed a site of local significance, identifying further remains for the multi-phase Romano-British settlement located to the southwest of the present day town. These events have been preserved by record.

## 11.0 Acknowledgements

- 11.1 Allen Archaeology Limited would like to thank Grayling Thomas Architects Ltd for this commission, and the ground workers provided by Stepnell Ltd. and Bourne Grammar school for their cooperation during the scheme of works.

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## Appendix 1: Roman Pottery

By I M Rowlandson with H G Fiske and G Monteil

### Introduction

Eighty nine sherds (2.386kg, 1.9 RE) were presented for study. The majority of the vessels present dated to the 2<sup>nd</sup> to 3<sup>rd</sup> century AD. The pottery present was dominated by Nene Valley grey wares and a small quantity of the local shell-gritted wares produced at the Grammar School kiln (Precious n.d., Samuels 1983).

A single sherd from a South Gaulish samian form 27 cup and a small quantity of native tradition wares suggested some activity in the late 1<sup>st</sup> to early 2<sup>nd</sup> century AD.

The most notable vessel was a unique head pot, probably of 4<sup>th</sup> century AD date. Ritual or 'cult' vessels such as these have been found at other roadside settlements in Lincolnshire such as Navenby and at Lincoln (Darling 2011a 2014, Darling in Rowlandson 2015, Darling and Precious 2014). Bourne has generally considered to be a Roman roadside settlement and the presence of this specialist vessel would fit the pattern seen at other such sites in the county where ritual and mercantile activity probably went hand in hand.

### Methodology

An archive has been produced to comply with the requirements of the Study Group for Roman Pottery (Darling 2004) using the codes and system developed by the City of Lincoln Archaeological Unit (Darling and Precious 2014). The pottery has been bagged to conform with the requirements of the *Lincolnshire Handbook*. Rim equivalents have quantified following (Pollard 1990). A tabulated summary by context and a sherd archive are presented below (Table 1 and Table 5). The dates provided represent the pottery recorded here; the main text of the report and other specialist contributions should be consulted to ascertain the overall date attributed to each context.

| Context | Spot date | Comments   | Sherd | Weight (g) | Total RE % |
|---------|-----------|--|-------|------------|------------|
| 1003    | 4C        | A large proportion of a painted Parchment ware head pot (discussed below). Also present were sherds from a Mancetter/Hartshill type mortarium with fired clay trituration grits, a white ware sherd or heavily abraded colour coated sherd and a small piece of oolitic limestone. | 13    | 519        | 34         |
| 1021    | 2C        | A small rim fragment from a Bourne shell-gritted bowl with a grooved rim.  | 1     | 5          | 4          |
| 1046    | AD120-200 | A small group including a sherd from a samian cup, a local shell-gritted jar and Nene Valley grey ware.  | 4     | 116        | 6          |
| 1048    | AD120-200 | A small group including a tiny samian sherd and a Nene Valley grey ware bowl with a lipped rim (Howe et al. 1980, Fig. 2.18).  | 4     | 71         | 7          |
| 1051    | AD45-110  | A single sherd from a samian form 27 cup.  | 1     | 4          | 0          |
| 1057    | Roman     | A single oxidised sherd possibly from a folded beaker.   | 1     | 4          | 0          |
| 1062    | AD120-200 | A single sherd from a samian form 33 cup.  | 1     | 16         | 10         |
| 1065    | M2-3      | A single very abraded Nene Valley grey ware sherd.   | 1     | 13         | 0          |
| 1071    | 3-4C      | A small group including a grog-gritted sherd and a colour coated sherd from a folded jar or large beaker.  | 2     | 72         | 0          |
| 1073    | AD120-200 | A small group including sherds from a large shell-gritted jar and a burnt samian sherd.  | 3     | 127        | 8          |

| Context | Spot date | Comments  | Sherd | Weight (g) | Total RE % |
|---------|-----------|---|-------|------------|------------|
| 1075    | L1-2      | A single shell and grog-gritted native tradition ware sherd.  | 1     | 46         | 0          |
| 1079    | 3C        | A small group including Nene Valley grey ware and local shell-gritted sherds. Sherds from a colour coated trefoil rimmed flagon (as Howe et al. 1980, Fig. 2.14 with single neck cordon) date the group.  | 12    | 174        | 60         |
| 1081    | 3C+       | A small group including Nene Valley grey ware and a heavily abraded rim sherd from a colour coated beaker with a short funnel neck (rim as Perrin 1999, Fig. 61.170).   | 3     | 27         | 8          |
| 1089    | 3-4C      | A colour coated basal sherd from a flagon or jar, a local shell-gritted jar and a Nene Valley grey ware necked jar.   | 9     | 163        | 20         |
| 1103    | AD140-200 | A small group including a sherd from a samian bowl or dish with omphalos base and a Nene Valley grey ware sherd.  | 2     | 47         | 0          |
| 1109    | M2-3      | A small fresh group including a shell-gritted sherd or tile fragment and fresh fragments from a Nene Valley folded beaker, a jar and a necked jar with cordon decoration (Perrin 1999, Fig. 57.38). A heavily abraded fragment from a <i>tegula</i> type tile was also present. | 11    | 528        | 20         |
| 1111    | AD140-200 | A small group including Nene Valley grey ware and a sherd from a samian bowl.   | 3     | 43         | 5          |
| 1113    | AD140-200 | A small group including a Nene Valley grey ware necked jar with cordon decoration (Perrin 1999, Fig. 57.38) and a sherd from the same samian bowl in context 1111.  | 12    | 235        | 8          |
| 1137    | 3-4C      | Sherds from a large colour coated jar or flagon.  | 2     | 68         | 0          |
| 1142    | Roman     | A single shell-gritted sherd containing punctate shell.   | 1     | 86         | 0          |
| 1165    | L1-2      | Native tradition shell-gritted ware sherds.   | 2     | 22         | 0          |

Table 1: Dating Summary

| Fabric code | Fabric group | Fabric details   | Sherd | Sherd % | Weight (g) | Weight % | Total RE % |
|-------------|--------------|--|-------|---------|------------|----------|------------|
| SAMCG       | Samian       | Central Gaulish  | 7     | 7.87    | 69         | 2.89     | 23         |
| SAMLG       | Samian       | La Graufesenque samian ware  | 1     | 1.12    | 4          | 0.17     | 0          |
| MOMH2       | Mortaria     | Mancetter-Hartshill mortaria: Meta sediment trituration; Leicester fabric MO4 (Pollard 1994) | 1     | 1.12    | 23         | 0.96     | 0          |
| CC1         | Fine         | Colour coated fabric 1   | 13    | 14.61   | 215        | 9.01     | 68         |
| CR?         | Oxidised     | Roman cream wares  | 3     | 3.37    | 29         | 1.22     | 0          |
| OX          | Oxidised     | Misc. oxidized wares   | 1     | 1.12    | 4          | 0.17     | 0          |
| PARC        | Oxidised     | Parchment; cream painted; unknown source/s   | 11    | 12.36   | 483        | 20.24    | 34         |
| GREY        | Reduced      | Miscellaneous grey wares   | 2     | 2.25    | 18         | 0.75     | 0          |
| IAGR        | Reduced      | Native tradition/transitional grit-tempered wares  | 7     | 7.87    | 328        | 13.75    | 8          |
| NVGW        | Reduced      | Nene Valley grey ware  | 32    | 35.96   | 942        | 39.48    | 29         |
| NVGW?       | Reduced      | Nene Valley grey ware  | 1     | 1.12    | 6          | 0.25     | 0          |
| IASH        | Calcareous   | Native tradition shell-tempered  | 2     | 2.25    | 22         | 0.92     | 0          |
| IASH?       | Calcareous   | Native tradition shell-tempered  | 1     | 1.12    | 23         | 0.96     | 0          |
| SHELP       | Calcareous   | Shell gritted including Punctate Brachiopods   | 2     | 2.25    | 121        | 5.07     | 0          |
| SLSHB       | Calcareous   | Bourne shell gritted   | 4     | 4.49    | 93         | 3.90     | 28         |

| Fabric code | Fabric group | Fabric details   | Sherd | Sherd % | Weight (g) | Weight % | Total RE % |
|-------------|--------------|------------------|-------|---------|------------|----------|------------|
| VESIC       | Shell?       | Vesicular fabric | 1     | 1.12    | 6          | 0.25     | 0          |

Table 2: Fabric Summary

| Form  | Form Type  | Form Description                             | Sherd | Sherd % | Weight (g) | Weight % | Total RE % |
|-------|------------|--|-------|---------|------------|----------|------------|
| BKFN  | Beaker     | Funnel necked; form unknown                  | 1     | 1.12%   | 3          | 0.13%    | 8          |
| BKFO  | Beaker     | Folded; indeterminate type                   | 1     | 1.12%   | 4          | 0.17%    | 0          |
| B     | Bowl       | Unclassified form                            | 1     | 1.12%   | 5          | 0.21%    | 4          |
| BFL   | Bowl       | Flange rimmed (eg Gillam 1970 Types 218-220) | 1     | 1.12%   | 61         | 2.56%    | 7          |
| BD    | Bowl/dish  | -  | 2     | 2.25%   | 49         | 2.05%    | 0          |
| CLSD  | Closed     | Form   | 10    | 11.24%  | 481        | 20.16%   | 0          |
| 27    | Cup        | Samian form- see Webster 1996                | 1     | 1.12%   | 4          | 0.17%    | 0          |
| 33    | Cup        | Samian form- see Webster 1996                | 3     | 3.37%   | 30         | 1.26%    | 10         |
| 31    | Dish       | Samian form- see Webster 1996                | 3     | 3.37%   | 38         | 1.59%    | 13         |
| FJ    | Flagon/jar | Unclassified form                            | 3     | 3.37%   | 81         | 3.39%    | 0          |
| JUG   | Flagon/jug | Pinched neck                                 | 8     | 8.99%   | 75         | 3.14%    | 60         |
| JBN3  | Jar        | Bourne type jar no. 3; Bolton 1968 Fig. 1.1  | 3     | 3.37%   | 88         | 3.69%    | 24         |
| JL    | Jar        | Large  | 5     | 5.62%   | 247        | 10.35%   | 0          |
| JNK   | Jar        | Necked                                       | 14    | 15.73%  | 302        | 12.66%   | 22         |
| JS    | Jar        | Storage                                      | 1     | 1.12%   | 84         | 3.52%    | 8          |
| JS?   | Jar        | Storage                                      | 1     | 1.12%   | 35         | 1.47%    | 0          |
| JBKFO | Jar/Beaker | Folded; indeterminate type                   | 2     | 2.25%   | 59         | 2.47%    | 0          |
| JBL   | Jar/Bowl   | Large  | 2     | 2.25%   | 85         | 3.56%    | 0          |
| HEAD  | Misc       | Head pot                                     | 11    | 12.36%  | 483        | 20.24%   | 34         |
| M     | Mortaria   | Unclassified Form                            | 1     | 1.12%   | 23         | 0.96%    | 0          |
| -     | Unknown    | Form uncertain                               | 15    | 16.85%  | 149        | 6.24%    | 0          |

Table 3: Form Summary

## The Samian

By G. Monteil

Eight sherds of samian ware were recovered from excavations at Bourne and submitted for this report. The fabric of each sherd was examined, after taking a small fresh break, under a x 20 binocular microscope and was catalogued by context number. Each archive catalogue entry consists of a context number alongside fabric, form and decoration identification, sherd count, rim or base EVE (Estimated Vessel Equivalent) when appropriate and weight.

### Condition and taphonomy

The assemblage is very small with eight sherds for a total weight of 73g and a total rim EVES figure of 0.23 (Table 4). The average weight is c.9g a relatively low figure. No evidence of repair, graffiti or wear was noticed during recording.

### Assemblage composition and chronology

There is a single fragment that points to occupation in the 1<sup>st</sup> c. AD, a South Gaulish cup form Dr.27 recovered from context (1051). The rest of the assemblage is from Lezoux in Central Gaul and 2<sup>nd</sup> c. AD in date although there is very little that is diagnostic. The emphasis on the 2<sup>nd</sup> c. AD fits with previous samian assemblages recovered from Bourne (Darling 1997, 2005, 2008, 2011b).

The range of forms is very poor and consists entirely of plain types, namely dishes and cups. Bowls, whether decorated or plain are entirely absent from this small assemblage. Previous samian assemblages recovered from Bourne, even small ones included bowls whether plain or decorated (Darling 1997, 2005, 2008, 2011b). The limited range of types and the clear emphasis on plain forms makes this group more typical of a basic rural site (Willis 2005, chart 17) than a road-side settlement though it is small and perhaps not entirely typical.

|       | La Graufesenque |            | Lezoux |            |      | Total  |            |      |
|-------|-----------------|------------|--------|------------|------|--------|------------|------|
|       | Sherds          | Weight (g) | Sherds | Weight (g) | RE % | Sherds | Weight (g) | RE % |
| DR27  | 1               | 4          |        |            |      | 1      | 4          |      |
| DR31  |                 |            | 3      | 38         | 0.13 | 3      | 38         | 0.13 |
| DR33  |                 |            | 3      | 30         | 0.1  | 3      | 30         | 0.1  |
| unid  |                 |            | 1      | 1          |      | 1      | 1          |      |
| Total | 1               | 4          | 7      | 69         | 0.23 | 8      | 73         | 0.23 |

Table 4: Samian fabrics and forms represented in the group

### **The Head Pot**

By H. G. Fiske



Plate 5: The Head Pot

Height: 178 mm

Weight: 0.483 kg

Rim diameter: 10 cm

Percentage of rim (RE): 34%

### **Form**

Close parallels with this vessel are not easy to find and it is likely that this type of vessel was made to order by individual potters rather than being mass-produced (Darling 2014). It does have some stylistic similarities to a well-known example from Lincoln inscribed 'DOMIIRCURIIO' and now in the British Museum; that vessel is heavily restored but comparison can be made with the pre-restoration

photograph (Plate 7). Another from Colchester has similar vertically compressed facial features but the remainder of the vessel is much more plain (Braithwaite 2007, Pl. S13).

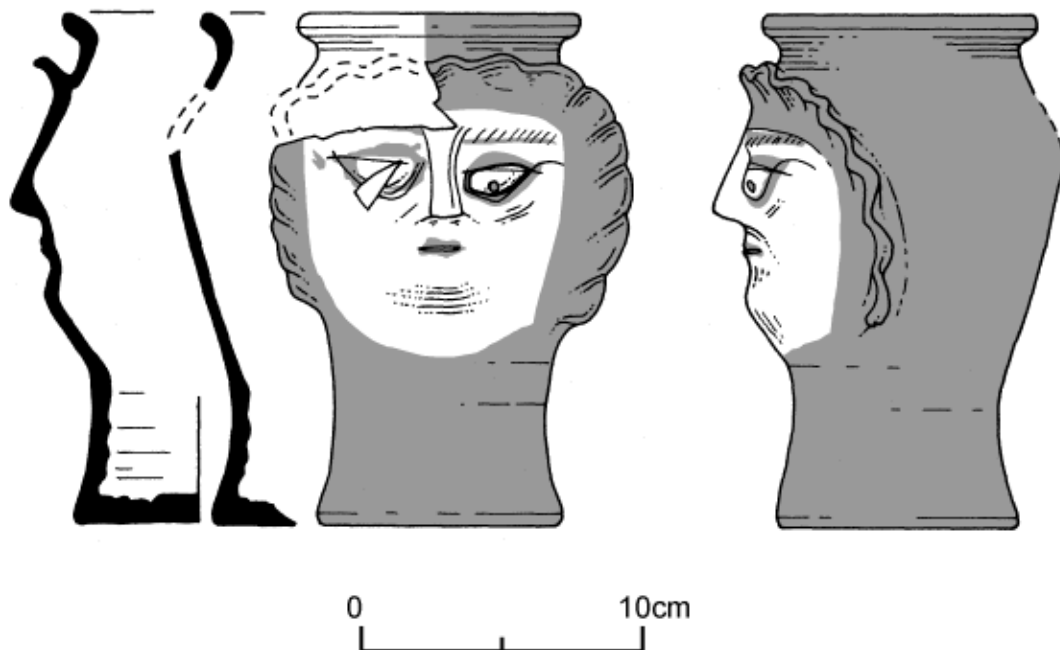
The treatment of the 'hair' is particularly unusual in this example; a prominent applied frilled strip extends down from the forehead to below the chin, and projects outwards from the vessel instead of being laid flat across the surface as more commonly seen, e.g. from Lincoln (Darling & Precious 2014 No. 1406), *Margidunum* (Braithwaite 2007 Fig. S4.7), and Sleaford (Elsdon 1997 Fig. 72.323). The nose is relatively naturalistic and appears to be pinched out rather than applied. Ears are not represented.

The eyes are similar to the British Museum example in that the outlines are incised, emphasised with painted lines and have an impressed and painted circular pupil. The eyebrows are also represented by scored lines and paint but not the eyelashes. The mouth is a narrow single scored horizontal line with paint representing the lips.

Unlike two other head pots from Lincoln already mentioned which are both dedicated to Mercury either by inscription or the depiction of associated iconography (his caduceus, or staff) and therefore likely to have been made for ritual use, this example does not appear to be dedicated to any particular deity. As such it is more difficult to suggest its original purpose; it may be that the more prominent than normal representation of hair denotes a female but more study and comparisons with contemporary images may be needed to clarify this further.

#### **Fabric**

The vessel is formed of dark- and mid-brown painted Parchment ware. Under x 20 magnification it is very similar to sherds seen from Lincoln (Fiske and Rowlandson forthcoming). As such it represents the southern tradition of head pot manufacture which was broadly centred on the Nene Valley industry and utilised painted Parchment ware as here, rather than the northern tradition which was centred on Yorkshire and beyond and mostly used oxidised coarse wares. Other head pot vessels in similar fabric to this one from the local area include partial examples from Water Newton, Cambridgeshire, Lincoln Flaxengate and Denver in Norfolk.



*Plate 6: The Head pot (by C Bentley)*



*Plate 7: The 'DOMIIRCURIO' vessel from Lincoln, before restoration. ©Trustees of the British Museum*



*Plate 8: Close up of the head pot*

### ***The Other Roman pottery***

*by I M Rowlandson*

No amphorae were retrieved from this small investigation although this is not unusual amongst small assemblages. Amphorae have been recorded from a number of other larger excavations at Bourne (e.g. Darling 1997, 2005, 2011b, 1997) and it is likely that amphorae borne goods such as wine and olive oil would have been available from shops or taverns within the settlement (Score 2010, Rowlandson 2015).

A single mortarium sherd from the prolific Mancetter/Hartshill production site in Warwickshire was recorded from context 1003. A number of vessels from this production site have been recorded from Bourne within contexts dated to the 2<sup>nd</sup> and 3<sup>rd</sup> century AD



With the exception of the head pot which had a parchment/ colour-coated fabric the other colour-coated pottery from the site included a large proportion of a trefoil necked flagon from context 1079, a folded beaker from context 1071 and a beaker with a short funnel neck from context 1081 (rim as Perrin 1999, Fig. 61.170). The range was typical of the 3<sup>rd</sup> century AD and none of the CC1 material would need to be dated to the 4<sup>th</sup> century AD. Similar vessels have been found amongst groups from southern Lincolnshire (Darling 2009) and it is likely that the Nene Valley production centres supplied much of the table ware to Bourne from the 3<sup>rd</sup> century AD onwards.

Nene Valley grey ware (NVGW) was the most common fabric on the site. Produced in the Nene Valley in the early mid 2<sup>nd</sup> century until sometime in the 3<sup>rd</sup> AD, this ware was most common in the assemblage with forms including: necked jars with cordon decoration (e.g. Perrin 1999, Fig. 57.38), a lipped bowl (Howe et al. 1980, Fig. 2.18) and a folded jar or beaker. Previous investigations at Bourne have shown that NVGW, along with local shell-gritted wares, were the most common pottery found in mid Roman groups dating to the early mid 2<sup>nd</sup> to mid 3<sup>rd</sup> century AD.

The relative absence of sandy grey wares is of interest (GREY) as excavations at the South Fields site in 1997 and at Willoughby School produced a considerably higher proportion of grey ware (Darling 1997, 2011b, GREY 27% and 17.89% respectively by sherd count) and a number of the vessels showed firing faults with the possibility that there was some grey ware production in the vicinity. It was noticeable amongst the BSS97 assemblage that the GREY forms were predominantly of 3<sup>rd</sup> or 4<sup>th</sup> century AD date with a good range of late Roman colour-coated wares and a proportion of late Roman shell-gritted vessels with punctate brachiopod shell-gritted fabrics. The relative absence of GREY types from the BOGS16 assemblage was probably due to few of the contexts dating to after the middle of the 3<sup>rd</sup> century AD, the period when the majority of this type was in use at Bourne.

Small quantities of native tradition shell-gritted (IASH) and shell and mixed 'gritty wares' (IAGR) were recorded. The majority of these sherds were from large jars and may indicate some early Roman activity on the site. Similar wares of 1<sup>st</sup> century AD date have been noted from the Mill Drove site (Darling and Knight 1995) and Baston (Darling 2009) and on this site are likely to date to the late 1<sup>st</sup> to early 2<sup>nd</sup> century AD.

Very few sherds of the local 2<sup>nd</sup> to 3<sup>rd</sup> century AD shell-gritted wares produced at the Grammar School site (Precious n.d. and Samuels 1983) were present although this may be due to the sample size. The forms present included the typical necked jar from context 1046 and two examples from context 1089 (JBN3, as Bolton 1968, Fig. 1.1) and a typical small bowl with a grooved lip (Samuels 1983, Fig. 214. 61-2). A 2<sup>nd</sup> to earlier 3<sup>rd</sup> century AD date for these sherds would be most likely given the comparative evidence from well stratified sites in the Nene Valley and elsewhere (e.g. Perrin 1999, Fig. 70. 435 and Fig. 73. 489, cf. Darling and Precious 2014, 96-8).

Shell-gritted vessels with punctate brachiopod type shells (SHELP) were recorded from context 1109 and 1142 both from large jars with red surfaces. These shell-gritted wares have been found in southern Lincolnshire, the Nene Valley and other parts of the South Midlands they have been noted amongst the later material from the Willoughby School and the Land off South Fields site (Darling 2011b and 1997) and from excavations at Baston (Darling 2009). Although pottery with this type of shell was produced in the earlier Roman period at sites such as Harrold, Bedfordshire the main *floruit* of these wares in Lincolnshire appears to have been the later 3<sup>rd</sup> to 4<sup>th</sup> century (Brown 1994, Darling and Precious 2014, 98). During this period it is likely that South Midlands type shell gritted pottery gained wider distribution as the Bourne industry declined. The small quantity of SHELP fabric from this site was probably of late Roman date in this part of Lincolnshire.

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| Context | Fabric | Form  | Decor.       | Vessels | Alt   | Drawing | Comments   | Sherd | Weight (g) | Rim diam | Rim eve |
|---------|--------|-------|--------------|---------|-------|---------|--|-------|------------|----------|---------|
| 1003    | CR?    | FJ    | CORD         | 1       | ABR   |         | BS NECK?   | 1     | 13         | 0        | 0       |
| 1003    | MOMH2  | M     |              | 1       | ABR   |         | BS   | 1     | 23         | 0        | 0       |
| 1003    | PARC   | HEAD  | FRILL;<br>PA | 1       |       | D1; P1  | RIM BODY BASE; ?LINCOLN FABRIC; SEE REPORT                   | 11    | 483        | 10       | 34      |
| 1021    | SLSHB  | B     |              | 1       |       |         | RIM; SMALL BOURNE TYPE BOWL WITH SLIGHTLY GROOVED RIM        | 1     | 5          | 20       | 4       |
| 1046    | SLSHB  | JBN3  |              | 1       | VAB   |         | RIM  | 1     | 59         | 26       | 6       |
| 1046    | IASH?  | JL    |              | 1       |       |         | BS; ?EARLY ROMAN SHELL-GRITTED TRANSITIONAL WARE             | 1     | 23         | 0        | 0       |
| 1046    | SAMCG  | 33    |              | 1       |       |         | BS; AD120-200  | 1     | 10         | 0        | 0       |
| 1046    | NVGW   | -     |              | 1       | VAB   |         | BASE   | 1     | 24         | 0        | 0       |
| 1048    | SAMCG  | -     |              | 1       |       |         | BS; AD120-200  | 1     | 1          | 0        | 0       |
| 1048    | CR?    | CLSD  |              | 1       | VAB   |         | BS; WHITE WARE OR COLOUR COAT?                               | 1     | 3          | 0        | 0       |
| 1048    | NVGW   | -     |              | 1       | VAB   |         | BS   | 1     | 6          | 0        | 0       |
| 1048    | NVGW   | BFL   |              | 1       |       |         | RIM  | 1     | 61         | 26       | 7       |
| 1051    | SAMLG  | 27    |              | 1       |       |         | BS; AD45-110   | 1     | 4          | 0        | 0       |
| 1057    | OX     | BKFO  |              | 1       | VAB   |         | BS   | 1     | 4          | 0        | 0       |
| 1062    | SAMCG  | 33    |              | 1       |       |         | RIM; AD120-200   | 1     | 16         | 12       | 10      |
| 1065    | NVGW   | BD    |              | 1       | VAB   |         | BASE   | 1     | 13         | 0        | 0       |
| 1071    | IAGR   | JL    |              | 1       | ABR   |         | BS; TRANSITIONAL SOME ?SHELL VOIDS                           | 1     | 53         | 0        | 0       |
| 1071    | CC1    | JBKFO |              | 1       | ABR   |         | BS   | 1     | 19         | 0        | 0       |
| 1073    | IAGR   | JL    |              | 1       |       |         | BS   | 1     | 39         | 0        | 0       |
| 1073    | SAMCG  | 33    |              | 1       | BURNT |         | BS FLAKE; AD120-200  | 1     | 4          | 0        | 0       |
| 1073    | IAGR   | JS    |              | 1       | ABR   |         | RIM; TRANSITIONAL SOME ?SHELL VOIDS; ?SAME VESSEL AS IN 1071 | 1     | 84         | 26       | 8       |
| 1075    | IAGR   | JL    |              | 1       | VAB   |         | BS   | 1     | 46         | 0        | 0       |
| 1079    | CC1    | JUG   | CORD         | 1       | VAB   |         | RIM; ESTIMATED RIM EQUIVALENT OF TREFOIL RIM                 | 8     | 75         | 0        | 60      |
| 1079    | IAGR   | CLSD  |              | 1       |       |         | BASE; SOME SHELL VOIDS                                       | 1     | 50         | 0        | 0       |
| 1079    | NVGW   | BD    |              | 1       | VAB   |         | BASE   | 1     | 36         | 0        | 0       |
| 1079    | NVGW   | -     |              | 1       | VAB   |         | BS   | 1     | 6          | 0        | 0       |
| 1079    | IAGR   | -     |              | 1       | VAB   |         | BS; SOME SHELL VOIDS   | 1     | 7          | 0        | 0       |
| 1081    | CR?    | -     |              | 1       | VAB   |         | BS; ?LIGHT FIRED FLAGON                                      | 1     | 13         | 0        | 0       |
| 1081    | CC1    | BKFN  |              | 1       | VAB   |         | RIM; SHORT FUNNEL  | 1     | 3          | 10       | 8       |

| Context | Fabric | Form  | Decor. | Vessels | Alt        | Drawing | Comments  | Sherd | Weight (g) | Rim diam | Rim eve |
|---------|--------|-------|--------|---------|------------|---------|---|-------|------------|----------|---------|
| 1081    | NVGW   | -     |        | 1       | ABR        |         | BS  | 1     | 11         | 0        | 0       |
| 1089    | IAGR   | JBL   |        | 1       | VAB        |         | BS; SOME SHELL  | 1     | 49         | 0        | 0       |
| 1089    | VESIC  | -     | HM     | 1       | ABR        |         | BS; OX; 9MM THICK; PREHISTORIC OR ROMAN                   | 1     | 6          | 0        | 0       |
| 1089    | SLSHB  | JBN3  |        | 1       |            |         | RIM   | 1     | 9          | 18       | 6       |
| 1089    | GREY   | -     |        | 2       | ABR        |         | BS; SANDY   | 2     | 18         | 0        | 0       |
| 1089    | NVGW   | JNK   |        | 1       | ABR        |         | RIM SCRAP   | 1     | 5          | 0        | 2       |
| 1089    | NVGW?  | -     |        | 1       | VAB        |         | BS; ?FABRIC ID  | 1     | 6          | 0        | 0       |
| 1089    | CC1    | CLSD  |        | 1       | ABR        |         | BASE FTG  | 1     | 50         | 0        | 0       |
| 1089    | SLSHB  | JBN3  |        | 1       |            |         | RIM   | 1     | 20         | 16       | 12      |
| 1103    | SAMCG  | 31    |        | 1       | EXCORIATED |         | BASE; AD140-200; GM WRITES "the int surface has abr away" | 1     | 11         | 0        | 0       |
| 1103    | NVGW   | JBL   |        | 1       | ABR        |         | BS  | 1     | 36         | 0        | 0       |
| 1109    | NVGW   | JBKFO |        | 1       |            |         | BS  | 1     | 40         | 0        | 0       |
| 1109    | SHELP  | JS?   |        | 1       | ABR        |         | BASE?; VESSEL?  | 1     | 35         | 0        | 0       |
| 1109    | NVGW   | JNK   | CORD   | 1       | ABR        |         | RIM   | 2     | 75         | 20       | 20      |
| 1109    | NVGW   | CLSD  |        | 1       | ABR        |         | BASE  | 4     | 197        | 0        | 0       |
| 1109    | NVGW   | CLSD  |        | 1       |            |         | BASE  | 2     | 93         | 0        | 0       |
| 1109    | NVGW   | CLSD  |        | 1       | ABR        |         | BS  | 1     | 88         | 0        | 0       |
| 1111    | SAMCG  | 31    |        | 1       |            |         | RIM; AD140-200  | 1     | 14         | 20       | 5       |
| 1111    | NVGW   | -     |        | 2       | ABR        |         | BS  | 2     | 29         | 0        | 0       |
| 1113    | NVGW   | JNK   | CORD   | 1       | ABR        |         | BASE SHLDR  | 11    | 222        | 0        | 0       |
| 1113    | SAMCG  | 31    |        | 1       |            |         | RIM; AD140-200  | 1     | 13         | 19       | 8       |
| 1137    | CC1    | FJ    |        | 1       | ABR        |         | BS  | 2     | 68         | 0        | 0       |
| 1142    | SHELP  | JL    |        | 1       | ABR        |         | BS; RED FABRIC WITH PUNCTATE SHELL; ?LATE roman           | 1     | 86         | 0        | 0       |
| 1165    | IASH   | -     |        | 1       | VAB        |         | BS; ?SLSHB  | 1     | 14         | 0        | 0       |
| 1165    | IASH   | -     |        | 1       | VAB        |         | BS  | 1     | 8          | 0        | 0       |

Table 5: Roman pottery archive

## **Appendix 2: Ceramic Building Material**

*By I. M. Rowlandson*

Two fragments of tile were presented for study; one fragment from a tegula (context 1109) and another of an unknown form (context 1007) both with a mid orange fabric were presented for study and are recorded below in Table 6. An unworked sandstone fragment from context 1071 was also noted.

### **Significance of the data**

This small assemblage is similar to other small groups from close by (Davies 1995, Precious 2001b, 2002, 2004, Rowlandson 2013) and the Wherry's Lane site (Darling 2008) with a range of mostly 2<sup>nd</sup> century AD pottery. It is another significant small assemblage to add to our understanding of the Roman settlement at Bourne.

Although locally produced shell-gritted pottery was retrieved there was no further evidence of pottery production (Precious n.d., Samuels 1983) from this site.

The face pot was of a significantly later date than the majority of the pottery, probably 4<sup>th</sup> century AD, but other finds from the site suggested activity continued until the 4<sup>th</sup> century AD. The face pot is unique and of national significance and contributes to a growing corpus of similar vessels that were often produced to represent deities or members of the imperial family.

### **Recommendations**

The pottery from this excavation should be deposited in the relevant local museum. At the time of writing all of the pottery was in a stable condition.

The head pot would be worthy of specialist reconstruction for display. As the vessel is largely complete, restoration by gluing the existing sherds together might be the best solution as the form of the vessel can be understood with the extant sherds without extensive re-moulding. It is recommended that a single insignificant sherd from the back of the head should be retained detached from the vessel to facilitate any future scientific analysis of the fabric without jeopardising the integrity of the reconstructed vessel.

The head pot should be published as it is a unique vessel of a type not common in Roman Britain (Braithwaite 2007).

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| Context | Cname  | Count | Weight | Comments/Date  |
|---------|--------|-------|--------|--|
| 1007    | RTMISC | 1     | 6      | MID ORANGE GREY CORE; ?CBM; ABUNDANT QUARTZ TO 0.5MM; FRAGMENT                                 |
| 1071    | STONE  | 1     | 124    | UNWORKED ABRADED SANDSTONE FRAGMENT; ?BURNT  |
| 1109    | TEG    | 1     | 19     | MID ORANGE; COMMON QUARTZ 0.5MM; ABRADED; JUNCTION BETWEEN FLANGE AND UPPER BETTS TYPE UNCLEAR |

*Table 6: Ceramic building material and unworked stone*

## Appendix 3: Other Finds

By Mike Wood

### Introduction

A small, mixed assemblage of metalwork, coins and fuel waste was recovered during excavation on land at Bourne Grammar School, South Road, Bourne, Lincolnshire.

### Methodology

The material was counted and weighed in grams, then examined visually to identify any diagnostic pieces and the overall condition of the assemblage. A full catalogue of all material is displayed in Table 7 and Table 8, with a summary of the significant artefacts detailed below.

### Condition

The lead and slag are stable and require no conservation. The copper alloy object and coin are however in moderate to poor condition with signs of surface flaking and will require stabilisation.

### Results

#### Coins

A single Roman coin was collected from context 1044, representing a mid-late 4<sup>th</sup> century *nummus* of the house of Constantine. The coin is in poor condition and only the reverse is legible.

| Context | SF | Material | Diameter (mm) | Wt (g) | Rev                      | Mint      | Obv       | Date      | Comment                                      |
|---------|----|----------|---------------|--------|--------------------------|-----------|-----------|-----------|--|
| 1044    | 3  | Cu alloy | 16.11         | 2.2    | Emperor dragging a slave | illegible | Illegible | c.364-383 | Very worn and flaking. House of Constantine. |

Table 7: Coins

#### Copper alloy

The copper alloy assemblage comprised a single brooch recovered from context 1003. This is a circular disc brooch, cast with a central umbo and concentric circles and raised pellets. This form would typically be enamelled with a very similar enamelled example known from the PAS near Sleaford (<https://finds.org.uk/database/artefacts/record/id/618494>). Another similar example from Colchester also retains enamel and can be dated securely to the 2<sup>nd</sup> century AD (Crummy 1983, 16, fig 14, no. 83), while other similar examples have been recorded nationally (Hattat 1989).

#### Lead and lead alloy

A single folded lead object was recovered of uncertain date.

#### Slag and fuel waste

Metalworking evidence was limited to a single iron smelting slag recovered from Phase 2 context 1073.

| Context | SF | Material | Object      | Measurements     | Date              | No. | Wt (g) | Comments   |
|---------|----|----------|-------------|------------------|-------------------|-----|--------|--|
| 1003    | 1  | Cu alloy | Disc brooch | 34.68x32.78x8.60 | 2 <sup>nd</sup> C | 1   | 7.6    | Circular plate cast disc. Decorated with concentric rings around a |



| Context | SF | Material | Object       | Measurements     | Date              | No. | Wt (g) | Comments   |
|---------|----|----------|--------------|------------------|-------------------|-----|--------|--|
|         |    |          |              |                  |                   |     |        | central umbo. There are regularly spaced raised pellets between the concentric rings. The pin is missing but retains the catch plate. Corroded and beginning to flake. Any enamelling has been lost. |
| 1032    | 4  | Pb       | Folded sheet | 23.49x15.21x8.64 | undated           | 1   | 9.5    | Folded sheet   |
| 1073    |    | Slag     | Furnace slag | -                | 2 <sup>nd</sup> C | 1   | 10.6   | Furnace slag, retaining traces of encrusted fuel waste.  |

Table 8: Metal and slag

### Discussion

This is a very small assemblage with a broadly Roman date range. The presence of a 2<sup>nd</sup> century brooch and 4<sup>th</sup> century coin is not surprising given the mix of 1<sup>st</sup> to 4<sup>th</sup> century ceramics recovered from the site. Such a limited assemblage offers little for discussion beyond noting the presence of a single 4<sup>th</sup> century coin, 2<sup>nd</sup> century dress accessory and possible evidence for nearby iron production.

### Significance of the Data

The assemblage is of local significance reflecting the presence of 2<sup>nd</sup>–4<sup>th</sup> century Roman small finds within the site. This is a relatively small group and while it adds to the overall picture of this part of Roman Bourne, there is insufficient data to draw anything but broad conclusions.

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## **Appendix 4: Animal Bone**

*By J Wood*

### **Introduction**

A total of 70 (1683g) refitted fragments of animal bone were recovered during a scheme of archaeological works undertaken by Allen Archaeological Associates on land at Bourne Grammar School, South Road, Bourne, Lincolnshire. The remains were recovered from ditch [1008], ditch [1022], ditch [1047], ditch [1051], ditch [1061], ditch [1064], pit [1072], ditch [1080], ditch [1084], pit [1004], pit [1090], pit [1100], pit [1104], pit [1108], ditch [1110] and pit [1140]. The majority of the remains were recovered from features dated from the Roman period, between the 2<sup>nd</sup> and 4th century.

### **Methodology**

For the purposes of this assessment the entire assemblage has been fully recorded into a database archive (Table 10). Identification of the bone was undertaken with access to a reference collection and published guides. All animal remains were counted and weighed, and where possible identified to species, element, side and zone (Serjeantson 1996). Also fusion data, butchery marks (Binford 1981), gnawing, burning and pathological changes were noted when present. Ribs and vertebrae were only recorded to species when they were substantially complete and could accurately be identified. Undiagnostic bones were recorded as micro (rodent size), small (rabbit size), medium (sheep size) or large (cattle size).

The condition of the bone was graded using the criteria stipulated by Lyman (1996). Grade 0 being the best preserved bone and grade 5 indicating that the bone had suffered such structural and attritional damage as to make it unrecognisable.

The quantification of species was carried out using the total fragment count, in which the total number of fragments of bone and teeth was calculated for each taxon. Where fresh breaks were noted, fragments were refitted and counted as one.

Tooth eruption and wear stages were measured using a combination of Halstead (1985), Grant (1982) and Levine (1982), and fusion data was analysed according to Silver (1969). Measurements of adult, that is, fully fused bones were taken according to the methods of von den Driesch (1976), with asterisked (\*) measurements indicating bones that were reconstructed or had slight abrasion of the surface.

### **Results**

The overall condition of the bone was moderate, averaging at grade 3 on the Lyman criteria (1996).

A single fragment of cattle scapula recovered from pit [1108] displayed evidence of butchery. The scapula had been chopped through the glenoid and chopped at the base of the spinous process. It appears that the remains had been trimmed to form a joint of meat. Studies of butchered scapulae from Lincoln suggested that this form of trimming of the glenoid was utilised for joints of meat that were preserved for storage (Dobney, Jaques and Irving, 1996).

No evidence of bone working, gnawing, burning or of pathological change was identified within the assemblage.

The table below summarises the number of fragments of bone identified to species or taxon from each area.

| Taxon                       | 2nd C | M2nd-3 <sup>rd</sup> C | 3 <sup>rd</sup> C+ | 4th C | Undated | Total |
|-----------------------------|-------|------------------------|--------------------|-------|---------|-------|
| <i>Equid</i> (Horse Family) | 1     |                        |                    | 5     | 2       | 8     |
| Cattle                      | 4     | 2                      |                    |       | 1       | 7     |
| Large Mammal                | 5     | 6                      | 1                  | 16    | 18      | 46    |
| Medium Mammal               |       | 1                      |                    |       |         | 1     |
| Unidentified                | 1     | 1                      | 1                  | 1     | 4       | 8     |
| N=                          | 11    | 10                     | 2                  | 22    | 25      | 70    |

Table 9: Summary of identified Taxa by phase

*Equid* (horse family) were the most predominant species identified, closely followed by cattle. The *equid* remains from the 4<sup>th</sup> century were all recovered from a single pit [1004] and probably represent a single individual. The remaining assemblage was not identifiable beyond size category.

### Discussion of Potential

The assemblage is too small provide detailed data on the dietary economy, animal utilisation or husbandry practices taking place on site. The assemblage is dominated by remains from larger species, it is uncertain in such a small assemblage if this is a true representation of animal utilisation or just a result of preservation and collection bias.

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| Context No | Taxon        | Element       | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Worked | Burnt | Gnaw | Fresh Break | Assoc'd | Measured | Tooth Wear | Surface | Condition | No | Weight (g) | Notes               |
|------------|--------------|---------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|--------|-------|------|-------------|---------|----------|------------|---------|-----------|----|------------|---------------------|
| 1003       | Large Mammal | Long Bone     | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 2  | 18         |                     |
| 1003       | Large Mammal | Long Bone     | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 4         | 5  | 39         |                     |
| 1003       | Large Mammal | Cervical      | B    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | U    | U    | Y    | Y     | Y      | Y     | Y    | N           | Y       | Y        | Y          | X       | 3         | 1  | 170        |                     |
| 1003       | Large Mammal | Vertebra      | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 2  | 30         | neural arch frags   |
| 1003       | Large Mammal | Long Bone     | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 2  | 39         | articular surfaces  |
| 1003       | Equid        | Metatarsal    | R    | Y  | Y  | N  | N  | N  | N  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 4         | 1  | 94         | midshaft            |
| 1003       | Unidentified | Unidentified  | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 2         | 1  | 17         |                     |
| 1003       | Equid        | Metatarsal    | L    | N  | N  | Y  | Y  | Y  | Y  | Y  | Y  | F    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | R       | 4         | 1  | 38         |                     |
| 1003       | Equid        | Tibia         | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | N  | X    | F    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 25         |                     |
| 1003       | Large Mammal | Carpal/Tarsal | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 3  | 12         |                     |
| 1003       | Equid        | Metapodial    | X    | N  | N  | Y  | Y  | Y  | Y  | Y  | Y  | F    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 7          | Residual metapodial |
| 1003       | Equid        | Calcaneus     | L    | N  | N  | N  | N  | N  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 4         | 1  | 39         |                     |
| 1003       | Large Mammal | Long Bone     | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 12         |                     |
| 1007       | Equid        | Femur         | R    | Y  | Y  | Y  | Y  | N  | N  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | N           | Y       | Y        | Y          | X       | 3         | 1  | 66         |                     |
| 1021       | Cattle       | Mandible      | X    | Y  | Y  | N  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | N           | Y       | Y        | Y          | X       | 3         | 1  | 84         |                     |
| 1021       | Cattle       | Scapula       | L    | Y  | N  | Y  | N  | Y  | Y  | Y  | Y  | F    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 96         |                     |
| 1048       | Large Mammal | Rib           | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 3          |                     |
| 1048       | Large Mammal | Atlas         | L    | Y  | N  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 22         |                     |
| 1051       | Large Mammal | Long Bone     | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 8          |                     |
| 1062       | Unidentified | Unidentified  | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 4          |                     |
| 1065       | Large Mammal | Femur         | R    | N  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | X    | Y    | Y     | Y      | Y     | Y    | N           | Y       | Y        | Y          | X       | 3         | 1  | 43         | Equid?              |

| Context No | Taxon         | Element      | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Worked | Burnt | Gnaw | Fresh Break | Assoc'd | Measured | Tooth Wear | Surface | Condition | No | Weight (g) | Notes   |
|------------|---------------|--------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|--------|-------|------|-------------|---------|----------|------------|---------|-----------|----|------------|---|
| 1065       | Large Mammal  | Long Bone    | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 6          |   |
| 1081       | Large Mammal  | Thoracic     | B    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 24         |   |
| 1081       | Unidentified  | Unidentified | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 9          |   |
| 1083       | Large Mammal  | Long Bone    | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 3  | 15         |   |
| 1083       | Large Mammal  | Humerus      | L    | Y  | Y  | Y  | Y  | Y  | N  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 40         |   |
| 1099       | Large Mammal  | Humerus      | R    | Y  | Y  | Y  | Y  | N  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | N           | Y       | Y        | Y          | X       | 3         | 1  | 19         |   |
| 1099       | Large Mammal  | Long Bone    | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 2         | 1  | 8          |   |
| 1103       | Equid         | Tooth        | R    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 40         | Lower M3=   |
| 1103       | Large Mammal  | Long Bone    | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 4         | 2  | 9          |   |
| 1109       | Cattle        | Metatarsal   | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | N  | X    | F    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 2         | 1  | 40         |   |
| 1109       | Large Mammal  | Thoracic     | B    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 49         |   |
| 1109       | Large Mammal  | Innominate   | L    | Y  | N  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 42         |   |
| 1109       | Cattle        | Scapula      | R    | Y  | N  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | N     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 61         | Chopped through the glenoid process, chopped at the spinous process |
| 1109       | Medium Mammal | Long Bone    | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 2         | 1  | 6          |   |
| 1109       | Large Mammal  | Tibia        | L    | N  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | U    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 27         |   |

| Context No | Taxon        | Element        | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Worked | Burnt | Gnaw | Fresh Break | Assoc'd | Measured | Tooth Wear | Surface | Condition | No | Weight (g) | Notes            |
|------------|--------------|----------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|--------|-------|------|-------------|---------|----------|------------|---------|-----------|----|------------|------------------|
| 1109       | Large Mammal | Vertebra       | B    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 40         | Neural arch      |
| 1109       | Unidentified | Unidentified   | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 10         |                  |
| 1111       | Cattle       | Skull- frontal | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 2  | 17         | +horncore base   |
| 1141       | Large Mammal | Skull          | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 2  | 18         |                  |
| 1141       | Cattle       | Mandible       | R    | Y  | Y  | Y  | Y  | Y  | Y  | N  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 24         |                  |
| 1141       | Large Mammal | Innominate     | R    | Y  | Y  | N  | N  | Y  | Y  | Y  | Y  | F    | X    | Y    | Y     | Y      | Y     | Y    | N           | Y       | Y        | Y          | X       | 3         | 1  | 58         |                  |
| 1141       | Large Mammal | Innominate     | X    | Y  | N  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 73         |                  |
| 1141       | Unidentified | Unidentified   | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 3  | 44         |                  |
| 1141       | Equid        | Mandible       | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | N  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 15         |                  |
| 1141       | Large Mammal | Scapula        | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 30         | scapula fragment |
| 1141       | Large Mammal | Long Bone      | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 6  | 33         |                  |
| 1141       | Unidentified | Unidentified   | X    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 3         | 1  | 15         |                  |
| 1141       | Large Mammal | Skull-temporal | R    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | Y    | Y     | Y      | Y     | Y    | Y           | Y       | Y        | Y          | X       | 2         | 1  | 45         |                  |

Table 10: Animal bone archive

## Key: Codes and references used in cataloguing animal bone

|                         |   |
|-------------------------|---|
| <b>Taxon:</b>           | Species, family group or size category.<br>Non-species specific codes: -<br>: Equid- Horse Family<br>: Large Mammal – Cattle, Horse, Red Deer size<br>: Unidentified- Not identified to species   |
| <b>Element:</b>         | Skeletal element represented.<br>: Unidentified- Not identified to element  |
| <b>Side:</b>            | L-Left, R- Right, B- Both   |
| <b>Zones:</b>           | Records presence/absence of individual areas of the bone. Based on Zone illustrations in Serjeantson, D, 1996 <i>The Animal Bones, in Refuse and Disposal at Area 16, East Runnymede: Runnymede Bridge Research Excavations, Vol. 2</i> , (eds) E S Needham and T Spence, British Museum Press, London. |
| <b>Prox &amp; Dist:</b> | Fusion of proximal and distal epiphyses<br>: X- Not present, F- Fused, U- Unfused, B- Unfused diaphysis and epiphysis present, V- Fusion Line visible.  |
| <b>Path:</b>            | Presence of pathology, details in notes column.   |
| <b>Butch:</b>           | Presence of butchery, details in notes column.  |
| <b>Burnt:</b>           | Presence of burning, details in notes column.   |
| <b>Gnaw:</b>            | Presence of gnawing, details in notes column.   |
| <b>Worked:</b>          | Fragment shows evidence of working, details in the notes column.  |
| <b>Fresh Break:</b>     | Fresh break noted, fragments re-fitted as one bone.   |
| <b>Associated:</b>      | Articulating or adjoining bones.  |
| <b>Surface:</b>         | Taphonomies noted on the bone surface:<br>R- Rootlet etched   |
| <b>Condition:</b>       | Grades 0-5, where 0 = pristine and 5= indicating that the bone had suffered such structural and attritional damage as to make it unrecognisable. Based on Lyman, R L, 1996 <i>Vertebrate Taphonomy</i> , Cambridge Manuals in Archaeology, Cambridge University Press, Cambridge                        |
| <b>No.:</b>             | Number of individual bones/fragments  |

## Appendix 5: Charred Plant Macrofossils and Wood Charcoal

By Ellen Simmons

### Introduction

Six bulk sieving (BS) soil samples, comprising a total of one hundred and thirty litres of soil, were taken during archaeological excavations on land at Bourne Grammar School, South Road, Bourne, Lincolnshire (National Grid Reference: TF 09748 19603). Pottery from the site indicates activity during the Roman period. The samples were processed by flotation for the recovery of charred plant remains and wood charcoal using a water separation machine. Floating material was collected in a 300µm mesh, and the remaining heavy residue retained in a 1mm mesh. The flots and heavy residues were air dried. Low densities of charred plant macrofossils and wood charcoal fragments greater than 2mm in size were present in pit fill 1101, ditch fill 1003, ditch fill 1049 and ditch fill 1079. No charred plant macrofossils or wood charcoal fragments greater than 2mm in size were present in pit fill 1099 or ditch fill 1118. The charred plant macrofossils and the wood charcoal fragments greater than 2mm in size were identified in full.

### Methods

The samples were fully sorted using a low power binocular reflected light microscope (x10 – x 65). Identification of plant material and wood charcoal was carried out by comparison with material in the author's own reference collection and various reference works (eg. Cappers *et al*, 2006; Schweingruber 1990; Hather 2000). Cereal identifications follow Jacomet (2006). Other plant nomenclature follows Stace (2010). The archaeobotanical composition of the samples is recorded in Table 11.

Quantification of crop material was based on the presence of embryo ends, glume bases, rachis nodes and the nodes of straw (Jones 1990, 92). The seed, in the broadest sense, of the plant is always referred to in table 1 unless stated otherwise. The abbreviation *cf.* means 'compares with' and denotes that a specimen most closely resembles that particular taxa more than any other.

A minimum charcoal fragment size of 2mm was chosen for identification, as smaller fragments are difficult to fracture in all three planes and therefore difficult to identify. Wood charcoal fragments were fractured manually and the resultant anatomical features observed in transverse, radial and tangential planes, using high power binocular reflected light (episcopic) microscopy (x 50, x 100 and x 400). Identification of each fragment was carried out to as high a taxonomic level as possible. Due to the small size and relatively poor preservation of the wood charcoal fragments it was not possible to observe ring curvature or other details of the ligneous structure of the wood charcoal fragments (*cf.* Marguerie, & Hunot 2007).

Information regarding the ecology of the identified plant and wood charcoal taxa was taken from the habitat information listed in Stace (2010) and Preston *et al* (2002).

### Preservation

Only one cereal grain was present in the sampled contexts, the preservation of which was relatively poor due to puffing, although the epidermis was largely intact. The small assemblage of wood charcoal fragments present in the sampled contexts was somewhat friable and relatively poorly preserved.



## Results

| Context number   | 1099 | 1101 | 1003 | 1118  | 1049  | 1079  |
|--|------|------|------|-------|-------|-------|
| Feature number   | 1100 | 1102 | 1004 | 1117  | 1051  | 1080  |
| Flotation sample number  | 1    | 2    | 3    | 4     | 5     | 6     |
| Feature type   | Pit  | Pit  | Pit  | Ditch | Ditch | Ditch |
| Sample volume (litres)   | 10   | 10   | 20   | 30    | 30    | 30    |
| Volume of intrusive roots (ml)                                     | 10   | 3    | 15   | 20    | 20    | 20    |
| Flot volume excluding roots (ml)                                   | 0.5  | 0.5  | 0.5  | 0.5   | 1     | 0.5   |
| % Intrusive roots  | 95   | 88   | 97   | 98    | 95    | 98    |
| Cereals and other economic plants                                  |      |      |      |       |       |       |
| <i>Triticum dicoccum / spelta</i> (emmer / spelt wheat) glume base |      |      |      |       | 1     |       |
| <i>Triticum</i> indet. (indeterminate wheat) grain                 |      |      |      |       |       | 1     |
| Wild / weed plant seeds  |      |      |      |       |       |       |
| <i>Rumex acetosella</i> L. (sheep's sorrel)                        |      |      |      |       |       | 1     |
| <i>Anthemis cotula</i> L. (stinking chamomile)                     |      | 1    | 1    |       |       |       |
| <2 mm Poaceae (small seeded grass seed)                            |      |      |      |       | 1     |       |
| > 2mm wood charcoal  |      |      |      |       |       |       |
| Pomoideae (hawthorn/apple/pear/service tree/rowan/whitebeam)       |      |      | 3    |       |       |       |
| <i>Quercus</i> sp. (oak)   |      |      | 2    |       |       |       |
| <i>Betula</i> sp. (birch)  |      |      | 1    |       |       |       |
| <i>Fraxinus excelsior</i> L. (ash)                                 |      |      |      |       |       | 1     |
| > 2mm vitrified charcoal   |      |      | 1    |       |       |       |
| Wood charcoal ligneous structure                                   |      |      |      |       |       |       |
| Fungal hyphae  |      |      | 1    |       |       |       |

Table 11: Charred plant macrofossils and wood charcoal

The only charred crop material present in the sampled contexts was a glume wheat glume base (*Triticum dicoccum / spelta*) and an indeterminate wheat grain (*Triticum* indet.). A small number of charred wild or weed plant seeds were also present, including the typical crop weed stinking chamomile (*Anthemis cotula*) as well as sheep's sorrel (*Rumex acetosella*) which is commonly associated with heaths and acid sandy soils, and small seeded grasses (<2mm Poaceae).

It is likely that much of the woody taxa which had been utilised as fuel will not have been recorded, due to the small sample size of the wood charcoal assemblage. Taxa present in the wood charcoal assemblage included Pomoideae (hawthorn/apple/pear/service tree/rowan/whitebeam), *Quercus* sp. (oak), *Betula* sp. (birch) and *Fraxinus excelsior* (ash). Pomoideae, which cannot be differentiated using morphological characteristics, is a large sub-family of the Rosaceae (rose family) containing many species, although the native woody plant species most likely represented would be wild pear (*Pyrus communis*), crab apple (*Malus sylvestris*), service tree (*Sorbus domestica*), rowan (*Sorbus aucuparia*), common whitebeam (*Sorbus aria*), hawthorn (*Crataegus monogyna*) or Midland hawthorn (*Crataegus*

*laevigata*). Oak charcoal cannot be identified to species using morphological characteristics so either sessile oak (*Quercus petraea*) or pendunculate oak (*Quercus robur*) is represented.

Due to the small size of the majority of the wood charcoal fragments it was not possible to determine growth ring curvature. Fungal hyphae were observed in the vessel cavities of one of the oak charcoal fragments pit [1004] (fill 1003).

## Discussion

The crop types identified as present in the sampled contexts were emmer / spelt wheat (*Triticum dicoccum / spelta*) and indeterminate wheat (*Triticum* indet.). Spelt wheat is typically the predominant crop type present in Roman period archaeobotanical assemblages from the region, such as at Maxey (Green 1985), Parnwell, (Druce 2007) and Orton Longueville (Jones 2001). Emmer wheat and free threshing wheat are also however occasionally present as minor components of Roman period archaeobotanical assemblages (Monckton 2006; Murphy 1997)

The cereal grain is likely to have been charred accidentally during parching or food preparation, while the cereal chaff is likely to have been removed during crop processing and charred as waste. The low density of charred plant remains present in the sampled contexts may be due to poor conditions for preservation but may also indicate that cereal processing or food preparation was not carried out to any great extent at the site. It is also possible, however, that crop processing bi-products were used for other purposes such as fodder and temper rather than being burnt.

The wild or weed plant seeds, particularly the seeds of stinking chamomile (*Anthemis cotula*), are likely have been harvested as weeds along with the crops and discarded as waste following crop processing. Stinking chamomile is a characteristic crop weed, the increasing occurrence of which in archaeobotanical assemblages of the Roman period onwards, has been linked to the expansion of agriculture into heavy and damp soils (Jones 1981, 110). Stinking chamomile is first recorded from South Lincolnshire and Leicestershire in archaeobotanical assemblages of Roman date (Monckton 2006). The cultivation of acid sandy soils is suggested by the presence of sheep's sorrel (*Rumex acetosella*), possibly indicating the exploitation of different soil types in the vicinity of the site. The low numbers of charred seeds present in the sampled contexts preclude any firm conclusions however and it is possible that the sheep's sorrel originates from plant material collected for other purposes such as fodder, tinder, roofing material or flooring material, rather than as a crop weed. Both stinking chamomile and sheep's sorrel were also present in a rich assemblage of charred plant remains from a Roman period corn dryer excavated at Parnwell, Peterborough (Druce 2007).

A relatively high diversity of taxa was present in the low-density wood charcoal assemblage, which suggests the use of a mix of different fuel woods sourced from open woodland or hedgerows. Roman period wood charcoal assemblages from Parnwell, Peterborough were noted as being very mixed, this being a common feature of domestic contexts of the period (Challinor 2007). Wood charcoal assemblages of Roman date from the East Midlands region also generally indicate increasing pressure on woodland resources, with the use of small diameter wood and the presence of a wide range of taxa sourced from a range of habitat types (Murphy 2001, 16-18).

Oak is one of the most common mixed deciduous woodland trees but can also be present as a component of hedgerows (Rackham 2003, 283). Ash is one of the most common woodland understory trees in mixed deciduous woodland but can also grow as a component of hedgerows and scrub (Rackham 2003, 203). Hawthorn, wild apple, wild pear and members of the rowan family which are represented by Pomoideae are hedgerow and scrub taxa as well as being frequently occurring underwood taxa in deciduous woodland (Rackham 2003, 349-358). Birch is a common pioneer species of secondary woodland on derelict land, fens and heathland (Rackham 2003, 313)

Charcoal assemblage composition is likely to be influenced by a number of factors, including differences in availability and anthropogenic fuel wood selection strategies, as well as to taphonomic factors such as differential charcoal preservation and recovery (Asouti and Austin 2005, 8; Théry-Parisot *et al.* 2010). It is therefore unlikely that the composition of the wood charcoal assemblage is directly representative of the nature and extent of woodland and scrub in the local environment. The taxa present in the wood charcoal assemblage all represent good fuel woods and are likely to have been selected for this purpose. Oak produces a hot long lasting fire, as do the taxa potentially represented by Pomoideae, birch produces a hot fast burning fire and ash does not require seasoning in order to burn well (Webster 1919, 44; Porter 1990, 93). It is also possible that offcuts from wood collected for structural purposes were used as fuel.

### Summary

The low density of charred crop material included glume wheat chaff and an indeterminate wheat grain. Wild or weed plant seeds possibly indicate the cultivation of heavy, clay soils as well as the cultivation of lighter sandy soils although the small number of seeds present in the samples precludes firm conclusions.

A relatively diverse range of taxa was present in the small assemblage of wood charcoal fragments greater than 2mm in size, including oak, ash, Pomoideae and birch. This indicates the collection of a mix of different fuel woods from open woodland or hedgerows.

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## Appendix 6: Context Summary List

### Strip Map and Record

| Context | Feature | Type  | Description  | Length (m) | Width (m) | Thickness/depth (m) | Interpretation                |
|---------|---------|-------|--|------------|-----------|---------------------|-------------------------------|
| 1000    | 1000    | Layer | Friable, dark brown clayey silt with occasional stones   | -          | -         | 0.3-0.4             | Topsoil                       |
| 1001    | 1001    | Layer | Firm, mid yellowish brown silty clay with occasional flint nodules   | -          | -         | 0.4                 | Subsoil                       |
| 1002    | 1002    | Layer | Firm, mid orange clay with occasional patches of clayey sand and occasional limestone fragments  | -          | -         | -                   | Natural geology               |
| 1003    | 1004    | Fill  | Friable mid bluey grey clayey silt with very occasional iron panning and sub-angular and sub-rounded stones and occasional charcoal flecks | -          | -         | 0.35                | Fill of pit [1004]            |
| 1004    | 1004    | Cut   | East-west orientated oval shape in plan, heavily truncated to the east, with gradually sloping sides and a flat base                       | 1.6        | 1.3       | 0.35                | Cut of pit                    |
| 1005    | 1006    | Fill  | Firm dark brownish grey clayey silt  | -          | -         | 0.04                | Fill of pit [1006]            |
| 1006    | 1006    | Cut   | Northwest- southeast orientated oval with very shallow sides with straight sides and a flat base   | -          | 0.32      | 0.04                | Cut of pit                    |
| 1007    | 1008    | Fill  | Friable dark brownish grey clayey silt with occasional charcoal fragments  | -          | -         | 0.18                | Fill of boundary ditch [1008] |
| 1008    | 1008    | Cut   | East- west orientated linear with steep moderately straight sides with gradual break of slope to a concave base                            | -          | 0.74      | 0.18                | Cut of boundary ditch         |
| 1009    | 1010    | Fill  | Friable dark brownish grey clayey silt   | -          | -         | 0.18                | Fill of pit [1010]            |
| 1010    | 1010    | Cut   | Northwest- southeast orientated sub-circular with fairly steep sloping sides with gradual break of slope to concave base                   | -          | 0.46      | 0.18                | Cut of pit                    |
| 1011    | 1012    | Fill  | Friable dark brownish grey clayey silt   | -          | -         | 0.2                 | Fill of gully [1012]          |
| 1012    | 1012    | Cut   | East- west orientated linear with shallow sloping sides with gradual break of slope to flat base   | -          | 0.74      | 0.2                 | Cut of possible gully         |

| Context | Feature | Type | Description   | Length (m) | Width (m) | Thickness/depth (m) | Interpretation        |
|---------|---------|------|---|------------|-----------|---------------------|-----------------------|
| 1013    | 1013    | Cut  | Northwest- southeast orientated sub-rectangular with shallow concave sides and flat base  | -          | 0.15      | 0.06                | Cut of pit            |
| 1014    | 1013    | Fill | Compact light grey clay   | -          | -         | 0.06                | Fill of pit [1013]    |
| 1015    | 1015    | Cut  | Northwest- southeast orientated, turning northeast- southwest curvilinear with steep straight sides with gradual break of slope to a concave base | -          | 0.5       | 0.12                | Cut of gully          |
| 1016    | 1015    | Fill | Compact mid grey silty clay with occasional unsorted sub-angular flint fragments  | -          | -         | 0.12                | Fill of gully [1015]  |
| 1017    | 1017    | Cut  | Northwest- southeast orientated linear with shallow straight sides with gradual break of slope to a flat base                                     | -          | 0.45      | 0.14                | Cut of gully          |
| 1018    | 1017    | Fill | Compact mid grey clay with silty mid grey mottles   | -          | -         | 0.14                | Fill of gully [1017]  |
| 1019    | 1020    | Fill | Firm mid greyish brown clayey silt  | -          | -         | 0.1                 | Fill of pit [1020]    |
| 1020    | 1020    | Cut  | East- west orientated sub-oval with very shallow sloping sides with gradual break of slope to a flat base   | -          | 0.15      | 0.1                 | Cut of pit            |
| 1021    | 1022    | Fill | Friable dark brownish grey clayey silt  | -          | -         | 0.42                | Fill of linear [1022] |
| 1022    | 1022    | Cut  | Northwest- southeast orientated linear with steep, straight sloping sides with gradual break of slope to a concave base                           | -          | 0.58      | 0.42                | Cut of linear         |
| 1023    | 1024    | Fill | Friable dark brownish grey clayey silt  | -          | -         | 0.18                | Fill of pit [1024]    |
| 1024    | 1024    | Cut  | East- west orientated sub-oval with shallow sloping sides with gradual break of slope to a concave base   | -          | 1.02      | 0.18                | Cut of pit            |
| 1025    | Void    | Void | Void  | Void       | Void      | Void                | Void                  |
| 1026    | Void    | Void | Void  | Void       | Void      | Void                | Void                  |

| Context | Feature | Type | Description   | Length (m) | Width (m) | Thickness/ depth (m) | Interpretation             |
|---------|---------|------|---|------------|-----------|----------------------|----------------------------|
| 1027    | 1027    | Cut  | East- west orientated curvilinear with steep concave sides with gradual break of slop to a concave base       | -          | 0.6       | 0.3                  | Cut of ditch               |
| 1028    | 1027    | Fill | Hard dark yellowish brown silty clay  | -          | -         | 0.3                  | Fill of cut [1027]         |
| 1029    | 1029    | Cut  | Circular with shallow stepped sides with gradual break of slope to a concave base                             | -          | 0.8       | 0.18                 | Cut of pit                 |
| 1030    | 1029    | Fill | Hard dark blueish grey clay   | -          | -         | 0.18                 | Fill of pit [1029]         |
| 1031    | 1031    | Cut  | Circular with moderately shallow concave sides with gradual break of slope                                    | -          | 0.4       | 0.18                 | Cut of clay extraction pit |
| 1032    | 1031    | Fill | Hard light yellowish brown clay   | -          | -         | 0.18                 | Fill of pit [1031]         |
| 1033    | 1033    | Cut  | East- west orientated oval with very shallow concave sides with gradual break of slope                        | -          | 0.6       | 0.16                 | Cut of pit                 |
| 1034    | 1033    | Fill | Friable dark grey silty clay with occasional small angular flint fragments                                    | -          | -         | 0.33                 | Fill of pit [1033]         |
| 1035    | 1035    | Cut  | East- west orientated oval with very shallow concave sides with gradual break of slope to a concave base      | -          | 0.6       | 0.1                  | Cut of pit                 |
| 1036    | 1035    | Fill | Friable mid grey silty clay with occasional small angular flint fragments                                     | -          | -         | 0.35                 | Fill of [1035]             |
| 1037    | 1037    | Cut  | Circular with moderately shallow concave sides with gradual break of slope to a concave base                  | -          | 1.0       | 0.2                  | Cut of pit                 |
| 1038    | 1037    | Fill | Friable mid orangey grey clayey silt with very occasional small angular flint fragments                       | -          | -         | 0.2                  | Fill of pit [1037]         |
| 1039    | 1039    | Cut  | Northwest - southeast orientated linear with shallow concave sides with gradual break of slope to a flat base | -          | 0.7       | 0.16                 | Cut of ditch terminal      |
| 1040    | 1039    | Fill | Compact mid brownish grey silty clay with moderate iron panning mottles                                       | -          | -         | 0.16                 | Fill of ditch [1039]       |
| 1041    | 1042    | Fill | Firm mid greyish brown silty clay   | -          | -         | 0.2                  | Fill of pit [1042]         |

| Context | Feature | Type | Description  | Length (m) | Width (m) | Thickness/depth (m) | Interpretation                |
|---------|---------|------|--|------------|-----------|---------------------|-------------------------------|
| 1042    | 1042    | Cut  | Northeast- southwest orientated oval with shallow straight sides with gradual break of slope to a flat base  | -          | 0.7       | 0.2                 | Cut of pit                    |
| 1043    | 1043    | Cut  | Southeast - west orientated curvilinear with moderately steep concave sides with gradual break of slope to a concave base  | -          | 0.6       | 0.17                | Cut of gully                  |
| 1044    | 1043    | Fill | Hard yellowish blue clay with occasional small stones  | -          | -         | 0.17                | Fill of gully [1043]          |
| 1045    | 1045    | Cut  | North - south orientated oval with moderately shallow concave sides with gradual break of slope to a concave base  | -          | 1.0       | 0.18                | Cut of pit                    |
| 1046    | 1045    | Fill | Firm mid blueish grey silty clay with occasional small stones  | -          | -         | 0.18                | Fill of [1045]                |
| 1047    | 1047    | Cut  | East-west orientated linear with moderately steep concave sides with gradual break of slope on north side and sharp break of slope on south side to a concave base | -          | 0.12      | 0.46                | Cut of boundary ditch         |
| 1048    | 1047    | Fill | Compact dark grey clay with very occasional sub-angular small flint fragments  | -          | -         | 0.16                | Fill of boundary ditch [1047] |
| 1049    | 1051    | Fill | Friable dark brownish grey silty clay with flecks of iron panning  | -          | -         | 0.16                | Fill of boundary ditch [1051] |
| 1050    | 1051    | Fill | Compact dark grey clay   | -          | -         | 0.31                | Fill of boundary ditch [1051] |
| 1051    | 1051    | Cut  | East-west orientated linear with fairly steep stepped sides with gradual break of slope to a flat base   | -          | 1.5       | 0.47                | Cut of boundary ditch         |
| 1052    | 1048    | Fill | Compact dark brownish grey silty clay with moderate iron panning   | -          | -         | 0.18                | Fill of ditch [1047]          |
| 1053    | 1053    | Cut  | Northwest- southeast orientated linear with steep sides with gradual break of slope to a concave base  | -          | 0.25      | 0.16                | Cut of ditch                  |
| 1054    | 1053    | Fill | Friable light orangey grey silty clay  | -          | -         | 0.16                | Fill of ditch [1053]          |



| Context | Feature | Type | Description  | Length (m) | Width (m) | Thickness/ depth (m) | Interpretation                |
|---------|---------|------|--|------------|-----------|----------------------|-------------------------------|
| 1055    | 1055    | Cut  | Circular with shallow concave sides with gradual break of slope to a concave base  | -          | 0.35      | 0.16                 | Cut of ditch                  |
| 1056    | 1055    | Fill | Friable mid brownish grey silty clay   | -          | -         | 0.16                 | Fill of pit [1055]            |
| 1057    | 1058    | Fill | Firm dark brownish grey silty clay   | -          | -         | 0.14                 | Fill of boundary ditch [1058] |
| 1058    | 1058    | Cut  | North - south orientated linear with moderately shallow concave sides with gradual break of slope to a flat base               | -          | 1.8       | 0.14                 | Cut of boundary ditch         |
| 1059    | 1059    | Cut  | Northwest- southeast orientated linear with shallow straight sides with gradual break of slope to a flat base                  | -          | 0.45      | 0.14                 | Cut of gully terminal         |
| 1060    | 1059    | Fill | Compact mid grey clay with silty mottle  | -          | -         | 0.14                 | Fill of cut [1059]            |
| 1061    | 1061    | Cut  | North-south orientated curvilinear with moderately steep concave sides with gradual break of slope to a concave break of slope | -          | 0.72      | 0.22                 | Cut of ditch                  |
| 1062    | 1061    | Fill | Firm dark brownish grey clay with occasional charcoal flecks   | -          | -         | 0.12                 | Fill of ditch [1061]          |
| 1063    | 1061    | Fill | Firm blueish grey clay   | -          | -         | 0.1                  | Fill of ditch [1061]          |
| 1064    | 1064    | Cut  | North-south orientated curvilinear with moderately shallow concave sides with gradual break of slope to a concave base         | -          | 1.1       | 0.3                  | Cut of ditch                  |
| 1065    | 1064    | Fill | Firm blueish grey clay with occasional stones  | -          | -         | 0.2                  | Fill of ditch [1064]          |
| 1066    | 1066    | Cut  | Northeast-southwest orientated sub-oval with moderately steep straight sides with sharp break of slope to an uneven base       | -          | 1.45      | 0.1                  | Cut of pit                    |
| 1067    | 1066    | Fill | Compact mid brownish grey silty clay with very occasional sorted rounded pebbles   | -          | -         | 0.1                  | Fill of pit [1066]            |
| 1068    | Void    | Void | Void   | Void       | Void      | Void                 | Void                          |

| Context | Feature | Type  | Description  | Length (m) | Width (m) | Thickness/depth (m) | Interpretation                |
|---------|---------|-------|--|------------|-----------|---------------------|-------------------------------|
| 1069    | Void    | Void  | Void   | Void       | Void      | Void                | Void                          |
| 1070    | 1068    | Layer | Compact dark grey silty clay with occasional very small sub-angular flint fragments                                | -          | -         | 0.03                | Spread.                       |
| 1071    | 1072    | Fill  | Loose dark grey brown clayey silt with occasional flint nodules and patches of orange sand                         | -          | -         | 0.2                 | Fill of pit [1072]            |
| 1072    | 1072    | Cut   | Northeast-southwest orientated sub-oval with steep stepped sides to an uneven base                                 | -          | 1.35      | 0.2                 | Cut of pit                    |
| 1073    | 1074    | Fill  | Firm mid blueish grey clayey silt with occasional small stones and very occasional small angular flint fragments   | -          | -         | 0.24                | fill of pit [1074]            |
| 1074    | 1074    | Cut   | North-south orientated oval with moderately steep, concave sides with gradual break of slope to a concave base     | -          | 1.1       | 0.24                | Cut of pit                    |
| 1075    | 1076    | Fill  | Firm greyish brown silty clay  | -          | -         | 0.11                | Fill of pit [1076]            |
| 1076    | 1076    | Cut   | East-west orientated linear with shallow concave sides with gradual break of slope to a flat base                  | -          | 0.56      | 0.11                | Cut of pit                    |
| 1077    | Void    | Void  | Void   | Void       | Void      | Void                | Void                          |
| 1078    | Void    | Void  | Void   | Void       | Void      | Void                | Void                          |
| 1079    | 1080    | Fill  | Compact mid brownish grey silty clay   | -          | -         | 0.12                | Fill of ditch [1080]          |
| 1080    | 1080    | Cut   | East-west orientated linear with shallow concave sides with gradual break of slope to a flat base                  | -          | 0.56      | 0.12                | Cut of ditch                  |
| 1081    | 1082    | Fill  | Friable mid grey silty clay with mottled orange sand patches   | -          | -         | 0.18                | Fill of boundary ditch [1082] |
| 1082    | 1082    | Cut   | North-south orientated linear with steep moderately straight sides with a gradual break of slope to a concave base | -          | 0.76      | 0.18                | Cut of boundary ditch         |

| Context | Feature | Type | Description   | Length (m) | Width (m) | Thickness/depth (m) | Interpretation                     |
|---------|---------|------|---|------------|-----------|---------------------|------------------------------------|
| 1083    | 1084    | Fill | Firm mid grey silty clay with occasional sandy patches and occasional small charcoal flecks                     | -          | -         | 0.22                | Fill of boundary ditch [1084]      |
| 1084    | 1084    | Cut  | North-south orientated linear with steep, straight sides with sharp break of slope to a flat base               | -          | 0.95      | 0.22                | Cut of boundary ditch              |
| 1085    | 1086    | Fill | Firm mid yellowish brown silty clay with occasional flint fragments and charcoal flecks                         | -          | -         | 0.08                | Fill of [1086]                     |
| 1086    | 1086    | Cut  | Circular with steep concave sides with gradual break of slope to a concave base                                 | -          | 0.6       | 0.08                | Cut of pit                         |
| 1087    | 1088    | Fill | Friable mid blueish grey clayey silt with occasional small angular flint, small pebbles and flecks of charcoal  | -          | -         | 0.1                 | Fill of pit [1088]                 |
| 1088    | 1088    | Cut  | Circular with moderately shallow concave sides with gradual break of slope to a concave base                    | -          | 0.45      | 0.1                 | Cut of pit                         |
| 1089    | 1090    | Fill | Friable very dark grey sandy clay with moderate iron panning occasional charcoal and small angular flint        | -          | -         | 0.2                 | Fill of pit [1090]                 |
| 1090    | 1090    | Cut  | East-west orientated linear with moderately shallow concave sides with gradual break of slope to a concave base | -          | 1.5       | 0.2                 | Cut of pit                         |
| 1091    | 1091    | Cut  | East-west orientated linear with moderately shallow, concave sides with gradual break of slope to a flat base   | -          | 0.6       | 0.28                | Cut of boundary ditch              |
| 1092    | 1091    | Fill | Friable mid greyish brown clay with very occasional angular poorly sorted stone fragments                       | -          | -         | 0.28                | Fill of boundary ditch [1091]      |
| 1093    | 1093    | Cut  | Irregular with moderately steep sides with gradual break of slope to a concave base                             | -          | -         | 0.38                | Cut of pit. Part of Feature [1190] |
| 1094    | 1093    | Fill | Friable mid brownish grey clay with very occasional angular poorly sorted stone fragments                       | -          | -         | 0.38                | Fill of pit [1093]                 |

| Context | Feature | Type | Description  | Length (m) | Width (m) | Thickness/depth (m) | Interpretation                     |
|---------|---------|------|--|------------|-----------|---------------------|------------------------------------|
| 1095    | 1096    | Fill | Firm dark blueish grey silty clay with occasional small stones and angular flint and occasional flecks of charcoal                   | -          | -         | 0.1                 | Fill of pit [1096]                 |
| 1096    | 1096    | Cut  | Circular with moderately shallow concave sides with gradual break of slope to a concave base   | -          | 0.65      | 0.1                 | Cut of pit                         |
| 1097    | 1098    | Fill | Friable mid greyish brown silty clay with mottled orange sand  | -          | -         | 0.16                | Fill of linear [1098]              |
| 1098    | 1098    | Cut  | North-south orientated, turning to southeast-northwest linear with steep straight sides with gradual break of slope and concave base | -          | 0.76      | 0.16                | Cut of ditch                       |
| 1099    | 1100    | Fill | Compact mid grey clay  | -          | -         | 0.12                | Fill of pit [1100]                 |
| 1100    | 1100    | Cut  | Northwest-southeast orientated sub-circular with shallow concave sides with gradual break of slope to a flat base                    | -          | 0.52      | 0.12                | Cut of pit                         |
| 1101    | 1102    | Fill | Compact mid grey clay  | -          | -         | 0.24                | Fill of pit [1102]                 |
| 1102    | 1102    | Cut  | Northeast-southwest orientated sub-circular with shallow concave sides with gradual break of slope to a flat base                    | -          | 0.66      | 0.24                | Cut of pit                         |
| 1103    | 1104    | Fill | Compact mid grey clay  | -          | -         | 0.22                | Fill of pit [1104]                 |
| 1104    | 1104    | Cut  | Sub-circular with shallow straight sides with gradual break of slope to a flat base  | -          | 1.24      | 0.22                | Cut of pit                         |
| 1105    | 1105    | Cut  | Northwest-southeast orientated linear with shallow concave sides with gradual break of slope to a flat base                          | -          | 1.32      | 0.11                | Cut of ditch                       |
| 1106    | 1105    | Fill | Friable mid brownish grey clay   | -          | -         | 0.11                | Fill of ditch [1105]               |
| 1107    | 1064    | Fill | Hard blueish yellow clay   | -          | -         | 0.1                 | Redeposited natural [1064]         |
| 1108    | 1108    | Cut  | Circular with moderately shallow, concave sides with gradual break of slope to a concave base  | -          | 2.0       | 0.5                 | Cut of pit. Part of Feature [1190] |

| Context | Feature | Type | Description   | Length (m) | Width (m) | Thickness/depth (m) | Interpretation                     |
|---------|---------|------|---|------------|-----------|---------------------|------------------------------------|
| 1109    | 1108    | Fill | Friable mid brownish grey silty clay  | -          | -         | 0.5                 | Fill of pit [1108]                 |
| 1110    | 1110    | Cut  | Circular with moderately shallow, concave sides with gradual break of slope to a concave base                       | -          | 2.0       | 0.38                | Cut of pit. Part of Feature [1190] |
| 1111    | 1110    | Fill | Friable dark brownish grey silty clay   |            |           | 0.38                | Fill of pit [1110]                 |
| 1112    | 1112    | Cut  | Amorphous with shallow flat sides with gradual break of slope to a flat base  | -          | 2.75      | 0.3                 | Cut of pit. Part of Feature [1190] |
| 1113    | 1112    | Fill | Friable mid brownish grey clayey silt   | -          | -         | 0.3                 | Fill of pit [1112]                 |
| 1114    | 1114    | Cut  | Sub circular with steep sides with gradual break of slope to a concave base   | -          | 2.6       | 0.88                | Cut of pit. Part of Feature [1190] |
| 1115    | 1114    | Fill | Firm light brownish grey silty clay   | -          | -         | 0.7                 | Fill of pit [1114]                 |
| 1116    | 1114    | Fill | Compact mid brownish yellow clay  | -          | -         | 0.18                | Re-deposited natural [1114]        |
| 1117    | 1117    | Cut  | East-west orientated linear with moderately steep straight sides with gradual break of slope to a flat base         | -          | 0.34      | 0.12                | Cut of ditch                       |
| 1118    | 1117    | Fill | Compact, dark grey brown silty clay   | -          | -         | 0.12                | Fill of ditch [1117]               |
| 1119    | 1119    | Cut  | Northwest-southeast orientated oval with very shallow concave sides with gradual break of slope to a flat base      | -          | 0.46      | 0.1                 | Cut of pit                         |
| 1120    | 1119    | Fill | Compact mid grey silty clay   | -          | -         | 0.1                 | Fill of pit [1119]                 |
| 1121    | 1121    | Cut  | East-west orientated oval with shallow concave sides with gradual break of slope to a concave base                  | -          | 0.3       | 0.07                | Cut of pit                         |
| 1122    | 1121    | Fill | Compact dark brownish grey silty clay with occasional small rounded flint pebbles                                   | -          | -         | 0.07                | Fill of pit [1121]                 |
| 1123    | 1123    | Cut  | North-south orientated linear with moderately steep, concave sides with gradual break of slope to an irregular base | -          | 0.6       | 0.04                | Cut of gully                       |

| Context | Feature | Type           | Description  | Length (m) | Width (m) | Thickness/depth (m) | Interpretation  |
|---------|---------|----------------|--|------------|-----------|---------------------|---|
| 1124    | 1123    | Fill           | Friable, dark brownish grey silty clay with very occasional small sub-angular flint fragments                                      | -          | -         | 0.04                | Fill of cut [1124]  |
| 1125    | 1125    | Cut            | Unexcavated pit Part of Feature [1190]   | -          | -         | -                   | Cut of pit. Part of Feature [1190]                                |
| 1126    | 1125    | Fill           | Firm dark greyish brown silty clay   | -          | -         | -                   | Fill of pit [1125]  |
| 1127    | 1127    | Cut            | Sub circular with steep irregular sides with a step and a sharp break of slope to a flat base                                      | -          | 1.0       | 0.5                 | Cut of pit. Part of Feature [1190]                                |
| 1128    | 1127    | Fill           | Firm dark purplish brown silty clay  | -          | -         | 0.5                 | Fill of pit [1127]  |
| 1188    | 1189    | Fill           | Firm dark greyish brown silty clay Unexcavated   | -          | -         | -                   | Fill of pit [1189]  |
| 1189    | 1189    | Cut            | Unexcavated pit Part of Feature [1190]   | -          | -         | -                   | Cut of pit. Part of Feature [1190]                                |
| 1190    | 1190    | Feature number | Feature number for multiphase clay extraction pit comprising [1093] [1108] [1110] [1112] [1114] [1125] [1127] [1189] [1196] [1198] | 8.9        | 5.0       | 1.0+                | Feature number assigned to a large multiphase clay extraction pit |
| 1191    | 1192    | Fill           | Compact mid grey silty clay  | -          | -         | 0.1                 | Fill of pit [1192]  |
| 1192    | 1192    | Cut            | Amorphous shape in plan with moderately steep sides and a gradual BOS to a concave base  | 1.8        | 0.98      | 0.1                 | Cut of pit  |
| 1193    | 1194    | Fill           | Compact mid grey silty clay  | 2.3        | 1.4       | 0.15                | Fill of pit [1194]  |
| 1194    | 1194    | Cut            | Oval shape in plan with shallow sides and a gradual BOS to a concave base  | -          | -         | 0.15                | Cut of pit  |
| 1195    | 1193    | Fill           | Firm dark greyish brown silty clay Unexcavated   | -          | -         | -                   | Fill of pit [1189]  |
| 1196    | 1196    | Cut            | Unexcavated pit Part of Feature [1190]   | -          | -         | -                   | Cut of pit. Part of Feature [1190]                                |
| 1197    | 1198    | Fill           | Firm dark greyish brown silty clay Unexcavated   | -          | -         | -                   | Fill of pit [1189]  |

| Context | Feature | Type | Description                            | Length (m) | Width (m) | Thickness/depth (m) | Interpretation                     |
|---------|---------|------|--|------------|-----------|---------------------|------------------------------------|
| 1198    | 1198    | Cut  | Unexcavated pit Part of Feature [1190] | -          | -         | -                   | Cut of pit. Part of Feature [1190] |

## Monitoring

| Context | Feature | Type | Description  | Length (m) | Width (m) | Thickness/depth (m) | Interpretation                      |
|---------|---------|------|--|------------|-----------|---------------------|-------------------------------------|
| 1129    | 1129    | Cut  | NE-SW oriented linear feature with vertical sides and a flat base  | 10.0       | 1.8       | 0.1                 | Cut for modern land drain           |
| 1130    | 1129    | Fill | Compact dark blue grey slightly silty clay   | -          | -         | 0.1                 | Fill of [1129]                      |
| 1131    | 1131    | Cut  | Unknown shape in plan with moderately steep straight sides and a sharp BOS to a concave base. Only seen in section | 1.2        | 0.2       | 0.3                 | Cut of possible pit                 |
| 1132    | 1131    | Fill | Compact mid grey silty clay with very occasional ironstone flacks  | -          | -         | 0.3                 | Fill of [1131]                      |
| 1133    | 1133    | Cut  | Amorphous shape in plan with moderately steep sides and a gradual BOS to a concave base                            | 1.14       | 0.57      | 0.37                | Cut of pit                          |
| 1134    | 1133    | Fill | Compact mid grey silty clay with occasional small rounded stones and flint fragments                               | -          | -         | 0.37                | Fill of [1133]                      |
| 1135    | 1135    | Cut  | NE-SW oriented linear shape in plan with steep sides and a moderate BOS to an off centre concave base              | -          | 0.85      | 0.45                | Cut of boundary ditch               |
| 1136    | 1135    | Fill | Compact mid grey silty clay with occasional small rounded stones and flint fragments                               | -          | -         | 0.18                | Lower fill of boundary ditch [1136] |
| 1137    | 1135    | Fill | Compact dark grey silty clay with occasional iron panning  | -          | -         | 0.27                | Upper fill of boundary ditch [1136] |
| 1138    | 1138    | Cut  | Circular shape in plan with steep concave sides and a gentle BOS to a concave base                                 | 1.8        | 0.42+     | 0.25                | Cut of pit                          |
| 1139    | 1138    | Fill | Compact mid grey silty clay with occasional small rounded stones and flint fragments                               | -          | -         | 0.25                | Fill of [1138]                      |

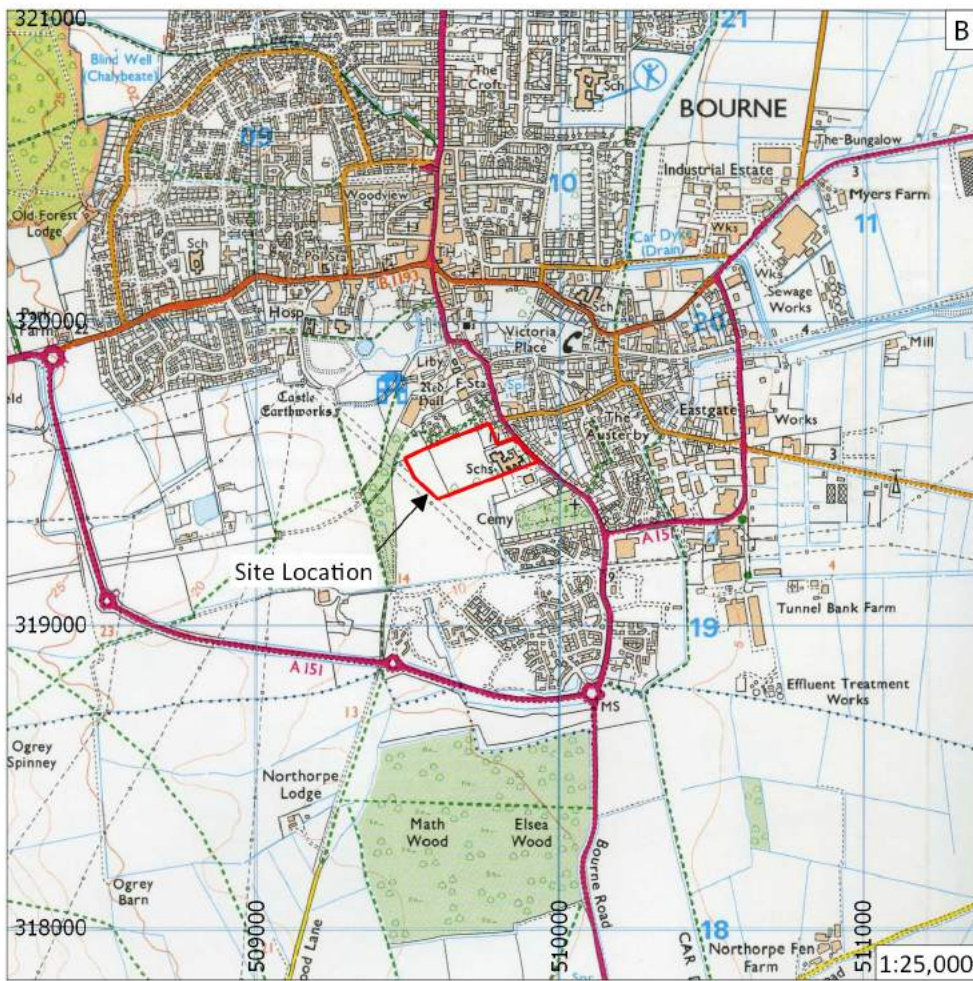
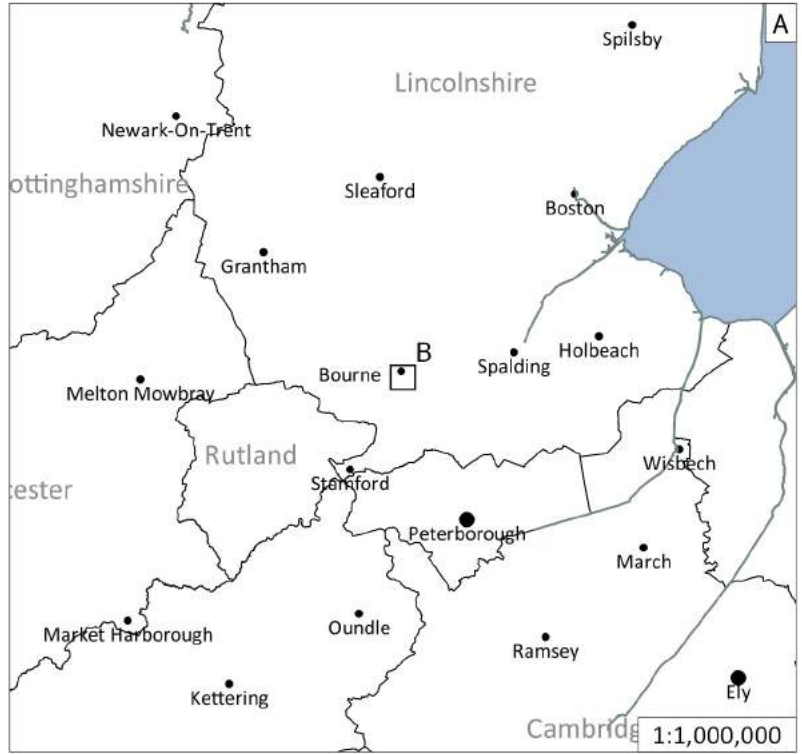
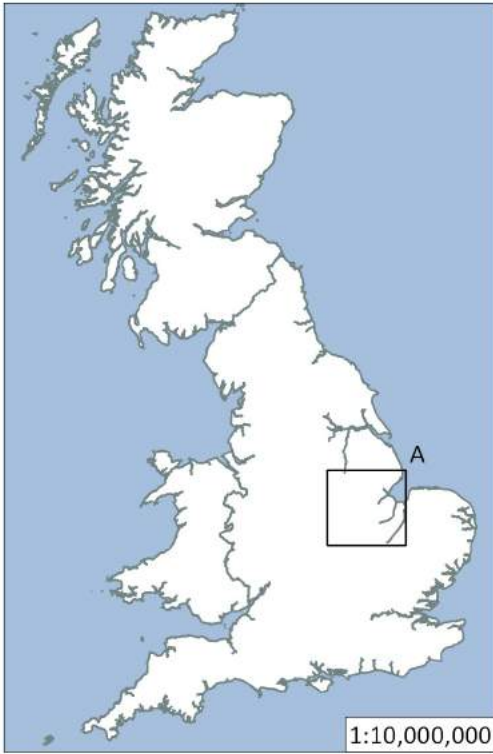
| Context | Feature | Type | Description  | Length (m) | Width (m) | Thickness/depth (m) | Interpretation       |
|---------|---------|------|--|------------|-----------|---------------------|----------------------|
| 1140    | 1140    | Cut  | Sub-circular shape in plan with stepped sides and a gentle BOS to a concave base   | 2.25       | -         | 0.4                 | Cut of pit           |
| 1141    | 1140    | Fill | Compact dark grey silty clay with occasional small rounded stones  | -          | -         | 0.38                | Lower fill of [1140] |
| 1142    | 1140    | Fill | Compact dark grey clay with frequent iron panning and small rounded stones   | -          | -         | 0.35                | Upper fill of [1140] |
| 1143    | 1143    | Cut  | Unknown shape in plan with shallow sides and a gentle BOS to a slightly concave base. Only seen in section but possibly the same as [1147] | 1.6        | 3         | 0.15                | Cut of possible pit  |
| 1144    | 1143    | Fill | Compact very dark grey clay with occasional iron panning and small rounded stones  | -          | -         | 0.15                | Fill of [1143]       |
| 1145    | 1145    | Cut  | NE-SW oriented linear with steep straight sides and a gentle BOS to a narrow slightly "V" shaped base                                      | -          | 0.95      | 0.45                | Cut of ditch         |
| 1146    | 1145    | Fill | Compact very dark grey clay with occasional iron panning and small rounded stones  | -          | -         | 0.45                | Fill of [1145]       |
| 1147    | 1147    | Cut  | E-W oriented sub-rectangular feature with shallow concave sides and a gentle BOS to a slightly concave base                                | 3.9        | 0.6       | 0.27                | Cut of ditch         |
| 1148    | 1147    | Fill | Compact very dark grey clay with occasional iron panning and small rounded stones  | -          | -         | 0.27                | Fill of [1147]       |
| 1149    | 1149    | Cut  | NW-SE oriented oval shape in plan with moderately steep sides and a gentle BOS to a concave base   | 0.6        | 0.42      | 0.38                | Cut of ditch         |
| 1150    | 1149    | Fill | Compact mid grey clay  | -          | -         | 0.38                | Fill of [1149]       |
| 1151    | 1151    | Cut  | E-W oriented oval shape in plan with moderately steep sides and a gentle BOS to a concave base   | 2          | 0.74      | 0.15                | Cut of ditch         |
| 1152    | 1151    | Fill | Compact very dark grey silt with occasional charcoal flecks  | -          | -         | 0.15                | Fill of [1151]       |
| 1153    | 1153    | Cut  | NW-SE oriented sub-circular shape in plan with moderately steep straight sides and a gentle BOS to a moderately concave base               | 0.5        | 0.4       | 0.3                 | Cut of ditch         |



| Context | Feature | Type | Description   | Length (m) | Width (m) | Thickness/depth (m) | Interpretation |
|---------|---------|------|---|------------|-----------|---------------------|----------------|
| 1154    | 1153    | Fill | Compact mid grey silty clay with frequent grey clay mottling  | -          | -         | 0.3                 | Fill of [1153] |
| 1155    | 1155    | Cut  | E-W oriented sub-circular shape in plan with moderately steep sides and a gentle BOS to a flat base                     | 2.06       | 1.6       | 0.1                 | Cut of ditch   |
| 1156    | 1155    | Fill | Compact dark grey silty clay with occasional small sub-angular flint fragments  | -          | -         | 0.1                 | Fill of [1155] |
| 1157    | 1157    | Cut  | N-S oriented oval shape in plan with shallow concave sides and a gentle BOS to a concave base                           | 1.2        | 1         | 0.17                | Cut of pit     |
| 1158    | 1157    | Fill | Compact very dark grey clay with occasional charcoal flecks   | -          | -         | 0.17                | Fill of [1157] |
| 1159    | 1159    | Cut  | Base 12, extent unknown, possibly a spread.   | 1.6        | 1.6       | 0.12                | Cut of ditch   |
| 1160    | 1159    | Fill | Compact mid grey silty clay with occasional small rounded stones.   | -          | -         | 0.12                | Fill of [1159] |
| 1161    | 1162    | Fill | Friable dark grey silty clay with occasional rounded stones   | -          | -         | 0.3                 | Fill of [1162] |
| 1162    | 1162    | Cut  | NE-SW oriented linear feature with straight sides and a moderate BOS to a flat base                                     | -          | 1.1       | 0.3                 | Cut of ditch   |
| 1163    | 1164    | Fill | Compact dark grey silty clay with occasional small to medium sub-angular stones and flecks of CBM and charcoal          | -          | -         | 0.2                 | Fill of [1164] |
| 1164    | 1164    | Cut  | Sub-circular shape in plan with gentle straight sides and a gentle BOS to a concave base                                | 1.0        | 1.15      | 0.2                 | Cut of ditch   |
| 1165    | 1166    | Fill | Compact dark brownish grey silty clay with occasional small to medium sub-angular stones and flecks of CBM and charcoal | 1.9        | 1.56      | 0.2                 | Fill of [1166] |
| 1166    | 1166    | Cut  | NW-SE oriented sub-oval shape in plan with straight sides and a moderate BOS to a flat base                             | 1.3        | 0.9       | 0.2                 | Cut of ditch   |
| 1167    | 1167    | Cut  | E-W oriented linear. Unexcavated dimensions unknown.  | -          | 1         | 0.1+                | Cut of ditch   |
| 1168    | 1167    | Fill | Firm very dark grey silty clay with occasional small sub-rounded stones   | -          | -         | 0.1+                | Fill of [1167] |

| Context | Feature | Type  | Description   | Length (m) | Width (m) | Thickness/depth (m) | Interpretation      |
|---------|---------|-------|---|------------|-----------|---------------------|---------------------|
| 1169    | 1169    | Layer | Firm dark grey brown silty clay with occasional small sub-rounded stones and patches of sand                                      | -          | -         | 0.1                 | Layer of [1169]     |
| 1170    | 1171    | Fill  | Compact dark grey silty clay with occasional small rounded stones   | -          | --        | 0.3                 | Fill of [1171]      |
| 1171    | 1171    | Cut   | Circular shape in plan with concave sides and a moderate BOS to a concave base extends past LOE.                                  | 1.77       | 0.88      | 0.1                 | Cut of possible pit |
| 1172    | 1172    | Cut   | NW-SE oriented oval shape in plan with shallow concave sides and a gentle BOS to a flat base extends past LOE.                    | 1+         | 1+        | 0.15                | Cut of pit.         |
| 1173    | 1172    | Fill  | Compact very dark grey clay with occasional small clay fragments  | -          | -         | 0.15                | Fill of [1172]      |
| 1174    | 1174    | Cut   | NW-SE oriented amorphous shape in plan with moderately shallow concave sides and a gentle BOS to a concave base extends past LOE. | 1+         | 1+        | 0.05                | Cut of pit          |
| 1175    | 1174    | Fill  | Compact very dark grey clay with lenses of iron panning   | -          | -         | 0.05                | Fill of [1174]      |
| 1176    | 1176    | Cut   | NE-SW oriented sub-oval shape in plan. Unexcavated extends past LOE   | 1+         | 1+        | 0.1+                | Cut of possible pit |
| 1177    | 1176    | Fill  | Firm very dark grey silty clay with occasional small sub-rounded stones   | -          | -         | 0.1+                | Fill of [1176]      |
| 1178    | 1179    | Fill  | Compact dark grey clay  | -          | -         | 0.16                | Fill of [1179]      |
| 1179    | 1179    | Cut   | Sub-circular shape in plan with shallow sloping sides and a gentle BOS to a concave base  |            |           | 0.16                | Cut of [1179]       |
| 1180    | 1181    | Fill  | Compact dark grey clay  | -          | -         | 0.12                | Fill of [1181]      |
| 1181    | 1181    | Cut   | Sub-circular shape in plan with shallow sloping sides and a gradual BOS to a concave base   |            |           | 0.12                | Cut of [1181]       |
| 1182    | 1183    | Fill  | Compact dark grey clay  | -          |           | 0.18                | Fill of [1183]      |
| 1183    | 1183    | Cut   | NE-SW oriented linear with shallow straight sides and a gradual BOS to a flat base  |            |           | 0.18                | Cut of [1183]       |
| 1184    | 1185    | Fill  | Compact dark grey silty clay  | -          | -         | 0.18                | Fill of [1185]      |
| 1185    | 1185    | Cut   | N-S oriented linear with shallow straight sides and a gradual BOS to a flat base  |            |           | 0.18                | Cut of [1185]       |

| Context | Feature | Type | Description  | Length (m) | Width (m) | Thickness/depth (m) | Interpretation |
|---------|---------|------|--|------------|-----------|---------------------|----------------|
| 1186    | 1187    | Fill | Compact dark grey silty clay   | -          | -         | 0.14                | Fill of [1187] |
| 1187    | 1187    | Cut  | NW-SE oriented linear feature with concave side and a gradual BOS to a flat base |            |           | 0.14                | Cut of [1187]  |



**Figure 1:** Site location outlined in red

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|           |  |
|-----------|--|
| Site Code | BOGS 16                                      |
| Scale     | 1:10,000,000<br>1:1,000,000<br>1:25,000 @ A4 |
| Drawn by  | F Johnson                                    |
| Date      | 09/02/2018                                   |

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**Figure 2:** Plan of site outlined in red showing monitored and excavated areas in blue. Base mapping provided by the client



**Key**

**Plan areas**

- Phase 1 - Late 1st - Early 2nd C
- Phase 2 - 2nd C
- Phase 3 - 3rd - 4th C
- Phase 4 - 4th C
- Modern
- Modern drainage
- Undated
- Limit of Excavation

|           |            |
|-----------|------------|
| Site Code | BOGS 16    |
| Scale     | 1:350 @ A4 |
| Drawn By  | F Johnson  |
| Date      | 09/02/2018 |

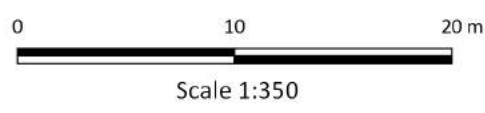
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**Figure 3: Phased plan of site**



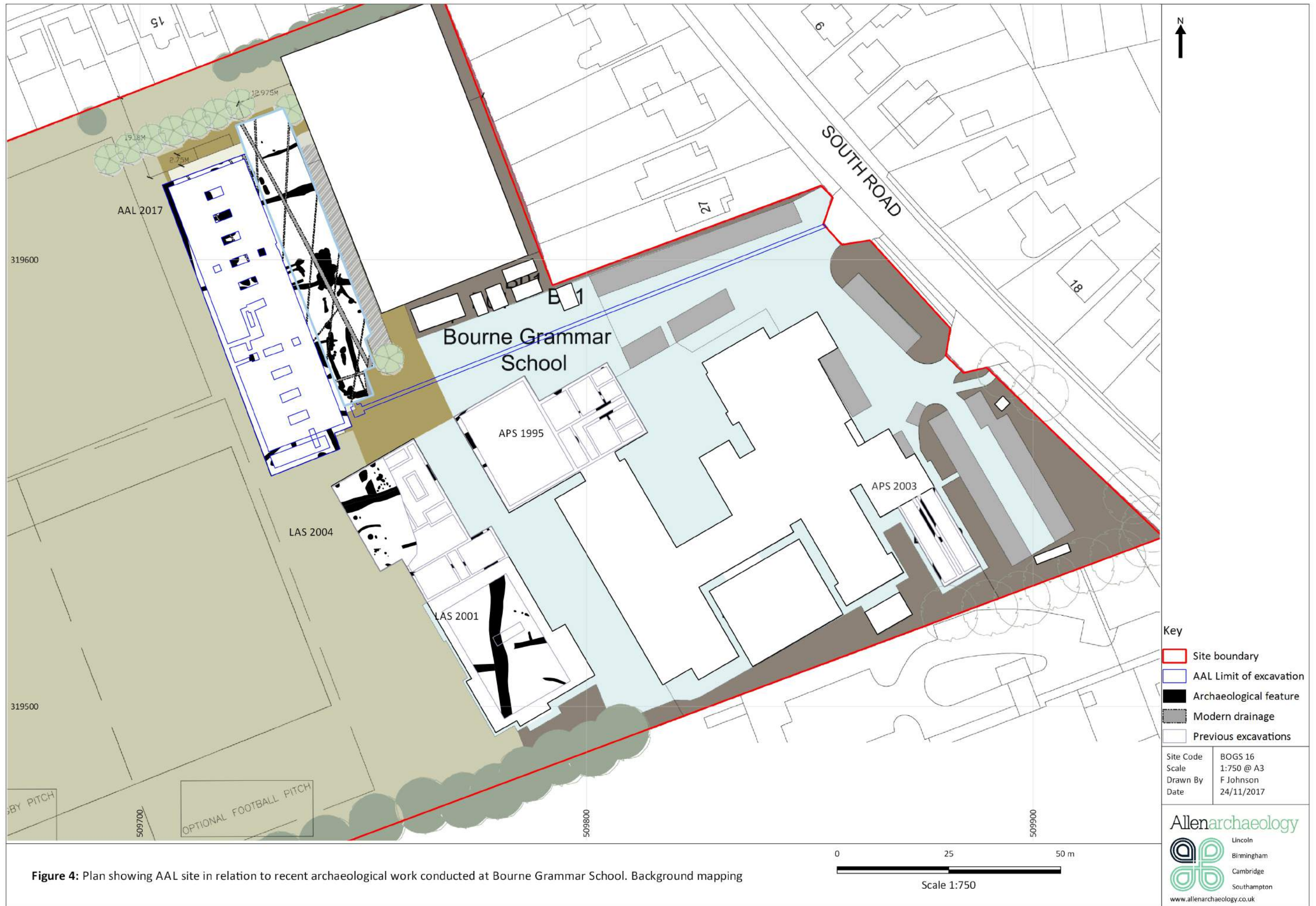


Figure 4: Plan showing AAL site in relation to recent archaeological work conducted at Bourne Grammar School. Background mapping

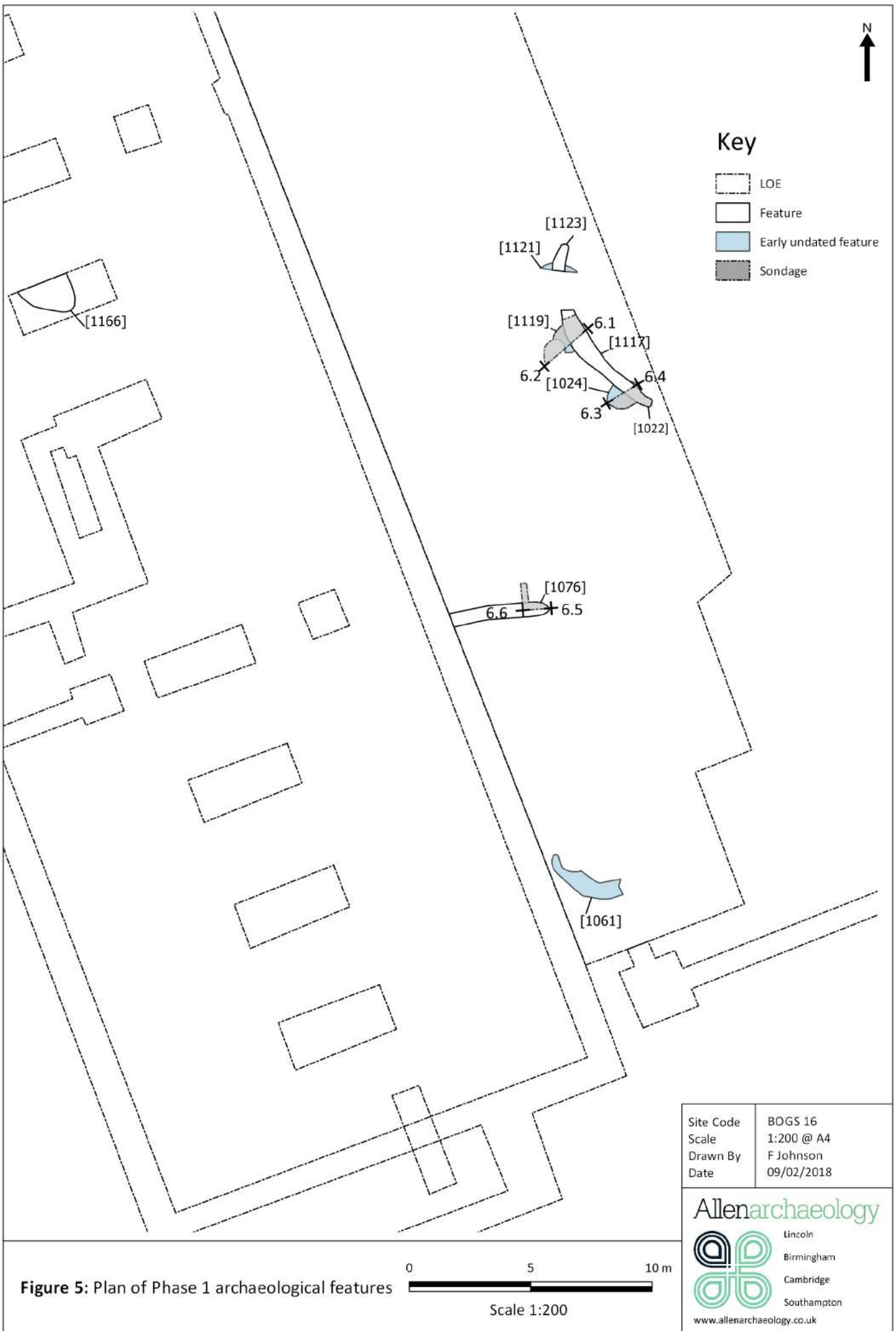
- Key
- Site boundary
  - AAL Limit of excavation
  - Archaeological feature
  - Modern drainage
  - Previous excavations

|           |            |
|-----------|------------|
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| Scale     | 1:750 @ A3 |
| Drawn By  | F Johnson  |
| Date      | 24/11/2017 |





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### Key

-  LOE
-  Feature
-  Early undated feature
-  Sondage

|           |            |
|-----------|------------|
| Site Code | BOGS 16    |
| Scale     | 1:200 @ A4 |
| Drawn By  | F Johnson  |
| Date      | 09/02/2018 |

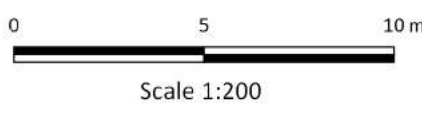
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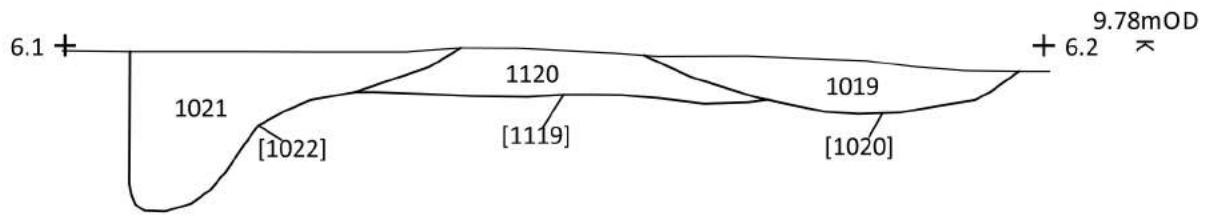
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**Figure 5:** Plan of Phase 1 archaeological features

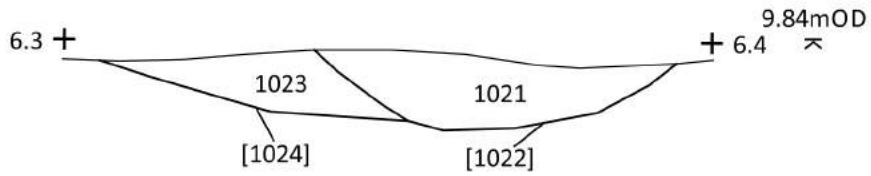




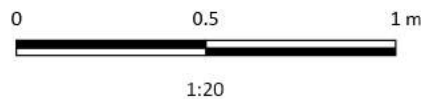
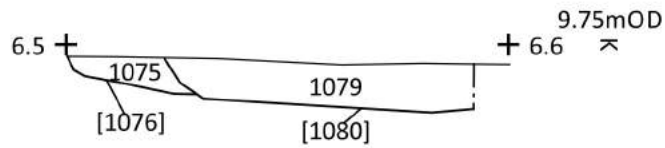
Northwest-Facing Section



Southeast-Facing Section



North-Facing Section

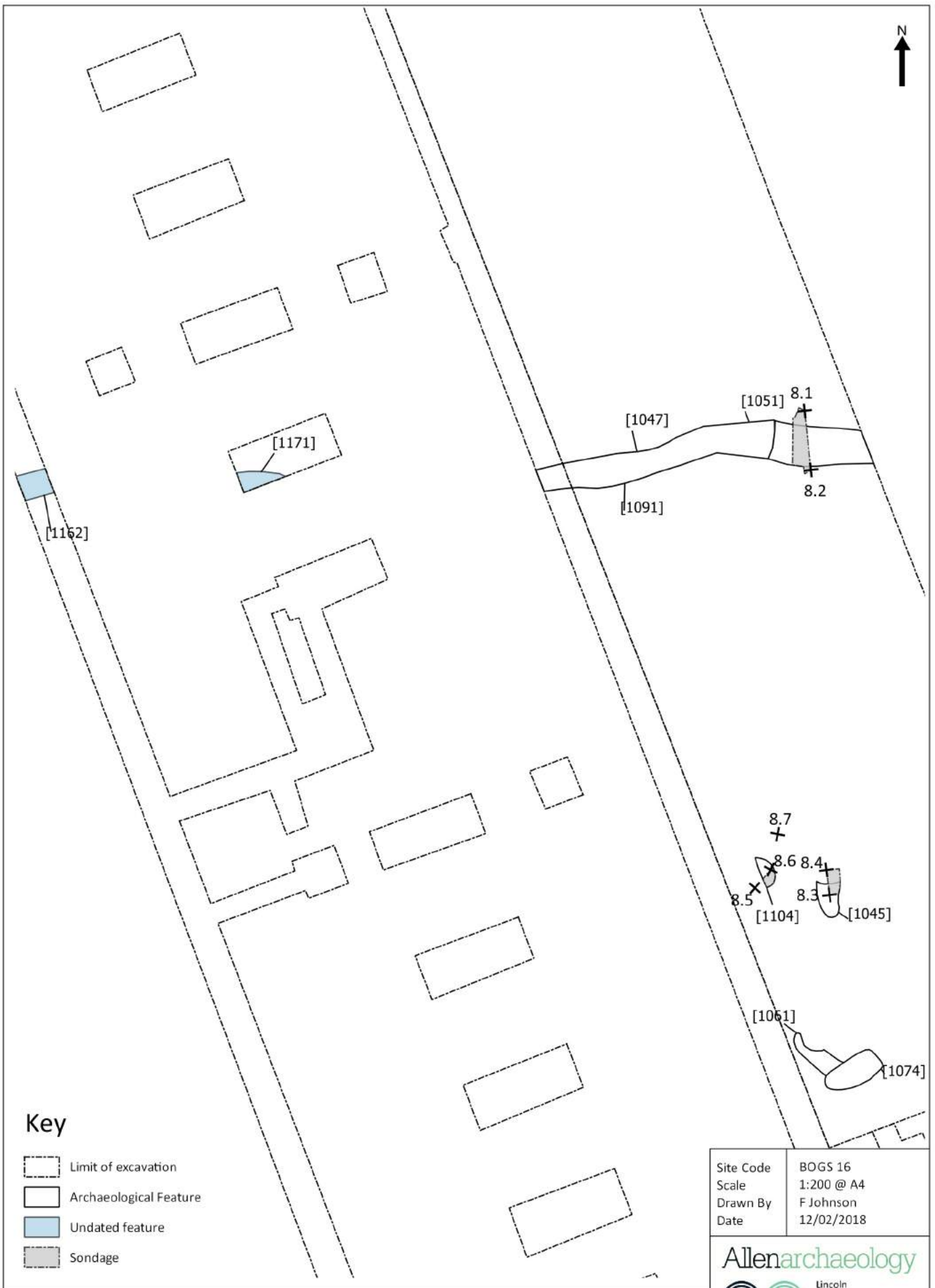


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|-----------|-------------|
| Site Code | BOGS 16     |
| Scale     | 1:20 @ A4   |
| Drawn By  | M Stockdale |
| Date      | 19/02/2018  |





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Figure 6: Phase 1 sections



**Key**

-  Limit of excavation
-  Archaeological Feature
-  Undated feature
-  Sondage

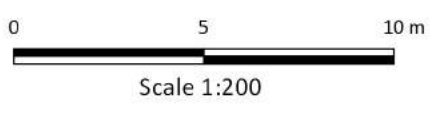
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| Drawn By  | F Johnson  |
| Date      | 12/02/2018 |

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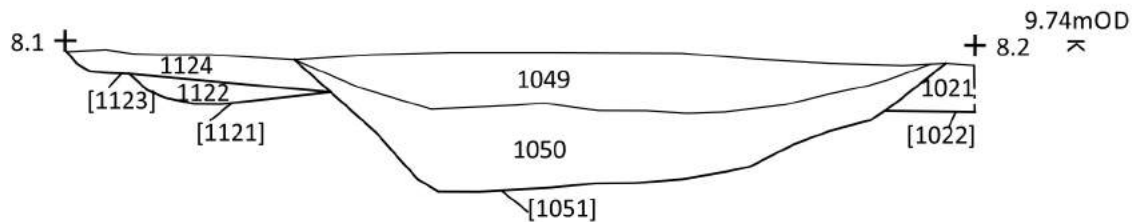
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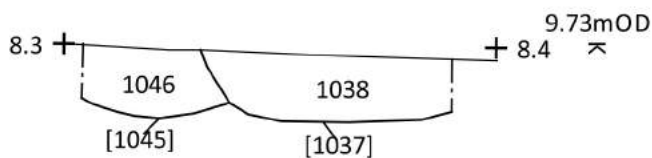
**Figure 7: Phase 2 plan**



West-Facing Section

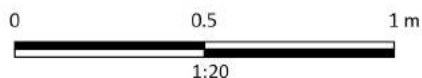
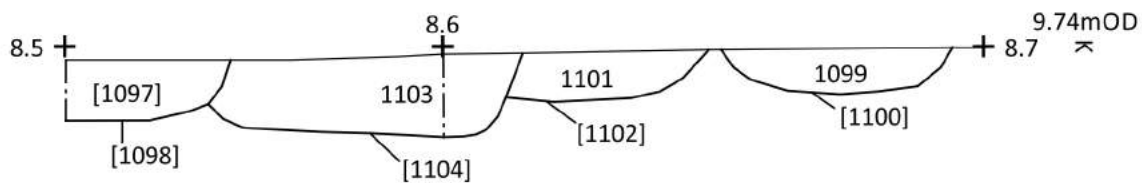


East-Facing Section



Southeast-Facing Section

East-Southeast-Facing Section



|           |             |
|-----------|-------------|
| Site Code | BOGS        |
| Scale     | 1:20 @ A4   |
| Drawn By  | M Stockdale |
| Date      | 19/02/2018  |

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Figure 8: Phase 2 sections

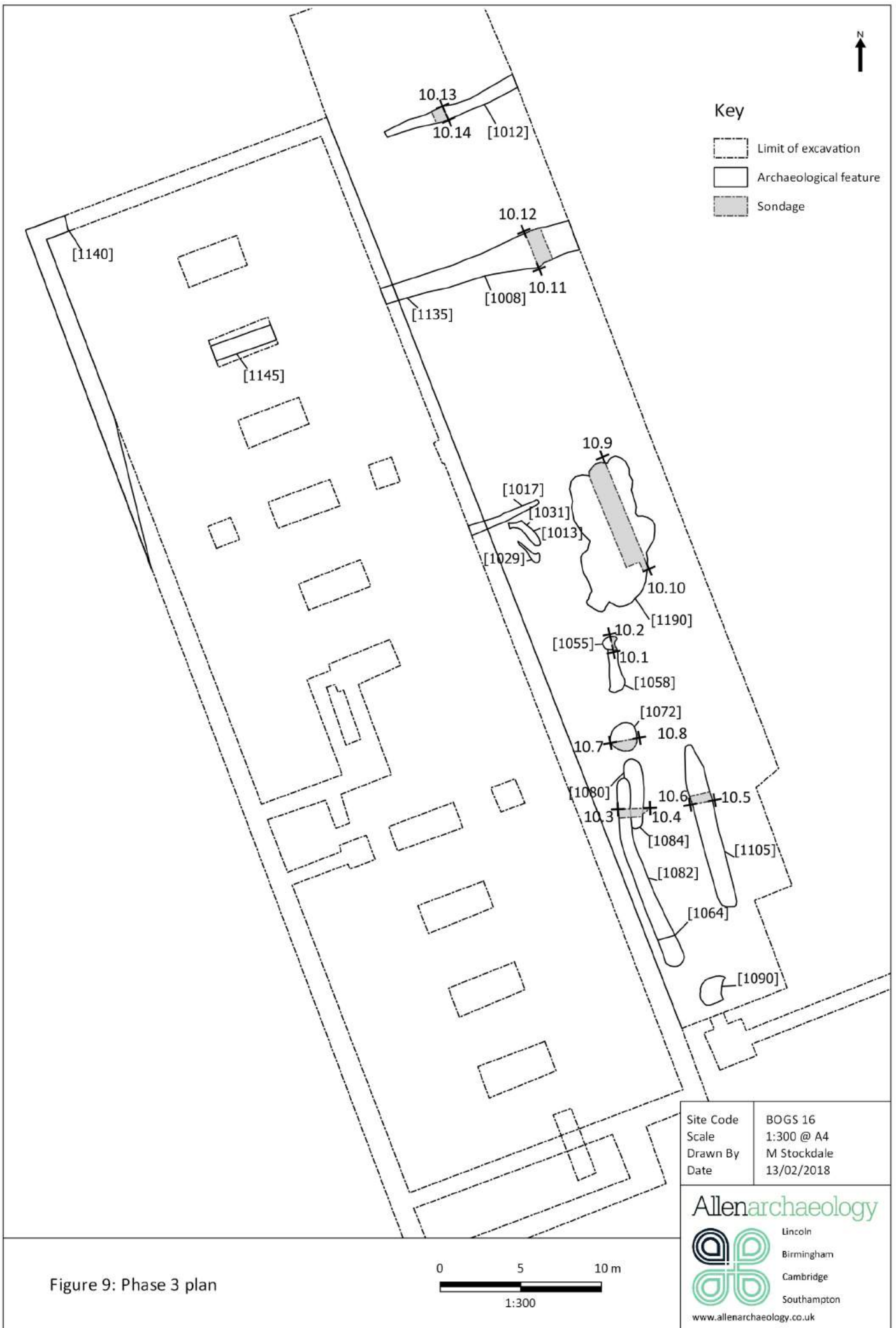
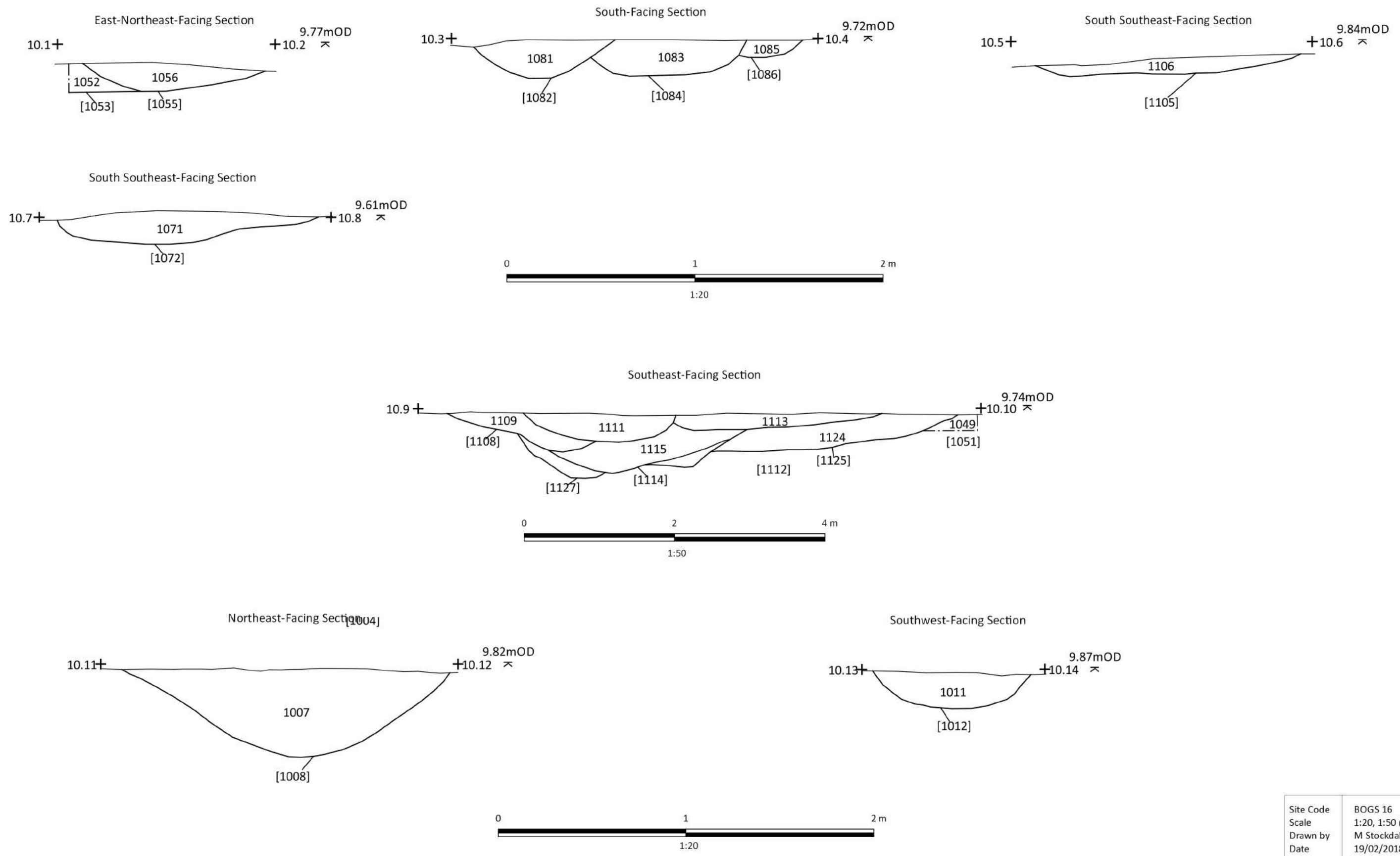


Figure 9: Phase 3 plan



|           |                 |
|-----------|-----------------|
| Site Code | BOGS 16         |
| Scale     | 1:20, 1:50 @ A3 |
| Drawn by  | M Stockdale     |
| Date      | 19/02/2018      |

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Figure 10: Phase 3 sections

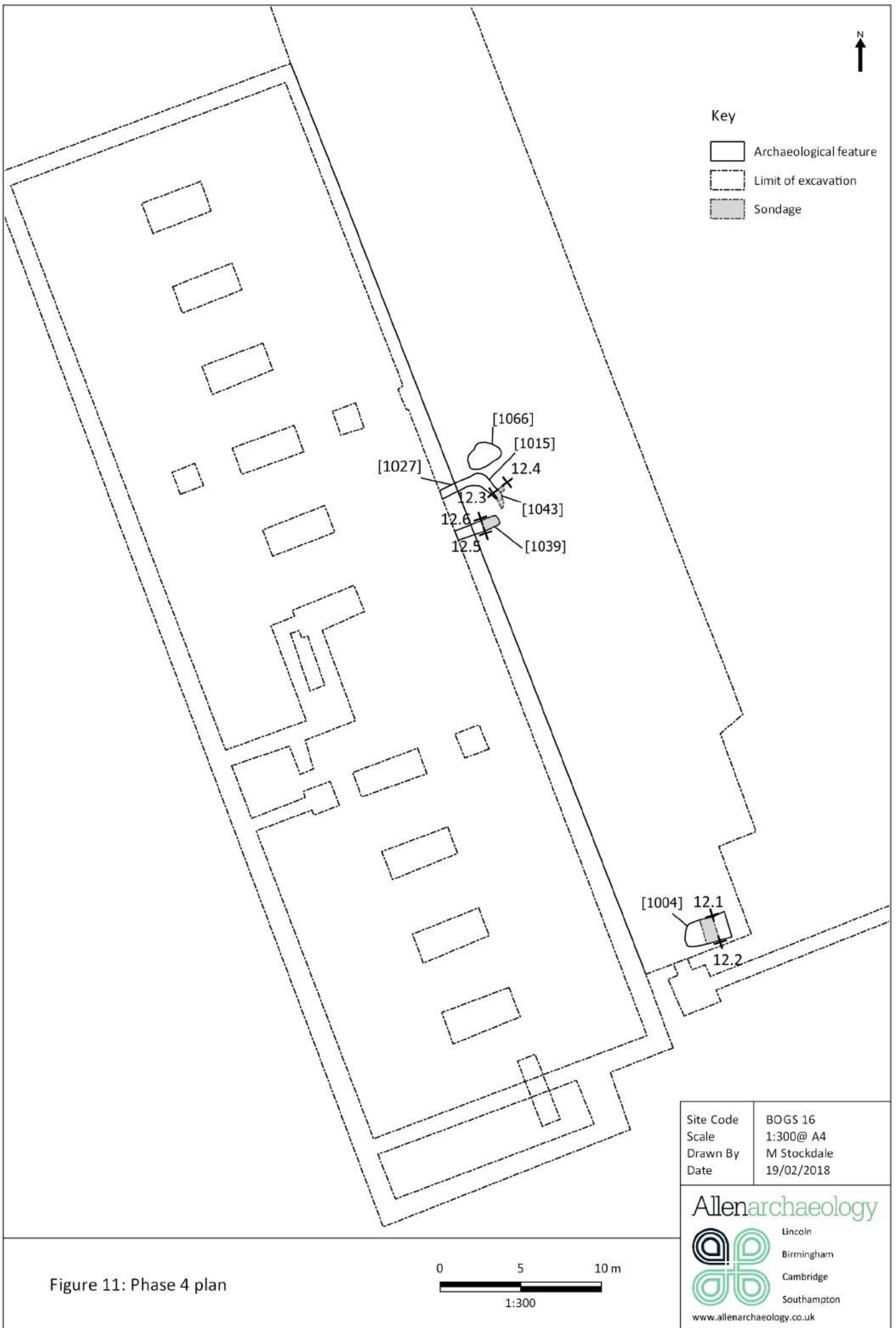
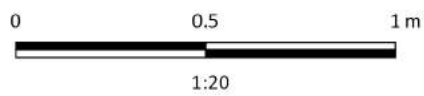
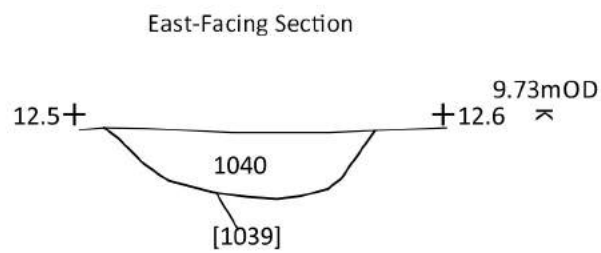
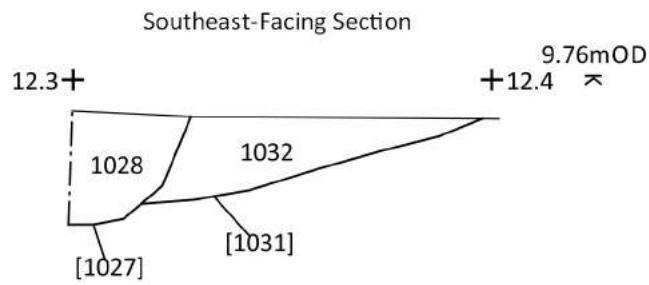
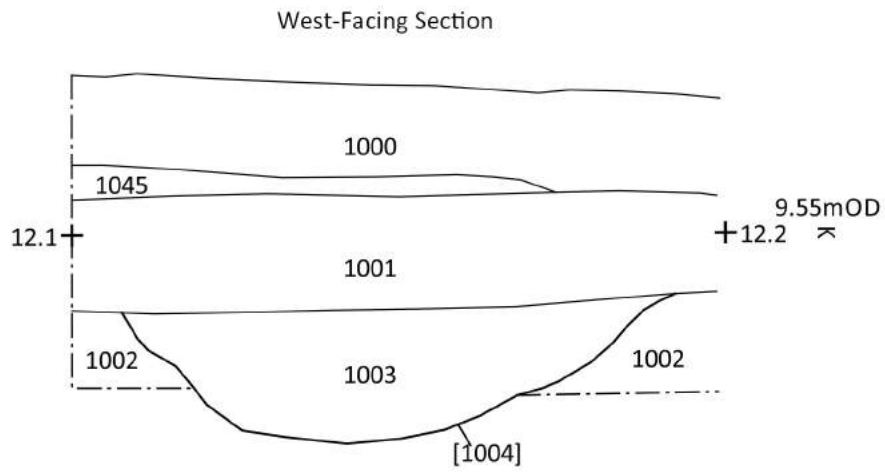


Figure 11: Phase 4 plan

0 5 10 m  
1:300



|           |             |
|-----------|-------------|
| Site Code | BOGS 16     |
| Scale     | 1:20 @ A4   |
| Drawn By  | M Stockdale |
| Date      | 19/02/2018  |

Figure 12: Phase 4 sections

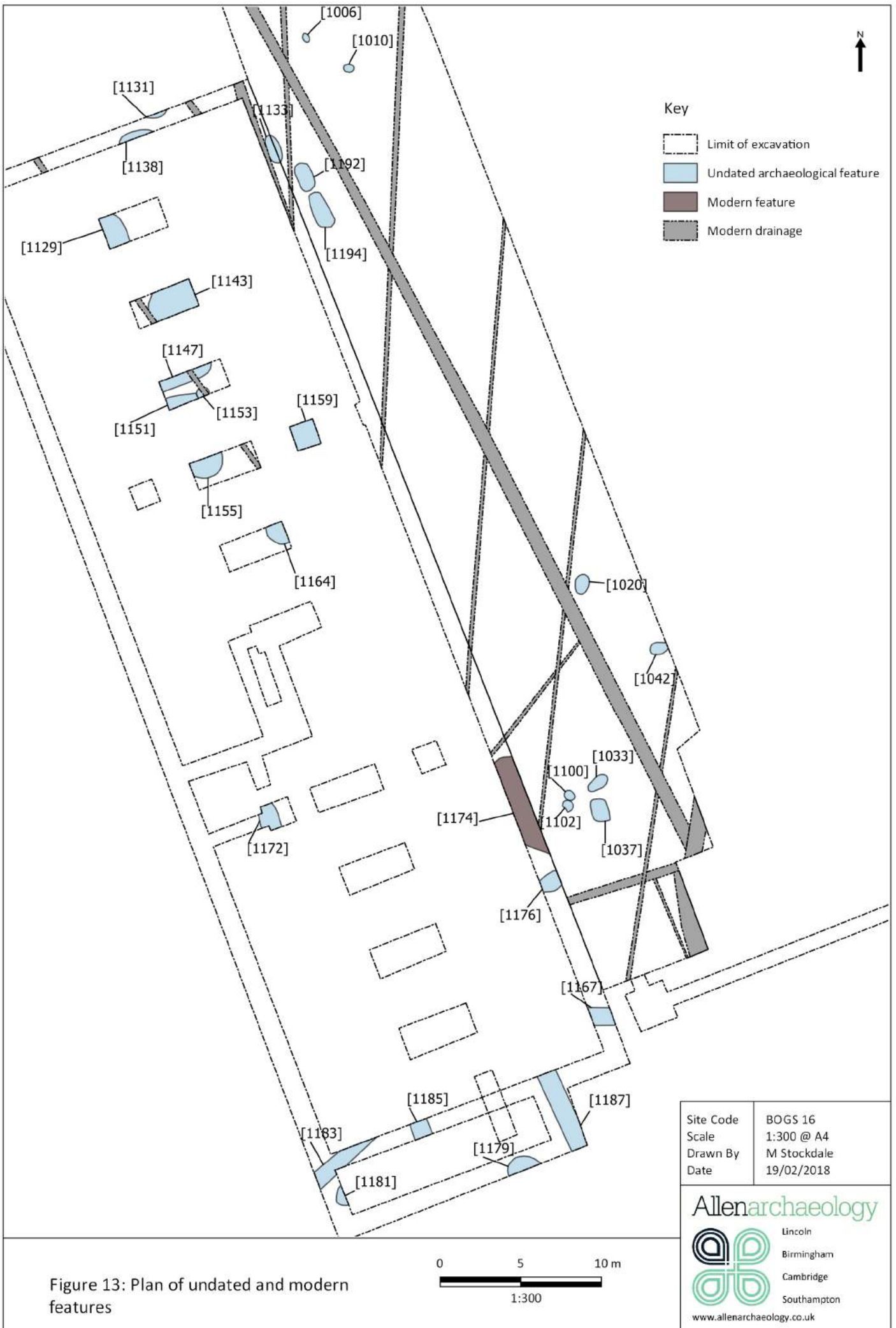


Figure 13: Plan of undated and modern features





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