

Archaeological Investigations at Godson's Lane, Napton-on-the-Hill, Warwickshire



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Status: Revision 2: 18 December 2018
Date: 9 November 2018
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Project reference: P4938
Report reference: 2519
Oasis id [fieldsec1-332871](#)

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Archaeological investigations at Godson's Lane, Napton-on-the-Hill, Warwickshire

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Illustrations by Carolyn Hunt

Summary

A programme of archaeological investigations was undertaken at Godson's Lane, Napton-on-the-Hill, Warwickshire (NGR SP 46685 61146) for Prospect Archaeology Ltd on behalf of AC Lloyd (Homes) Ltd, in advance of residential development (reference 13/02690/FUL).

The site lies at the foot of a steeply sloping field, on the east side of the present village.

Following an initial evaluation, a programme of works was outlined to further investigate the medieval potential of the site. Twelve geotechnical test pits were monitored, then excavation of three discrete areas, followed by watching brief of three areas.

A Roman ditch was the earliest feature identified on site, overlain by a series of medieval field systems dating from the 12th to the 15th centuries. A late Saxon grave was discovered toward the north end of the site, conjectured to be a deviant burial due to its location outside any known consecrated ground.

A complex of stone buildings and metal surfaces dating to the 13th to 15th centuries was revealed toward the east side of the site, which was conjectured to be a farm rather than a manor, and surrounded by small fields defined by ditches across the wider site. The site was abandoned in the 15th century, and no further occupation of the site was apparent until probably the 18th century, when a new farm complex was built toward the north side of the site. This was abandoned and demolished by the 1887, after which the entire site reverted to unoccupied agricultural use.

Introduction

A programme of archaeological investigations was undertaken at Godson's Lane, Napton-on-the-Hill, Warwickshire (NGR SP 46685 61146 for Prospect Archaeology Ltd, on behalf of AC Lloyd (Homes) Ltd, in advance of residential development for which planning permission has been granted by Stratford-on-Avon District Council (reference APP/J3720/A/14/2217115).

The development site was considered to include heritage assets and potential heritage assets, the significance of which might be affected by the application. The archaeological mitigation followed an initial stage of evaluation, also undertaken by Worcestershire Archaeology (Walsh 2014).

The project conforms to the generality of briefs and for which a project proposal (including detailed specification) was produced (Prospect Archaeology 2016). The project also conforms to the *Standard and guidance: Archaeological excavation* (ClfA 2014a); *Standard and guidance: Archaeological watching brief* (ClfA 2014b).

The project was led by Peter Lovett (BSc Hons., ACIfA), assisted by Jamie Wilkins (BA Hons.), Nina O'Hare (BA Hons.). Morgan Murphy (BA Hons; MA), and Richard Bradley (BA Hons., MA; ACIfA). The project manager responsible for the quality of the project was Tom Vaughan (BA Hons. Dunelm; MA; MCIfA). Illustrations were prepared by Carolyn Hunt (BSc Hons.); Elizabeth Pearson (MSc; ACIfA) contributed the environmental report, Laura Griffin (BA Hons.); PG Cert; ACIfA) contributed the finds report. Matilda Holmes contributed the animal bone report. Gaynor Western (Ossafreelance) contributed the human bone report.

1 Aims

The aims of the investigations were to:

- characterise the nature of the 12th-13th century settlement remains revealed during the evaluation;
- to further examine the stone walled buildings revealed in the evaluation;
- to establish whether there was any earlier phase/s of settlement.

2 Methods

2.1 Documentary research

No desk-based assessment has been undertaken for the site, because an assessment of the historic environment of Napton-on-the-Hill was undertaken as part of a larger assessment of local service villages in Stratford-upon-Avon district (AOC 2012). Prior to fieldwork commencing a search was made of relevant online sources including *A Vision of Britain Through Time*, *British History Online*, *old-maps.co.uk* and Warwickshire Museum's *Take the Timetrail* website (WM 2014).

2.2 Fieldwork strategy

A detailed specification was prepared by Prospect Archaeology (2016) and approved by Stratford District Council.

Fieldwork was undertaken in three stages between 12 December 2016 and 18 April 2018. The first stage was a watching brief monitoring the excavation of geotechnical test pits (TPs 1-12). The second stage involved the excavation of three areas across the site (Areas 1-3). The third stage consisted of a watching brief to monitor a service trench, a modern house platform, and to extend an area around a burial discovered during the excavation phase (Areas 4-6). Area 1 measured 20m x 20m, Areas 2 and 3 measured 25m x 25m. The original extent of Area 2 was restricted by overhead power cables in the south-west corner, but was eventually extended to the north and east in response to the archaeology revealed. Similarly, Area 3 was extended in the north-west corner by an extra 100m² in response to the archaeology revealed.

Area 4 was a narrow trench measuring 1.3m wide by 29.4m long. Area 5 was an area of approximately 200m², while Area 6 was approximately 85m². The location of the trenches is indicated in Figure 2.

Deposits considered not to be significant were removed under archaeological supervision using a 360° tracked excavator, employing a toothless bucket. Subsequent excavation was undertaken by hand. Clean surfaces were inspected and selected deposits were excavated to retrieve artefactual material and environmental samples, as well as to determine their nature. Deposits were recorded according to standard Worcestershire Archaeology practice (WA 2012).

Aerial photographs were taken during the main excavation stage of site works by Aerial-Cam on 13 and 30 June 2017.

The artefact recovery policy conformed to standard Worcestershire Archaeology practice (WA 2012; appendix 2).

2.3 Statement of confidence in the methods and results

Having undertaken the project the following comments may be made with regard to the methods adopted.

The limited time frame available for the excavation of Areas 2 and 5 meant that only a superficial understanding of the archaeological sequence was achievable. Furthermore, the small sample size of the excavation areas within the total site area meant that the full extent of the buildings identified in Area 2 and their immediate setting could not be fully determined, so conclusions are therefore tentative.

3 Topography, geology and archaeological context

The village of Napton on the Hill is located within the parish of the same name, c 2.7 miles to the south of Leamington Spa. The 1.3ha development site is located on the eastern edge of the village south of the Vicarage Road east of Godson's Lane and north of Fell's Lane. It comprises a sub-rectangular plot located on a south-eastern facing slope with the elevation falling from 119m AOD in the north to 106m AOD to the south. A public footpath runs through the site from Fell's Lane northward to Vicarage Lane. The ground rises steeply to the north. Prior to development it was pasture for livestock grazing.

The majority of the village is located on Charmouth Mudstone with Dyrham Formation (siltstone and mudstone) recorded to the northwest. No superficial deposits are recorded.

The background to the site has previously been presented in the evaluation report but repeated here for sake of completeness

Although no prehistoric settlement has been found in Napton, there is evidence to suggest that activity was taking place in the surrounding areas during this period. A small flint axe dating to the Neolithic was found during an archaeological evaluation Windmill Business Park to the west of Napton. A Bronze Age ring ditch and a round barrow, indicative of settlement and burial activity have been identified at Tomlow, to the north-west of Napton (WM 2014). Evidence of Roman activity at Napton has been restricted to a number of pottery findspots and the identification of Roman field system at Windmill Business Park on aerial photographs (WM 2014).

Early medieval activity on the area is limited to an Anglo-Saxon burial, found complete with a sword in 1927 during quarrying operations near the west end of Napton Hill (WM 2014). However despite the lack of archaeological evidence the settlement of Napton almost certainly dates to the early medieval period. The place-name is thought to derive from the Anglian '*cnæpp*' (hill-top; a short sharp ascent, a hillock) or possibly Old English '*hnæpp*' (a bowl) combined with the Old English '*tūn*' (an enclosure, farmstead or village) (KEPN 2014). Three estates are listed in the Domesday Book (1086), with a total population of 39 households (Martin 2003, 657, 660-1).

A priest was resident at Napton in 1086 and, although the Church of St Lawrence was constructed during the 12th century (Salzman 1951), the current building was probably not the first church in the parish. The street layout south of the church indicates that this part of Napton was laid out as a planned settlement along an axis of parallel roads, Howcombe Lane, High Street (leading up to the church) and possibly Godson's Lane, which are intersected by New Street/Dog Lane to the south and School Hill/Poplar Road to the north. The date of this planning has not been established although elsewhere in the region there was a phase of re-planning of settlements during the 12th century (Watt 2011, 179), which also correlate with the date of construction of the church at Napton.

A market was granted to Robert de Napton in 1321 to hold a Thursday market and an annual fair on the Assumption. In the 16th century there were a least four distinct manors, and large numbers of documents record property transfers through the medieval and early post-medieval periods (Salzman 1951). The village has always been large with reports of encroachments and cottages on the common fields in 1656 and 'above one hundred' houses recorded in 1730.

The earliest available mapping for the proposed site is the Ordnance Survey First Series 1":1 mile dating to 1834. Despite the small scale map it does appear to show a building on the site, although no boundaries apart from roads are illustrated. The next available map is the OS 1st edition 25":1 mile dating to 1887. This map shows the site much as it is now, with the exception of two ponds. These are illustrated on OS maps up to and including the 1955 edition. The next available map (1974) does not show them, indicating they had been filled during the intervening period.

Analysis of Environment Agency LiDAR data was commissioned by the Client (Malone 2013). This established the presence of earthworks of presumed medieval date across the proposed site. These included ridge and furrow on the western side of the site, along with a series of platforms and holloways/tracks across the rest of the site (Walsh 2014, 4-5).

The evaluation excavation comprised twelve trenches across the site. They revealed well-preserved archaeological remains dating to the medieval and later post-medieval periods, buried below earthwork remains of ridge and furrow. The medieval remains included ditches and at least one wall, as well as other extensive deposits. The later post-medieval features included a ditch and a number of stone surfaces associated with platforms, which may relate to a building illustrated on an 1834 Ordnance Survey map. An undated wall, which probably represents the remains of a structure or building, was also identified on the site.

The medieval finds assemblage formed a good group of 12th–13th century material. The dominance of cooking pot fabrics and forms is consistent with the date range and may also indicate a lower status settlement due to the scarcity of jug or pitcher forms, which would commonly be associated with an urban assemblage of this date.

The environmental samples demonstrated the use of clean, processed grain on the site, although it was not possible to make any detailed interpretation of arable farming methods or crop growing conditions. The good preservation suggests that there is the potential to recover some evidence of cereal crop use and processing elsewhere on the site.

The evaluation results correlated well with the LiDAR survey (Malone 2013). There were two main phases of occupation across the site: the first, of 12th to 13th century date of local, and potentially regional, significance with associated ridge and furrow to the north-west, followed by a second in the 18th to 19th centuries.

4 Results

4.1 Structural analysis

The excavation areas and features recorded are shown in Figures 2-9.

Context Group	Contexts	Feature Type
1	3016-3023, 3034-3035	Ditch
2	3052-3054	Grave
3	1026-1030, 1033-1035, 1041-1042	Pit
4	1016-1023	Ditch
5	1031-1032	Ditch
6	3003-3015, 3045, 3050-3051	Ditch
7	3036-3040, 6008-6009	Ditch
8	1024-1025	Ditch
9	1008-1014	Ditch
10	2030-2031, 2033-2036, 2091-2092	Ditch
11	2084-2087	Ditch
12	2041-2042, 2046, 2051, 2063, 2094	Structure
13	2070-2073	Structure
14	2065-2067	Structure
15	2012-2013, 2069	Structure
16	2055-2057, 2106-2107	Structure
17	2052-2054	Structure
18	2058-2061, 2083	Structure
19	2119-2120	Structure
20	2011, 2044, 2075, 2077	Structure
21	1036-1040, 1051-1052	Posthole
22	3024-3027, 3031-3033	Ditch
23	3028-3030	Ditch
24	3041-3044, 5021-5022	Ditch
25	3055-3056	Structure
26	1047-1050	Pit
27	5025-5028	Pit
28	1043-1046	Pit
29	6010-6011	Ditch
30	5032-5045	Structure
31	5011-5014, 5017-5018	Ditch
32	5004-5010-	Structure, Ditch

Table 1 List of Context Groups

4.1.1 Test Pits (Fig 2)

Test Pits 1 and 5 contained possible furrows, both running down the slope of the hill. These were considered to be the eastern extents of the furrow system, according to the LiDAR survey (Malone 2013). However, the later excavations suggested that these may have been ditches relating to an earlier field system, and that the furrows were only extant as earthworks and not present as cut features through the natural geology.

In Test Pit 3 a deposit containing occasional domestic material was observed, and when compared to the excavation results, the test pit can be seen to be close to two ditches. The observed deposits are likely to be associated with one or more of those.

Test Pit 6 contained part of a limestone wall, running north-west to south-east, and was likely to be associated with a 19th century building platform.

Test Pit 8 contained a north-west to south-east aligned ditch, of medieval date. This was located c 19m north-west of Area 2, and 3.5m south-west of a probable medieval wall found in Trench 6 of the evaluation (Walsh 2014). In Test Pit 9 a ditch terminus or pit was encountered, of probable medieval date. Test Pit 10 revealed two ditches, running parallel 6m to the north-west of the Phase 4 ditches identified in Area 1. These ditches possibly truncated the platform material seen in Area 1. Test Pit 11 was excavated through the housing platform in Area 2, and demonstrates the same sequence of deposits as seen in Sondage 3.

Test Pit 4 contained 0.57m of colluvial build-up. Test Pits 2, 7, and 12 contained no archaeology. Test Pit 13 contained modern dumping material, probably as backfill of a pond.

4.1.2 Phase 1: Natural deposits

The natural geology consists of a compact, light yellow, clay marl. This was occasionally sealed by a colluvial deposit, most notably in Area 3, where a dirty redeposited natural material was extant across the area, and was cut by all of the medieval ditches. Two flints were recovered from this deposit (3002).

4.1.3 Phase 2: 2nd-3rd century Roman

Area 3 (Figs 3, 9a,)

The earliest surviving human activity on the site was 3021 in Area 3, of which only a small amount was left following its replacement by ditch 3019. 3019 also truncated a small pit 3023 on its north-east side. It was 1.45m wide and 0.54m deep, with a shallow eastern slope and contained 2nd-3rd century Roman pottery. This in turn was replaced by 3017, which truncated its western edge and measured 0.91m wide and 0.43m deep. It had steeper sides and a more concave base than 3019, though all three ditches can probably be considered to be roughly contemporary, and may represent a Roman field system. Residual Roman pottery was recovered from various other features across the site, so there was clearly some activity from this period in the immediate area.

4.1.4 Phase 3 10th century

Area 3 (Figs 3, 9c)

In the north-west corner of Area 3, was a human burial (3052) (CG2) (Plates 24 and 25). This was of a robust male of around and was generally well preserved, with the exception of its skull which had suffered post-depositional damage. He was 30-45 years old and showed signs of having undertaken strenuous activity with the arms, as strong ridged/wrinkled muscular attachments were evident in the upper limbs and clavicle. There were also signs of slight developmental defects in the vertebrae and in the foot. The full osteological report is included as Appendix 2. The grave was aligned slightly off east to west, with the head at the western end. No evidence for a coffin was identified, and there were no grave goods, though 10th century pottery was recovered from directly underneath the pelvis. Its date was confirmed by the carbon 14 result from one of the bones of 1036 +/- 25 BP (AD970-1030); SUERC ref. 76923.

4.1.5 Phase 4 11th-12th century

Area 1 (Fig 5)

A number of small pits and a posthole were located within Area 1 (CG3). They generally consisted of shallow oval features, with simple depositional sequences of a single dumped fill of domestic material. Of these features, two pits (1028, 1030) contained material that was dated to the 11th-12th century, with two more tentatively phased to this period by form (1035, 1042). They were oval in shape, with flat bases, between 0.84m and 1.6m long, and between 0.09m and 0.23m deep.

Area 5 (Fig 3)

Watching Brief Area 5 in the north-east corner of the site revealed a number of pits, ditches and structures from various phases. For the majority of these features, surface finds were collected where possible, but excavation was minimal, so the phasing of these features is less certain than for other areas. An undated pit was truncated by ditch 5012, and is therefore tentatively dated to this phase. A pair of interconnecting pits (5026 and 5028) to the north of this ditch contained pottery on their surfaces but were otherwise unexcavated (CG27).

4.1.6 Phases 5a and 5b 12-13th century

Area 1 (Figs 5, 7)

In Area 1, in the south-western part of the site, a linear feature ran north-west to south-east (CG4). This feature (Plate 5) consisted of three successive ditch cuts, all with U-shaped profiles, showing the progression and reinstatement of this boundary. The earliest surviving incarnation, 1023, was 0.56m deep and 1.17m wide, and filled with a redeposited natural basal material, before a more humic fill was cast into the ditch to fill it up. This was then truncated by 1020, which measured 0.54m deep and 1.48m wide, and revealed a similar depositional sequence. The final ditch was 1017, 0.41m deep and 1.06m deep and contained a single fill.

The ditch that lay to the south, 1032 (CG5), did not emerge from the northern side of ditch CG4, suggesting that it may have been contemporary, though its profile was different, being much shallower and flatter.

Area 3 (Figs 3, 9a)

The ditches (CG6) that represent Phase 5a in Area 3 were uniformly shallow, between 0.09m and 0.22m, with gentle edges to concave bases. The exception was 3011 (Plate 21), which was 0.45m deep, and more vertically sided with a flat base. Three ditches yielded pottery dating to the 12th-13th century. If entirely contemporary, these ditches would have defined small land parcels, between 4-5m across.

The Phase 5b ditch (CG7) truncated part of the Phase 5a system, in the north-west corner of Area 3. It consisted of a pair of ditches (3038/3040) running north-east to south-west, and was truncated by a Phase 7 ditch at its southern end. These ditches were between 0.46m and 0.58m deep, and up to 1.52m wide, with steep sides and concave bases. This ditch continued into Area 6.

Area 5 (Fig 3)

A small ditch, 5012, ran north-east to south-west, possibly truncating a ditch (5018) of a different alignment. Ditch 5014 ran roughly north-west to south-east before turning to the south at its eastern end. It was truncated by ditch 5012, and had an indeterminate relationship with undated ditch 5018. The courses of these ditches (CG31) were not fully understood, but they were of similar dimension and orientation to the ditches that made up the field systems described above in Area 3.

4.1.7 Phase 6 13th-14th century

Area 1 (Figs 5, 7)

The two ditches in Area 1 from this phase ran parallel to each other, across the slope of the hill, with both 1014 (CG9) and 1025 (CG8) continuing for the length of the trench. Both ditches had relatively flat bottoms, in contrast to the U-shaped profile of the Phase 5a ditch.

Ditch CG8 contained just a single fill, yielding animal bone and medieval pottery, whilst ditch CG9 revealed a more complex depositional sequence. There were six fills, including a basal fill, two slumping events, two periods of probable intentional backfilling, and a final upper fill with evidence of domestic waste within it.

One pit in Area 1 was dated to this phase (CG26) (Plate 6). 1050 was an oval pit, up to 0.76m deep, truncated by a later, Phase 7 pit 1046 (CG28). It contained three fills, the uppermost being

charcoal rich, with the two lower fills consisting of redeposited natural, with occasional pottery and animal bone fragments.

Area 2 (Figs 4, 6, 8a, 8b, 9c)

The earliest features observed in Area 2 were located in the south-east corner, in a machine-dug sondage (Sondage 1) through building platform material. A possible relict subsoil (2032/2090) was cut by a small ditch CG10 (2031/2036/2092). This measured between 0.27m and 0.4m deep and up to 1.06m wide. It ran roughly north-south, and was sealed by a possible relict topsoil.

In Sondage 2, another machine dug slot, on the western side of Area 2, were a series of redeposited materials (Plate 10). Two possible colluvial layers were sealed by orange-grey silty clay deposits of made ground, for the construction of a building platform. The absence of a buried topsoil under the made ground suggests that it was cleared to create a terrace off the slope of the hill. The upper made ground layer was partially covered by the same rubble spread that covered the ditches in Sondage 1.

Sondage 3 was hand-dug through the middle of the building platform and revealed a sequence of made ground deposits and relict subsoil (2015, 2016, 2017). Two distinct layers of made ground were identified, above the relict subsoil. The upper deposit, 2015, contained domestic material dating from the 11th to 14th centuries, as well as some residual late-Roman pottery, and combined with (2016), were 0.29m thick. These deposits were observed in other parts of Area 2 when investigations were taken to a similar depth.

Once the building platform had been constructed, several buildings were raised upon it, the partially preserved walls and floors of which remained to the present day. Due to the limitations of the excavation, only a partial picture could be gained. Two distinct buildings could be discerned, with two possible boundary walls forming a central cobbled courtyard. These were serviced by culverts running downslope and beyond the eastern boundary wall (Plate 7).

Building 1 (CG12)

Building 1 was in the north-west corner of the platform and was a rectangular structure aligned north-east to south-west, measuring 7m x 6m (external wall edge to external wall edge). The western and southern walls were partially intact, whilst the eastern and northern walls had been completely robbed out, though the robber cut was well defined, and was likely to have closely matched the original construction cut. The western wall (2063) was 0.64m wide, and as elsewhere was constructed of roughly hewn limestone blocks of varying sizes, with no defined bonding material. It survived to a height of 0.05m. The wall returned in the south-east corner, forming the southern wall of the building. It also continued south-west (as 2051) for 3m in increasingly poor condition until it had evidently been robbed out (Plates 8 and 12). An estimation of its course can be made from the aerial photograph (Fig 6). Within the interior of Building 1 was floor 2094. This consisted of roughly hewn limestone cobbles, some on edge, and all bedded into the underlying mound material. The surface only survived in the south-west corner of the building.

Building 2 (CG13)

This was another rectangular building, with the western and northern walls surviving. Of similar construction to that described for Building 1, the walls petered out at the southern and eastern ends. They were 0.78m wide, and survived to a total height of 0.22m. The interior of the building was partially floored by 2070, which comprised pitched limestone. These were present only in the north-western corner of the building. Elsewhere there were stones laid irregularly, with a line of five larger limestone slabs aligned north to south. It was unclear whether these irregular stones were a floor surface, accumulative patched repairs, or if they were rubble building collapse, or an indeterminate combination of all three.

No robber cut was discernible for the walls, so it was not possible to ascertain the dimensions of the building. However, the building platform ended very near to this structure on both the southern and eastern sides, so a rough size of structure can be estimated to 4.5m x 5.5m (external edge).

Boundary walls and culverts (CG 14, 15, and 16)

Along the eastern side of Area 2 was boundary wall 2066 (CG14). This was one of the best-preserved stretches of wall, and ran north-east to south-west. It was 0.8m wide, and was at least 11m in length. It was again built from roughly hewn limestone with no visible bonding material. At its northern end it became more truncated until it was no longer visible. At its southern end it terminated just short of Building 2, though no robber cut was discernible. Culvert CG15 (2013) (Plate 16) appeared to truncate the wall at this southern end, though it is quite probable that they were contemporary and the construction of culvert CG15 was part of the original layout. The culvert was aligned east to west, and possibly ran parallel to the northern wall of Building 2. It was a simple construction of a single course of roughly hewn limestone either side of a channel. The base of the culvert was not lined, but there was some evidence that it had been stone capped.

To the north of Area 2 was another probable boundary wall 2056 (CG16) (Plates 13-16). This ran roughly north-west to south-east, and may have joined up to wall CG14 if either of them had survived into the north-east corner of the area. This was probably the best-preserved section of wall, standing to 0.5m high in places, and emerging through the topsoil to be partially visible on the surface. It was 0.8m wide, and ran for 8.6m north-west to south-east. It was truncated by a robber cut (2096), which hindered the understanding of some relationships. The construction level for the wall was not entirely clear, due to the excavation restrictions, and the construction cut was not fully revealed. The north face of the wall was less well constructed, suggesting it wasn't intended to be on view, indicating different ground levels either side of the wall. There was a build-up of deposits on both sides, with a possible underlying feature observed in plan on the north side of the wall. Deposit 2105 may have been laid down fairly rapidly following the construction of the wall, to mask the lower courses. The deposits that built up on the southern side of the wall appeared to post-date the abandonment of the building complex, if all aspects of it were contemporary.

A rubble deposit (2009) was observed running roughly parallel to the south side of wall CG16, and was initially considered to be a wall itself until investigation indicated otherwise. Rather it is now considered to be collapse of one or both walls, over some of the build-up deposits that formed following the construction of wall CG16.

The floors (CG20)

Aside from the floors within Building 1 and 2, three areas were cleaned to investigate potential surfaces. 2075 and 2077 were located on the southern edge of the complex, and consisted of roughly hewn limestone cobbles. Coverage was occasionally patchy, highlighting the issue with distinguishing between *in situ* stone surface and rubble building collapse. Further to this, within surface 2077 were a number of large limestone slabs that initially appeared to be part of a wall but upon investigation could not be definitively assigned a form and were probably building debris. Floor 2011 was better preserved and clearer in definition. Its relationship with wall 2066 was established, with the surface lying above the lowest, wider, foundation course of the wall.

On the western side of the building, close to wall 2051, was an area of burning (2044) (Plates 8 and 11). Originally considered to be a hearth, further investigation did not allow it to be confidently described as such. Stones which at first seemed to suggest a structure were eventually seen to be rubble, and all that was left was a patch of heat-affected earth and stone. It was sampled for hammerscale, though this returned a negative result. During the medieval period, the practice was for a central fire pit, with the chimney not becoming prevalent until the early post-medieval period. There are examples of chimneys in the medieval period, such as at Boothby Manor House (TCM 2018), though this example was within the part of the camera block, rather than a kitchen or main hall. The chimney extends out the back of the building in the form of a massive buttress, and has a formal fireplace. As no structure could be discerned internally, and nothing in the form of the building suggested an external chimney, this heat-affected area was probably the result of a post-abandonment fire.

Area 4 (Fig 4)

This area was a narrow trench to the north-east of Area 2, and revealed a possible wall and stone surface directly under the topsoil (Plate 26). No dating was recovered but the proximity to the Area 2 structures suggests that they may have been contemporary.

Area 6 (Fig 3)

An unexcavated ditch was observed in Area 6, running down the slope of the hill from north-west to south-east (CG29). It appeared to terminate then restart with a gap of just 0.5m, so it may be a false terminus. This ditch aligned with a deposit observed in Test Pit 1 just to the north-west, so is assumed to be a continuation of it. This feature truncated an earlier Phase 5 ditch.

4.1.8 Phase 7 14th-15th century

Area 1 (Figs 5, 7)

Three post holes (CG21) in Area 1 were excavated (1038, 1040, 1052). Only 1040 had a stratigraphic relationship with any other feature, cutting the top of ditch 1014 from Phase 6. They formed a north-east to south-west alignment, spaced 4.3m to 5.5m apart. They were consistently circular with a flat base, and measured between 0.4m and 0.48m in diameter. They may have formed a fence line, though no ditches from this phase were identified in Area 1.

Pit 1046, previously discussed as cutting 1050, was the other feature from this phase in Area 1. The lowest fill of pit 1046 contained a large amount of probable building rubble, which had been intentionally dumped. The dating from this pit, along with the rubble, makes it likely that it was associated with activities relating to the building complex i in Area 2.

Area 2 (Figs 4, 6)

CG 10 (Plate 9), a ditch in Area 2, was cut by an east to west aligned ditch CG11 (2087), from which a large assemblage of medieval pottery was recovered. A poorly defined possible pit or ditch was observed in the section of Sondage 1, also cutting the relict topsoil. Both of these features were sealed by a stony layer, probably partly derived from the demolition of the buildings immediately north.

The robber cut [2040] that truncated Building 1 contained material dating to this phase, and lots of the artefacts that were recovered from the demolition layers overlying the structures that made up the building complex were similarly 14th-15th century in date. These layers were identified during manual cleaning in order to reveal *in situ* structural remains.

Further deposits dating to this period were identified as having built up against the walls to the north of Area 2 (CG16).

Area 3 (Figs 3, 9b)

The northernmost linear feature (CG22) from Phase 7 in Area 3 consisted of two ditches, one (3033) being a reinstatement of the other (3027) (Plate 22). They were aligned down the slope, north-west to south-east. 3033 was 0.34m deep and 1.68m wide, with a U-shaped profile and a depositional sequence of clay basal fill followed by a more intentional dumping of material containing domestic waste. 3027 was 0.5m deep and 1.1m wide, again with a U-shaped profile. It also had a similar depositional sequence.

A smaller ditch (3030: CG23) along the northern edge of 3033 contained pottery dated to the 11th-13th century. This followed a similar alignment to 3033 and cut a Phase 5a ditch at its western end.

The southern ditch (3044: CG24) in Phase 7 had a steep sided cut with a rounded base, upon which were intentionally deposited a number of large stones, presumably to aid drainage (Plate 23). The basal fill was a firm blue-grey clay, indicative of low energy waterborne deposition. One of the upper fills contained pottery dating to the 14th to 15th century.

Area 5 (Fig 3)

Ditch 5022 was observed as being the continuation of CG24 from the north-west in Area 3, though it was not excavated. It seemed to truncate ditch 5031 that ran perpendicular to it, though it was not a relationship that was tested by hand excavation.

4.1.9 Phase 8 17th-19th century

Area 1 (Fig 5)

Overlying the ditches and pits in the western half of Area 1 were two layers, 1007 and 1003. 1007 was a heavy clay deposit, similar to the natural, but with cultural inclusions, suggesting it was a base for the overlying platform material 1003, or redeposited natural, as part of the platform construction. 1003 was a compact blue-grey clay material, between 0.1m and 0.24m thick, heavily mixed with abundant charcoal fragments, and moderate burnt clay and stones, pottery sherds, and other domestic waste. It was observed in the western half of the area, emerging approximately 15m in from the western edge. It formed a probable building platform, part of which could still be identified in the landscape prior to excavation of Area 1. A 1m x1m sondage was hand dug through the deposit, following which the remainder was machined off.

Cutting through this layer was construction cut 1006, for wall 1005. This was, in effect, the rubble foundation remnants of a wall, heavily truncated. It ran north-west to south-east, along the same alignment as ditch 1017/1020/1023. Whether or not this was accidental or a continuation of an existing boundary it is not possible to discern. If it were to be, then no evidence for a building would sit atop the platform. Even if this boundary wall hypothesis is rejected, there is little else to suggest a building here. No return of wall 1005 was identified, nor were any floor surfaces.

Area 2 (Figs 4, 6)

At least two structures from Area 2 are thought not to be contemporary with the Phase 6 buildings; wall 2053 (CG17) and culvert 2060 (CG18) (Plates 17 and 18). Wall CG17 was built partially upon wall CG16, though on a slightly different alignment, being north-north-east to south-south-west. It was constructed on top of the deposits built up against the south side of wall CG16 at its western end. This segment of wall only survived to one course high (0.25m) and ran for 6m with a width of 0.58m. It may well have effectively continued as wall CG16 at its eastern end, if CG16 was still extant at that point.

Culvert CG18 ran parallel between the eastern length of wall CG16 and rubble wall collapse 2009. It probably post-dated 2009, hence why that deposit was a narrow stretch of material. This culvert was constructed of large limestone slabs, measuring up to 0.8m by 0.5m by 0.05m thick, laid on edge forming the sides. It was 0.34m wide and was observed to run for at least 1.3m in length. It was not observed in a slot against the western end of wall CG16, and had become a shallow unlined channel at the eastern extent of the wall.

A further culvert (2120) CG19 ran parallel on the northern side of wall CG16, observed at its eastern end. This was 0.4m wide and 0.16m deep, and was capped with limestone slabs. It is uncertain if this was contemporary with wall CG16, but it was sealed by a deposit built up against the side of the wall. If the depositional sequence observed at the western end of this wall were consistent then this culvert would be part of the same construction phase.

A small posthole (2082) was dug through the side of wall 2063. This was undated but was probably a post-medieval feature that truncated the wall following the complete abandonment of the building. It contained a small fragment of carbonised timber post. No other such features were identified in Area 2, but it was probably part of a fence line associated with agricultural activity.

Area 3 (Fig 3)

The construction cut for a 19th century building was identified in the south-east corner of Area 3 (CG25). This was associated with a stone surface that was excavated during the evaluation (Walsh 2014), and probably relates to the building on the 1834 Ordnance Survey map.

Area 5 (Fig 3)

A large ditch lay on the southern edge of the excavation area. This seemed to be covered at the western end by stone surface 5008, possibly acting as a causeway across the ditch (CG32) (Plate 27). At the other end of the area, a stone building was identified (CG30). This comprised a series of walls, floors and culverts, though as it was revealed under watching brief conditions only a rapid record was made (Plates 28 and 29). The pottery recovered during the cleaning of the surfaces and removal of rubble backfill was of a 17th-18th century date.

4.1.10 Phase 9: Modern deposits

The site was covered by a subsoil and topsoil, though the survival of some walls to such a height meant that stonework was visible on the surface.

4.2 Artefact methodology, by Laura Griffin

The finds work reported here conforms with the following guidance:

- finds work by ClfA (2014c),
- pottery analysis by PCRG/SGRP/MPRG (2016),
- archive creation by AAF (2011),
- museum deposition by SMA (1993).

All hand-retrieved finds were examined, identified, quantified and dated to period. A *terminus post quem* (*tpq*) date was produced for each stratified context. These dates were used for determining the broad date of phases for the site. All information was recorded on a Microsoft Access database.

Artefacts from environmental samples were scanned and found to be consistent with the rest of the assemblage. They are not included below, nor included in Table 2 quantification.

The assemblage recovered from the site totalled 1118 finds weighing 11.02kg (see Tables 2 and 3). The majority of material could be dated to the medieval period and later, but small amounts of Roman, post-medieval and modern material were also identified. Level of preservation was fair, with finds displaying moderate levels of surface abrasion, although material from building platform contexts was generally smaller in size and more abraded than that from other excavated features, thereby reflecting the higher level of disturbance usually associated with surfaces.

The pottery was examined under x20 magnification and referenced as appropriate by fabric type according to the Warwickshire medieval and post-medieval pottery type series (Soden and Ratkai 1998). It was not possible to consult the physical type series and so identifications have been made using the basic published descriptions for the type series. As a result, it was not possible to group all sherds by specific fabric type, particularly those which were predominantly quartz tempered. Therefore, it was decided to quantify the assemblage by broad 'group type' to give an overview of the assemblage composition, and then also refer to specific fabric types where known (Table 3).

material class	material subtype	object specific type	total	weight (g)
bone		pin/awl	1	1
ceramic		pot	850	8372
ceramic		floor tile	1	101
ceramic		pipe	20	72
ceramic		roof tile	22	441
ceramic		unidentified cbm	9	50
ceramic		brick	4	193
ceramic	fired clay		44	189
coal			18	45
glass		vessel	4	21
metal	iron		4	16
metal	iron	buckle	1	1
metal	iron	key	1	20
metal	iron	knife	2	36
metal	iron	nails	85	837
metal	iron	object	1	5
metal	iron	arrowhead	1	17
metal	copper alloy	button	2	7
metal	copper alloy	strap end	1	1
metal	copper alloy	strip	1	3
metal	copper alloy	coin	1	1
metal	copper alloy	book fitting	1	1
metal	lead	window came	1	11
metal	lead	object	1	9
metal	lead	nails	2	5
shell			2	15
slag		?hearth bottom	4	146
slag		smithing slag	14	64
stone	flint		6	32
stone		building material	13	276
stone		whetstone	1	32
		TOTAL	1118	11020

Table 2: Quantification of the assemblage

4.2.1 Pottery

4.2.1.1 Roman

Material of Roman date amounted to 16 sherds of pottery weighing 255g. The sherds came from excavation Areas 1-3 and the majority were residual. However, a gully (context 3003) and ditch (context 3018) in Area 3 could be assigned a Roman *tpq* date. Diagnostic sherds and fabric types present suggested a 2nd-4th century date for this activity.

The assemblage broadly followed the established pattern for rural assemblages with the majority of sherds being of locally produced oxidised and reduced coarsewares. Non-local wares consisted of a fragment of samian ware (context 3039), two fragments of Oxfordshire colour-coated ware (contexts 1029 and 3042) and a well-preserved mortarium rim of Mancetter-Hartshill production (context 2015). This was of hammerhead form and notable for having wavy diagonal lines painted in red slip around the rim exterior.

4.2.1.2 Medieval

A total of 781 sherds weighing 6.935kg were identified as being of medieval date, accounting for 92% of the pottery assemblage (Table 3). The level of preservation was variable dependent on the feature type from which the pottery was retrieved. In general, sherds from ditches and pits were less abraded than those from the building platforms, where the pottery had been incorporated into hardcore/rubble, (i.e. redeposited).

Fabrics

The following is intended to provide an overview of the medieval pottery assemblage by general fabric group type.

Group C. Calcareous tempered wares (fabric-type groups following Soden and Ratkai 1998)

A total of 323 sherds were calcareous tempered and sub-dividable into three main types: limestone-tempered (CL), oolitic (CO) and shell-tempered (CS), all being from non-local sources (i.e. limestone and shell-tempered wares being of south-east Midlands/Northamptonshire production and the oolitic from the Cotswolds region). Diagnostic sherds indicated that cooking pots/jars dominated the group, although two bowl and two jug forms were also identified.

This group included some of the earliest sherds wares from the site, in the form of St Neots-type ware (fabric CS01 and CS04) and Cotswolds oolitic ware (fabric CO01). Diagnostic sherds of the former consisted of jars of mid-10th–mid-11th century date and a straight-sided bowl datable to the 11th century, whilst the earliest cooking pots of Cotswolds oolitic ware could be dated to the mid-11th century.

In general, the remaining shell-tempered fabrics (CS02 and CS04) could be dated 12th-13th century, as could the limestone-tempered sherds (fabric CL01). It is unlikely that calcareous wares were being used on the site after the early 14th century.

Group G. Grog-tempered wares

Just 13 sherds of grog-tempered ware were identified, all of 11th-12th century date. Diagnostic form sherds and exterior sooting indicated the majority to have come from cooking pot forms.

Group RS. Reduced unglazed sandy wares

The majority of the 114 sherds (777g) identified were of local production, with Warwickshire black ware (fabric RS01) and Warwickshire grey wares (fabrics RS02 and RS021) dominating. Many of the sherds showed traces of use in the form of sooting and/or blackening on the exterior surface, indicating them to have come from cooking pot forms. Few diagnostic sherds were present but those that were could be paralleled with forms within the assemblage from Bridge End, Warwick (Ratkai 1990).

Sherds of this group were of 13th–14th century date in the main, although it is possible that a small number could be slightly earlier.

Group SC. Sandy calcareous wares

Only 12 sherds were thought to be of this fabric group, all being small and abraded, and none were diagnostic.

Group SQ. Sandy wares, mainly quartz-tempered

A total of 150 sherds weighing 1478g were identified as being of this group, which includes products of two major industries – Chilvers Coton (fabric SQ30) and Brill-Boarstall (fabric SQ40).

Chilvers Coton 'C' ware (39 sherds; fabric SQ30) included both glazed and unglazed examples, the majority with the wash/slip-like surface finish characteristic of this fabric type (Soden and Ratkai 1998, 84). Few diagnostic sherds were present but two jars, two jugs, a flared bowl and a possible dripping pan could be identified using parallels from Bridge End, Warwick (Ratkai 1990, 45; Mayes

and Scott 1984, 125 and 142). These forms and general production span indicate a 14th-15th century date for sherds of this fabric type.

Sherds of Brill-Boarstall ware (10 sherds; fabric SQ40) were few and far between. All had a streaky green glaze characteristic of this ware type and all looked to be from jug forms.

Sherds of local Warwick sandy ware (fabric SQ02) cooking pot forms were, once more, reminiscent of those seen within the assemblage from Bridge End, Warwick, where they were dated 12th-13th century (Ratkai 1990, 39). One sherd displayed a distinctive band of wavy combing, characteristic of this ware type, whilst another had finger impressions running around the rim to give a 'frilled' appearance.

A further distinctive sherd with a band of wavy combing was thought to come from a Coventry sandy ware pitcher (fabric SQ211) and was one of very few Coventry wares identified within the assemblage.

Group Sg. Sandy glazed wares

Sandy glazed wares (25 sherds) formed a very small proportion of the assemblage. Diagnostic sherds came primarily from jug and jar forms. Few sherds could be identified to a specific fabric type but included two from a Deritend ware jug (fabric Sg12) decorated with characteristic painted white slip lines and two from jar/jug forms of Brill ware (fabric Sg20), which displayed stabbed and incised patterns.

Group WW. White wares

White wares amounted to 21 sherds, the majority of which were identified as Chilvers Coton 'A' ware (fabric WW01). Diagnostic sherds of this fabric type consisted of jug, jar and cooking pot forms, all of which could be dated mid-13th-14th century.

Other notable sherds included two of Stamford ware (fabric WW20), one of which was identified as the handle from a mid-11th-mid-12th century pitcher of fabric A/B (Jane Young pers comm).

Remaining identifiable sherds included four from green-glazed jugs of South Staffordshire-North Warwickshire production (fabric WW012) and one from a cooking pot thought to be of early Potterspurty ware (fabric WW10) due to the smoke-blackened external surface.

Group StR. Stone/rock-tempered wares

All five sherds were small and abraded and although none were diagnostic, they are all likely to be from cooking pots.

Group SLM. Sandy oxidised, late medieval wares

The late medieval wares of this fabric group (49 sherds weighing 865g) were easily distinguished from those of earlier date due to their well-fired, oxidised fabrics and wider range of specialist forms, such as flared bowls, cups and large jars/cisterns. Dating of these fabrics spans the 14th-16th centuries, although the majority of identifiable forms are 15th century onwards. It was notable that sherds of this group were primarily retrieved from cleaning and abandonment layers and may, therefore, provide an end date for activity on the site.

The majority were Late Chilvers Coton 'C' ware (fabric SLM10) and Late medieval/early post-medieval transitional ware (fabric SLM41). A small quantity of Late medieval red ware was also identified (fabrics SLM12 and SLM14).

Group MP. Midlands purple

This highly fired, hard fabric, with purplish brown surfaces and grey core (25 sherds) is generally datable to the 15th-mid 17th century. However, identifiable forms, including jugs and jars similar to examples from Bridge End, Warwick (Ratkai 1990, 46) indicate that no sherds of later than 16th century were present. As with the sherds of Group SLM, those of Midlands purple largely came from cleaning and abandonment layers.

Group MB. Midlands blackware

A single sherd from a cup or tyg of early Midlands blackware (fabric MB01) was identified and could be dated late 16th-17th century.

Discussion of medieval pottery assemblage

The assemblage was of a domestic nature with a relatively narrow range of forms and fabrics identified. Fabric types indicated a fairly even split between sandy/quartz tempered wares (53%), a high proportion of which were of Warwickshire production, and calcareous wares (47%), all non-local, and primarily from the Cotswolds and south-east Midlands region. No foreign imports were identified.

Range of forms

For the size of assemblage, a notably small number of sherds were diagnostic. However, viewing these identifiable forms alongside the fabric types present and evidence of use, it was possible to surmise that the majority of sherds were from unglazed cooking pot forms, supplemented by a small number of glazed tablewares, primarily jugs. This narrow range of forms is common to most assemblages of 11th–14th century date and does not necessarily reflect site status. Indeed, contemporary documentary evidence points to cooking pots, pitchers and jugs having varied use, fulfilling a variety of functions (McCarthy and Brooks 1988, 102–112). Ethnographic studies (Blinkhorn 1999, 43), and evidence seen in medieval assemblages form elsewhere (Bryant 2004, 332), would indicate that a cooking pot could be used for many different purposes but in general, each individual vessel would have one specifically designed function. There might, therefore, be a number of cooking pots in use at any one time, all serving different purposes (e.g. for cooking or storage of particular foodstuffs or liquids).

From the mid–late 14th century onwards, there was a marked decrease in the number of ceramic cooking pots identified. Once more, this change appears to be part of a widespread shift with documentary evidence indicating that the ceramic cooking pot was largely replaced by brass vessels in most households around this time (Le Patourel 1968; Bryant 2004, 290). This was in part due to increased availability but also a general increase in household income following the Black Death. By the late 14th/15th century it is thought that even the poorest households were equipped with a metal cooking pot. At the same time more specialist ceramic vessels increase in range and number. This change was also due in part to the rise in income which resulted in a change in eating habits and in turn, cooking methods (e.g. Groups SLM and MP).

Evidence of use

The only surviving evidence of use in the assemblage was in the form of blackening and or sooting, primarily on cooking pot/jar sherds but also noted on a small number of other vessel types including bowls and a possible dripping pan.

Dating

The low presence of diagnostic sherds noted above also made dating of the assemblage problematic. As a result, much of the site dating has had to be based on production dates of known fabric types and, therefore, only generalised date ranges could be assigned to the majority of features. These date ranges indicated activity on the site from the later 10th/11th century onwards, with a noticeable peak in sherd quantity between the 11th-13th centuries, with 50% of all datable contexts falling into this range. As noted above, sherds of typically later medieval/early post-medieval fabrics or transitional wares were largely recovered from abandonment layers, indicating that site buildings were no longer in use by the later 15th–16th century.

4.2.1.3 Post-medieval and modern

Thirty-three sherds of post-medieval and twenty of modern pottery were retrieved from the site. The post-medieval sherds were primarily of later Midlands blackware (fabric MB02) and slipwares (fabrics SLPW01 and SLPW02)). Identifiable forms in the blackwares consisted of large

bowl/pancheons and cups, whilst the slipwares included press-moulded dishes and cups. Smaller amounts of English stoneware (fabric STE02) and manganese-mottled ware (fabric MANG) were also present. All could be dated mid-17th-18th century.

The modern sherds largely consisted of modern glazed wares (fabric MGW) of late 18th-19th century date, including transfer-decorated china and creamware.

fabric class	fabric class name	total	weight (g)
CL	Calcareous limestone-tempered ware	66	556
CO	Calcareous oolitic limestone-tempered ware	114	760
CS	Calcareous shell-tempered wares	143	1279
G	Grog-tempered wares	13	104
RS	Reduced unglazed sandy wares	114	777
SC	Sandy calcareous wares	12	45
SQ	Sandy wares, mainly quartz tempered	150	1478
Sg	Sandy glazed wares	25	260
WW	White wares	21	209
StR	Stone/rock-tempered wares	5	27
SLM	Sandy oxidised, late medieval wares	49	865
MP	Midlands purple	25	419
MB	Midlands blackwares	15	540
SLPW	Slipware	12	335
MANG	Manganese mottled ware	1	5
STE	English stoneware	2	54
MGW	Modern glazed wares	17	174
MO	Mocha ware	1	4
	Unidentified	49	226

Table 3: Quantification of the medieval and later pottery by fabric class

4.2.2 Other finds

4.2.2.1 Ceramic building material

Despite the evidence for a fairly extensive building/complex on the site, very little ceramic building material appears to have survived, with just 22 pieces of late medieval/early post-medieval roof tile and a single floor tile fragment retrieved.

The floor tile (context 3042) was plain with a yellow glaze and measured 25mm thick. It was well-fired throughout, indicating a date of 14th-15th century. A further nine fragments of undiagnostic ceramic building material and four highly abraded pieces of late post-medieval/modern brick were also retrieved.

4.2.2.2 Fired clay

A total of 42 pieces of fired clay came from Areas 1-3. The majority were undiagnostic fragments and where stratified could be dated to the medieval period by associated finds. A small number of fragments appeared vitrified and/or shaped, suggesting them to be pieces of hearth lining. Most of these came from ditch and pit fills in Area 1, suggesting a possible hearth in this vicinity.

4.2.2.3 Iron slag

Iron slag from the site amounted to 18 pieces, all but one piece coming from Area 1. This was all smithing slag, four pieces with a dished profile (cleaning layer context 1003), indicating smithing hearth bottom. The location of this slag in the same area of the site as the pieces of fired clay

thought to be hearth lining (see above), further strengthens the argument for a hearth having been located here.

4.2.2.4 Metalwork

Iron

Iron dominated the metalwork assemblage totalling 96 objects weighing 933g.

Arrowhead

A socketed arrowhead identified as of broadhead-type with short, slightly curving barbs, was identified from a layer (context 2006). It was 75mm in length, indicating it was most likely used for hunting rather than warfare (Borg 1991, 80). The form and associated finds indicated it to be of medieval date.

Nails

A total of 86 iron nails were retrieved from the site, almost all of which showed signs of use (i.e. bent or curved shank or flattened head). They were of varying size and form but the majority appeared to be residual, mainly coming from Area 2 abandonment layers with a late medieval/early post-medieval *tpq*. It is, therefore, assumed that most, if not all, of the nails in the assemblage originally came from the buildings and other structures on the site.

Knife

The blade of an iron knife (from a rubble layer 2009 overlying a floor surface 2011; in Area 2) was identified as of a straight-backed curved blade type consistent with the 12th–13th century date indicated by the associated pottery. The knife was heavily corroded with no tang surviving, making identification to a specific form difficult.

In addition, a further possible blade with a very rounded, blunt tip, rather than a defined point was identified (layer context 2006). Due to high levels of corrosion, a more definitive identification was not possible.

Key

A heavily corroded iron key was found in the fill of a 19th-century wall construction cut in Area 3 (context 3055). The short shank and notched oval bow indicated a medieval date (cf a Winchester example; Rees *et al* 2008, 335).

Buckle

A small circular-framed buckle measuring 15mm in diameter was retrieved from the cleaning layer above the courtyard area in Area 2 (context 2003). This could be dated 15th–16th century based on similar examples from Winchester (Rees *et al* 2008, fig 117, no 1436).

Unidentified

A thin strip of iron with a rivet at one end was retrieved from the deposit of late 16th–17th century date (context 1004).

Copper Alloy

The assemblage included just six copper alloy objects: a small, illegible clipped coin (unstratified), two post-medieval buttons (contexts 2000 and 5046), an undiagnostic strip (context 2003), a medieval strap-end (context 2007), and a book fitting/clasp (context 2006).

Strap end

The strap end was undecorated but identified as being of the relatively common 'single sheet folded widthways' form and the dating could not be further narrowed.

Book fitting

The book fitting was small (25mm across), triangular-shaped and folded over with three rivets. Similar examples from Winchester have been dated 15th-16th century (Rees *et al* 2008, 287).

Lead

Four pieces of lead (all residual) included a twisted window came fragment of medieval date (context 2058) and a two small nails (context 2007). The remaining fragment was too small to be identified (context 2076).

4.2.2.5 Glass

Three undiagnostic fragments of glass from two vessels were associated with medieval finds. The first fragment was colourless and highly abraded (context 2094). Although the glass vessels of this period were commonly green or blue-green, examples of 13th-14th century colourless soda glass are not unusual (Tyson 2000, 14), and the dating of the pottery from this feature was consistent with this date. Two very fine and pale green fragments from a second vessel were associated with a 14th-15th century *tpq* date. A fragment of post-medieval bottle glass was also retrieved from Area 5 (context 5009).

4.2.2.6 Clay pipe

A total of 20 pieces of clay pipe were retrieved, 12 of which were undiagnostic stem fragments. The remaining pieces came from four bowls, all from a demolition layer (context 5046). Three of these bowls could be dated, two on the basis of distinctive moulded decoration. The first had a mulberry on the bowl, a relatively common decoration type in the second half of the 17th century (Oswald 1975, 96). The other decorated bowl was more elaborate having wheatsheaves running the length and the Warwickshire symbol of the bear and ragged staff on one side. A similar example has been noted from St Mary's Grove, Stafford (Higgins 1987, 608, fig 94, no 12) and could be dated to the early 19th century. The remaining bowl was plain, apart from milling around the rim, but its form indicated a mid-17th century date (Oswald 1975, 40, fig 4, G, no 22).

4.2.2.7 Bone

A bone pin/awl was retrieved from a cleaning layer (context 2007). Although incomplete, it could be seen to have a flat top similar to an example from Winchester which was dated 13th-14th century (Rees *et al* 2008, 375).

4.2.2.8 Stone

Nineteen pieces of stone were retrieved. These included 13 fragments of building material, mainly roof tile, six pieces of worked flint and a whetstone/hone.

Whetstone/hone

This object was made of a fine-grained siltstone (Derek Hurst pers comm) and was small in size (65mm in length) with a hole drilled through one end for suspension (context 2007). The noticeably short length of the hone may indicate that it was previously broken and the end re-polished to enable continued use. There is a distinctive notch on the top of the object, directly above the hole, although this doesn't appear to have resulted from wear due to a lack of any adjacent abrasion in the suspension hole. Such perforations are relatively common on small hones of medieval and post-medieval date (cf Rees *et al* 2008, 326). Due to this example having been retrieved from a cleaning layer, it was not possible to further narrow this dating.

4.2.3 Discussion of the artefacts by phase

The finds assemblage from this site well illustrates the pattern of consumption common to this area of Warwickshire during the medieval and early post-medieval periods. This is particularly evident through the changing fabrics and forms of the pottery assemblage.

Phase 2 Roman 2nd-3rd century

Two sherds of greyware and a piece of flint were the only finds retrieved from deposits of Roman date (context 3018). All remaining Roman pottery within the assemblage was residual within later phases.

Phase 3 10th century

Material from this phase consisted of five small and abraded sherds of pottery and two fragments of fired clay from the fill of the grave in Area 3 (context 3053; CG2). Although all sherds were of the same St Neot's-type ware (fabric CS04), they appear to have come from at least two, possibly three different vessels. The largest sherd appeared to be a slightly sagging base, most likely from a small rounded jar form. The small size of these sherds and their location directly underneath the body, would suggest that they pre-date the burial.

Phase 4 11th-12th century

Just 17 sherds of pottery and one fragment of fired clay were identified within contexts of this phase.

The pottery included a residual sherd of Roman Oxfordshire ware (context 1029). The remaining group was too small for any useful interpretation, although it was noted that the pottery assemblage was dominated by calcareous fabrics including Cotswolds oolitic ware (fabric CO01) and a fine shelly ware with clay pellets (fabric CS03). Other pottery consisted of a single sherd of reduced sandy ware (fabric class RS).

Phase 5 12th-13th century

Material from this phase amounted to 77 finds weighing 663g, largely medieval pottery but also including fragments of fired clay, ceramic building material and one piece of smithing slag. Finds mainly came from ditch fills and occupation layers and the level of residuality appeared to be low.

Medieval pottery (59 sherds) was mainly non-local calcareous/shelly fabrics (69%). However, it can be seen that from the 13th century, vessels of locally produced sandy/quartz fabrics started to appear in greater number (25% of the medieval pottery from this phase). As expected at this date, cooking pot/jar forms dominated the group, with a single St Neots type-ware bowl being the only different form present (fabric CS01; context 5015). Likewise, glazed sherds were few and far between, with just two identified (fabric Sg; context 1031). Four sherds of residual Roman pottery were also present.

Phase 6 13th-14th century

This phase saw an increase in the quantity and diversity of material. A total of 158 finds came from contexts of this date, accounting for 14% of the whole assemblage, and included pottery, fired clay, smithing slag, building stone and metalwork, including the arrowhead, book-fitting and the possible knife.

Although the non-local calcareous and shelly wares still formed the larger proportion of the pottery assemblage (41%), the majority of these were now residual, coming largely from made ground layers and mixed ditch fills. As the proportion of calcareous wares coming into the site dropped, that of sandy/quartz tempered wares rose steeply with locally produced reduced sandy wares (fabrics RS01, RS04 and RS022) being used in greater quantity and Chilvers Coton products (fabrics SQ30 and WW01) being seen for the first time. A small quantity of Brill-Boarstall ware (fabric SQ40) was also noted.

Despite the range of fabric types increasing, diagnostic sherds indicated that the assemblage was still dominated by jar/cooking pot forms, with only a handful of glazed sherds and just one definite jug (fabric SQ40; context 2006).

Two sherds of Roman pottery (contexts 1008 and 2015) and a Stamford ware pitcher handle (fabric WW20; context 2043) were residual finds.

Phase 7 14th–15th century

Contexts from phase 7 produced the largest amount of material (577 finds; 5563g). Once more, pottery (463 sherds) formed the bulk of the assemblage. Other finds included building stone, ceramic roof tile, fired clay, a copper alloy strap-end, an iron buckle, the straight-backed knife, a fairly substantial assemblage of nails and the whetstone.

Finds came primarily from ditch fills and the mixed layers making up the building platform, as well as a number of arbitrary cleaning layers above the courtyard. Despite this, the pottery assemblage indicated that the majority of material was contemporary with the phase, with only 38% of datable sherds being pre-14th century in date and, therefore, residual.

The range of pottery fabrics seen in this phase was wider than during any previously, with not only more variety of the locally produced quartz/sandy fabrics but also a number of finer late medieval sandy oxidised wares (SLM) appearing for the first time. These included late Chilvers Coton C ware (fabric SLM10) and late medieval/early post-medieval transitional ware (fabric SLM41). Sherds of Midlands purple (fabric MP) are also present towards the end of the phase.

Although cooking pots/jars were still dominant at the start of this phase, these declined in popularity from the end of the 14th century (see above). In addition, a wider range of forms appeared: jugs, flared bowls and a possible cistern. The number of glazed and decorated sherds was also notably higher, presumably as a result of this diversification in vessel types.

Phase 8 17th–19th century

As would be expected, contexts of this phase were very mixed with high levels of residuality. Features were largely layers connected with abandonment and demolition of the medieval buildings. However, there was a small, well-preserved assemblage of clay pipe and mid-17th–18th century pottery from Area 5. The pottery included examples of Midlands blackware (fabric MB02), Staffordshire slipwares (fabrics SLPW01 and SLPW02), manganese mottled ware (fabric MANG) and English stoneware (fabric STE02).

4.3 Environmental analysis, by Elizabeth Pearson

The environmental analysis conforms to relevant sections of the *Standard and guidance: Archaeological excavation* (ClfA 2014a), *Standard and guidance: Archaeological watching brief* (ClfA 2014b), *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage 2011), and *Environmental archaeology and archaeological evaluations* (AEA 1995).

4.3.1 Sampling policy

Samples were taken according to standard Worcestershire Archaeology practice (2012). A total of 16 samples (each of up to 10 litres) were taken from the site, of which 11 were assessed (Table 4).

4.3.2 Processing and analysis

The samples were processed by flotation using a Siraf tank. The flots were collected on a 300µm sieve and the residue retained on a 1mm mesh. This allows for the recovery of items such as small animal bones, molluscs and seeds.

The residues were scanned by eye and the abundance of each category of environmental remains estimated. A magnet was also used to test for the presence of hammer scale. The flots were scanned using a low power MEIJI stereo light microscope and plant remains identified using modern reference collections maintained by Worcestershire Archaeology, and a seed identification manual (Cappers *et al* 2012). Nomenclature for the plant remains follows the *New Flora of the British Isles* (Stace 2010 3rd edition).

4.3.3 Discard policy

Remaining sample material and scanned residues will be discarded after a period of three months following submission of this report unless there is a specific request to retain them.

The results are summarised in Tables 4 and 5.

Uncharred remains, consisting of mainly root fragments are assumed to be modern and intrusive as they are unlikely to have survived in the soils on site for long without charring or waterlogging.

Environmental remains were mostly sparse, with, no significant variation between phases being apparent. For this reason the results for all phases are discussed together.

Low levels of charred cereal crop waste were found in all samples, except ditch fill (3028) where these remains were moderately abundant. Grains of free-threshing wheat (*Triticum* sp free-threshing) were found in most samples, whilst occasional finds of hulled barley (*Hordeum vulgare*) and oat were also noted. Small weed seeds presumably charred with cereal crops included vetch/vetchling (*Vicia/lathyrus* sp), stinking mayweed (*Anthemis cotula*) and small-grained grasses (Poaceae sp indet (1mm)). Only occasional fragments of cereal chaff (cereal straw or culm node fragments) and small weed seeds or grasses were noted in other samples. This material is likely to derive either from crop processing waste accidentally burnt in corn drying ovens or on domestic fires, and in the case of the burial fill (3053) are likely to be residual in the soil. Little detailed interpretation can be made of these remains.

Other material included a single charred fragment of hazelnut (Phase 8; 1003), oyster shell (Phase 7; 2012) and low levels of fragmented animal bone in several samples.

Context	Sample	Feature type	Fill of	Phase	Sample volume (L)	Volume processed (L)	Residue assessed	Flot assessed
1003	1	Layer		8	10	10	Yes	Yes
1026	6	Pit	1028	4	10	10	Yes	Yes
1031	7	Ditch	1032	5	10	10	Yes	Yes
1043	10	Pit	1046	7	10	10	Yes	Yes
2012	15	Culvert	2013	7	10	10	Yes	Yes
2044	16	Surface		6	5	5	Yes	Yes
3028	3	Ditch	3030	7	10	10	Yes	Yes
3053	14	Burial	3054	5	2	2	Yes	Yes
3053	13	Burial	3054	5	1	1	Yes	Yes
3053	12	Burial	3054	5	1	1	Yes	Yes
3053	11	Burial	3054	5	1	1	Yes	Yes

Table 4: List of bulk samples

context	sample	large mammal	charcoal	charred plant	uncharred plant	artefacts	comments
1003	1	occ	occ	occ		mod fired clay. Abt clay mould? Occ pot, tile, Fe slag, Fe objects	
1026	6	occ	occ	occ	occ-mod*	occ fired clay, pot	
1031	7	occ	occ	occ	mod*	occ fired clay, Cu alloy slag ?	
1043	10	occ		occ		occ pot,	
2012	15	occ	occ	occ	abt*	occ oystershell ?, pot ?, flint,	
2044	16		occ	occ	abt*	abt fired clay, daub ?	
3028	3	mod	occ	mod	occ-mod*	occ fired clay, pot.	

3053	11		occ	occ		Fe slag.	
3053.1	12		occ	occ	occ*		
3053.2	13		occ		occ*		
3053.3	14		occ	occ	abt*	fired clay, pot,	

Env summary: occ = occasional, mod = moderate, abt = abundant, * = probably modern and intrusive

context	sample	preservation type	species detail	category remains	quantity/diversity	comment
1003	1	ch	<i>Triticum</i> sp (free-threshing) grain, <i>Hordeum vulgare</i> grain (hulled), <i>Avena</i> sp grain, Poaceae sp indet grain (small)	grain	+/low	
1003	1	ch	<i>Persicaria maculosa</i> , <i>Carex</i> sp (2-sided) nutlets	seed	+/low	
1003	1	ch	<i>Corylus avellana</i> shell fragment	misc	+/low	
1026	6	ch	<i>Triticum</i> sp (free-threshing) grain	grain	+/low	
1026	6	ch	unidentified wood fragments	misc	+/low	Tiny fragments
1026	6	?wa*	unidentified herbaceous root fragments	misc	+/+/low	
1031	6	ch	<i>Triticum</i> sp (free-threshing) grain fragment, Cereal sp indet grain (fragment)	grain	+/low	
1031	6	ch	unidentified wood fragments	misc	+/low	Small fragments
1031	6	?wa	unidentified herbaceous root fragments	misc	+/low	
1043	10	ch	<i>Anthemis cotula</i>	seed	+/low	
1043	10	?wa*		other	+/low	Single earthworm egg, and other small ?invertebrate eggs
2012	15	ch	<i>Triticum</i> sp (free-threshing) grain, Cereal sp indet grain	grain	+/low	
2012	15	?wa*	unidentified herbaceous root fragments	misc	+++/low	
2044	16	ch	<i>Triticum</i> sp (free-threshing) grain, Cereal sp indet culm node	grain	+/low	
2044	16	?wa*	unidentified herbaceous root fragments	misc	++++/low	
2044	16	ch	unidentified wood fragments	misc	+/low	Small fragments
3028	3	ch	<i>Triticum aestivo-compactum</i> grain, <i>Triticum</i> sp (free-threshing) grain, <i>Avena</i> sp grain, <i>Bromus</i> sp grain	grain	+/low	
3028	3	ch	<i>Vicia/Lathyrus</i> sp, <i>Polygonum aviculare</i> , <i>Anthemis cotula</i> , Poaceae sp indet grain (1mm), unidentified seed	seed	+/low	
3028	3					
3028	3	ch	Cereal sp indet culm node, unidentified wood fragments	misc	+/low	
3053	14	ch	<i>Triticum</i> sp (free-threshing) grain	grain	+/low	
3053	14	?wa*	unidentified herbaceous root fragments	misc	++++/low	
3053	14	ch	unidentified wood fragments	misc	+/low	
3053	11	ch	<i>Vicia</i> sp, <i>Poa</i> sp grain	seed	+/low	
3053	12	?wa*	unidentified herbaceous root fragments	misc	+/low	
3053	12	ch	<i>Triticum</i> sp (free-threshing) grain	grain	+/low	
3053	12	ch	unidentified wood fragments	misc	+/low	tiny fragments
3053	13	ch	unidentified wood fragments	misc	+/low	Tiny fragments
3053	13	?wa*	unidentified herbaceous root fragments	misc	+/low	Tiny fragments

Table 5: Plant remains from bulk samples

Key:

preservation	quantity
ch = charred	+ = 1 - 10
min = mineralised	++ = 11- 50
wa = waterlogged	+++ = 51 - 100
?wa = waterlogged or uncharred	++++ = 101+
	* = Probably modern and intrusive

4.3.4 Recommendations

As the density of charred plant remains is low, providing information mainly on the cereal crops in cultivation, which are those expected for the medieval to early post-medieval period, no further work is recommended on these samples or on the remaining unprocessed samples.

4.4 Animal bone analysis, by Matilda Holmes**4.4.1 Methodology**

Bones were identified using the author's reference collection. Due to anatomical similarities between sheep and goat, bones of this type were assigned to the category 'sheep/ goat', unless a definite identification (Zeder and Lapham 2010; Zeder and Pilaar 2010) could be made. Bones that could not be identified to species were, where possible, categorised according to the relative size of the animal represented (micro – rat/ vole size; small – cat/ rabbit size; medium – sheep/ pig/ dog size; or large – cattle/ horse size). Ribs were identified to size category where the head was present, vertebrae were recorded when the vertebral body was present, and maxilla, zygomatic arch and occipital areas of the skull were identified from skull fragments.

Tooth wear and eruption were recorded using guidelines from Grant (1982) and Payne (1973), as were bone fusion, metrical data (von den Driesch 1976), anatomy, side, zone (Serjeantson 1996) and any evidence of pathological changes, butchery (Lauwerier 1988) and working. The condition of bones was noted on a scale of 0-5, where 0 is fresh bone and 5, the bone is falling apart (Lyman 1994, 355). Other taphonomic factors were also recorded, including the incidence of burning, gnawing, recent breakage and refitted fragments. All fragments were recorded, although articulated or associated fragments were entered as a count of 1, so they did not bias the relative frequency of species present. Details of associated bone groups were recorded in a separate table. No sieved samples were made available, which may have led to a negative bias in the number and variety of small mammals, fish and bird bones recorded in the assemblage.

4.4.2 Taphonomy and Condition

Bones were in good to fair condition (Table 6) although they were friable numerous fresh breaks and refitted fragments, which were particularly notable in the earlier deposits. A high proportion of fragments had been gnawed by dogs, which suggests that much of the material was not buried immediately. This is reflected by the presence of loose teeth, again indicating that there was delay between discard and burial, or re-deposition, leaving enough time for the tough connective tissue to break down and the teeth fall out. In combination, this implies that the material could have been stored on a midden, or was left out around the settlement before being incorporated into features or layers. Minimal evidence exists for butchery, which may be due to the prevalence of gnawing, obliterating cut or chop marks. Few burnt bones were observed, implying that bones were not regularly exposed to fire either as part of the cooking process, for fuel or as a means of disposal.

No notable deposits of primary butchery, skin-processing or bone-working waste were noted, although two fragments of worked bird bone from 13th-14th century ditch 1014 (contexts 1008 and 1010) could be fitted together. A cattle tibia also from context 1008 could be joined together with its epiphysis, indicating a primary context that had undergone little disturbance.

4.4.3 The Assemblage

Few bones were recovered from Roman contexts, comprising several loose sheep/ goat teeth and a cattle tibia (Table 7). Cattle and sheep/ goat dominated the medieval assemblage, with sheep/ goat most common, followed by pig and *equid* (horse or donkey) remains. The largest sample comes from the 14th-15th century, which also includes bones of *canid* (dog or fox), bird and oyster shell. Cattle and sheep/ goat were predominant in the modern material as well, alongside a few bones of pig, *equid* and *canid*. Because of the small sample sizes only the 14th-15th century deposits will be considered further.

While all parts of the cattle and sheep/ goat carcass are present (Table 7), loose teeth are unusually common, and are consistent with the delayed burial or re-deposition of material as described above. Also of note are the large number of sheep/goat tibiae fragments, fourteen of which come from context 2003, from a minimum of 3 animals. This again may be explained by taphonomic factors, as these elements are dense, so survive well, and are easily identified. Vertebrae and phalanges are under-represented, while the long bones of the upper and lower limbs most commonly recorded. This pattern implies a predominance of food debris, with little evidence for primary butchery waste, suggesting some form of redistribution, with animals being butchered elsewhere.

The considerable number of loose teeth revealed a consistent cull age for sheep/ goats, with two from animals at wear stage F and five at stage G – animals that would have been around the age of maturity, and therefore culled at prime meat age. The three cattle mandibles/ third molars providing suitable mortality data include considerably older animals, one at stage G and two at stage I, suggesting that these animals were valued for both meat and secondary products, possibly traction or milk production. Because of the prevalence of *canid* gnawing there are little fusion data available, and those that are useful are all from early fusing bones. Nonetheless, there is evidence for juvenile cattle, most likely killed for their meat, as well as the very porous bones of perinatal lambs indicating that they were bred in the area. A cattle 2nd phalanx from layer 2003 was pathological with lipping to the proximal end. While this may imply stress induced by the animal's use for traction (Bartosiewicz *et al* 1997), it is also a common age-related change that may simply be a product of old age observed in the cattle population.

4.4.4 Discussion

The prevalence of sheep/ goat remains is not uncommon at rural medieval settlements, and reflects both the increasing importance of the wool trade, and the marketing of cattle to urban sites. Despite sheep/ goat being more common, cattle would have provided most of the meat diet given their larger size and greater meat weight. Sheep were apparently consumed at prime meat age at the site, while cattle were killed either at around the time of maturity for meat, or kept into old age and culled after a long working life. There is some evidence that animals were butchered elsewhere, suggesting either that the primary butchery waste was disposed of at another part of the settlement, or that joints of meat were bought in.

Condition	2nd-3rd C	11-12th C	12-13th C	13-14th C	14-15th C	19th C
Fresh						
Very good				6	16	4
Good		1	6	5	40	12
Fair	2		3	3	47	9
Poor				1	4	
Very poor						
Total	2	1	9	15	107	25
Refit	1=2	1=6	4=15	4=11	15=52	4=8
Fresh break		1	5	2	30	9
Gnawed			3	10	53	11
Loose mandibular teeth*	2		2	1	15	2
Teeth in mandibles*				2	9	
Butchery	1		1	1	6	1
Burning					5	1

*deciduous and permanent 4th premolar and molars

Table 6: Condition and taphonomic factors affecting the hand-collected assemblage identified to taxa and/ or element. Teeth included where stated

Element	2nd-3 rd C		11-12th	12-13th C				13-14th C				14-15th C						19th C						
	Cattle	Sheep /goat	Equid	Cattle	Sheep/goat	Equid	Bird	Cattle	Sheep /goat	Pig	Equid	Cattle	Sheep /goat	Pig	Equid	Canid	Bird	Oyster	Cattle	Sheep/goat	Sheep	Pig	Equid	Canid
Horn core												1												
Zygomatic												1												
Mandible with teeth								1				1	3											
Loose tooth		5		1	6							14	29	2 7	8				2	2		3		
1st cervical vertebra												1		1										
2nd cervical vertebra													1											
Lumber vertebra				1																				2
Scapula				1								1	2											
Humerus				1						1		2	4	1		1				2		1		1
Radius					1							2	7							1				
Ulna												3	1		1	1			1					
Carpal												1												
3rd carpal												1												
Pelvis													2		1									
Femur			1				1					1	1											
Tibia	1			1		1		1	2			5	20	2					1	2		1		
Tarsal												1												
Astragalus																			3					
Calcaneus								1																
Metacarpal								1				2	7						1	1	2		1	
Metatarsal												8	3											
3rd metatarsal																1								
Metapodial								1				1		1					1			1		
1st phalanx								1				1	2				1		1			1		
2nd phalanx						1				1		2												

3rd phalanx											1														
Shell																	1								
Total	1	5	1	5	7	2	1	6	9	4	5	49	82	3	2	10	3	1	1	10	8	2	7	1	3

Table 7: Species representation by anatomical element (fragment count). Hand collected bones

5 Discussion

5.1 Roman activity

The archaeological evidence for Roman occupation on the site is predicated on pottery recovered from one ditch (CG1), though there is an amount of residual pottery from all Areas 1-3 on the site. Little more can be said about the extent of Roman occupation, other than to note that find spots of Roman pottery have been recorded in the wider landscape around Napton-on-the-Hill, and that a field system identified on aerial photographs has been ascribed to this period.

5.2 A Saxon burial, by Peter Lovett and Elizabeth Pearson

The presence of a late Saxon (970-1030 cal AD) grave within the landscape was anomalous. As the grave sat in isolation, it is concluded that this was not an area of consecrated ground. The Church of St Lawrence, lying some 370m to the north-west at the top of the hill, was not built until the 12th century (VCH 2018), though a priest was recorded in Domesday at Napton in 1086. It is not known whether any earlier church may have existed prior to the construction of St Lawrence, through the presence of a priest in the 11th century does imply that there was one. The collection of houses to the south known as Chapel Green may be a memorial to an earlier religious presence.

It was in the 10th century that legislation was written listing offences that would exclude people from burial in consecrated ground. These transgressions included murder, adultery, and swearing a false oath (Hadley and Buckberry 2005). No pathology indicative of execution or mutilation was identified on the skeleton, suggesting that the individual did not meet a violent end, though not all forms of punishment will be visible in the osteological record.

The carbon and nitrogen isotope results compare with those from burials from archaeological investigations associated with the Kempsey Flood Alleviation Scheme (Millard 2015, Millard 2016). Here, $\delta^{13}\text{C}$ results were in the range of -21.4 to -19.9 ‰, which was consistent with primary protein sources being terrestrial animals, and no evidence for consumption of any significant amount of either freshwater or marine fish. The Napton results are in the middle of the range for both Kempsey Flood Alleviation Scheme and Holy Trinity Church, Stratford-Upon-Avon (Mann and Western 2016).

5.3 Medieval activity

The building complex

The LiDAR survey of the site and surrounding land shows ridge and furrow along the western edge of the site, before giving way to a series of house platforms and possible land divisions. The field to the east of the development site, across from Fell's Lane, was also shown to have a number of potential building plots within it, as well as more ridge and furrow further to the east. Some of the features revealed in the LiDAR survey are of post-medieval date, including the two 19th century structures in Areas 3 and 5, so without further fieldwork it is not possible to determine dates. However, the survey does suggest a possible trackway with plots adjoining them. These could be building platforms for smallholdings (croft and toft) or for further areas of a possible manorial or farm complex.

The building complex in Area 2 consisted of probably three small rectangular structures around a central cobbled courtyard, bounded on the eastern and northern sides by an outer wall. All this was upon a building platform of made ground. Truncation and the limited scope of the investigations meant that the south-western corner in particular was poorly defined, and the limits of the complex are not fully understood. The platform edge to the east, south and west was well defined, and tested satisfactorily by excavation, but the northern side was less conclusive. The northern boundary wall could instead have been the southern limit of another building. The small service trench (Area 4) immediately north of Area 2 revealed a possible wall and a stone surface, and this wall ran perpendicular to the northern boundary wall, potentially forming another building. The layout is suggestive of a manor house or farm complex, with a central courtyard, and ancillary

buildings. A number of manors are mentioned in the histories of Napton; the Domesday lists one manor, belonging to the Count of Meulan, whilst there were at least four distinct manors in the 16th century (VCH 2018). If the site was manorial then these outbuildings might have been a pantry or a buttery, with a hall beyond the limits of excavation to the north. However, the classic form for a manor house is '...tripartite, consisting of a central open hall, with the solar...to one end, and the service rooms...at the other end' (Grenville 1997, 89). If the complex was actually a farm, then the buildings could have been agricultural in purpose, with further buildings situated to the north of Area 2. Indeed, it is suggested that farm complexes were intentionally copying the courtyard layout of manors (Beresford and Hurst 1971, 107), making the distinction between the two even harder in this case. Fundamentally, there is not enough evidence to determine confidently the form or function of these buildings.

The building complex was constructed sometime in the 13th-14th century, with the building platform overlying a ditch dated to the same period. The material associated with its abandonment and demolition dated no later than the 15th century, so the site was probably occupied for no more than 150 years, and may have been less. The peasant class had seen an increase in wages due to the decimation of the population following the Black Death in the mid-14th century, with demand for labour driving up pay. The wool trade survived the Black Death much better than its customers, with sustained trade evident in the estate accounts of the time (Hurst 2005). There was an increase in flock size, presumably in part due to the death of many shepherds and the acquisition of the sheep by the survivors. This led to much arable land being untended. The highest level of desertion of villages corresponded with the greatest prosperity in the wool trade, around the 15th century, as pressures on the land shifted from arable to pastoral (Rowley and Wood 1982, 17-18).

The field system

The exploitation of the site in the medieval period evolved through a series of changing field boundaries, but it had not begun in the 11th-12th centuries (Phase 4). This period was represented by just a number of small pits, suggesting that the land was not yet part of the open field system in operation generally during this period. By the 12th-13th centuries, perhaps in response to the general population growth and subsequent demand for produce, the land was clearly being farmed, and was divided into thin strips running roughly north to south across the width of the slope (Phases 5a and 5b). These were then superseded by two more phases of land division up into the 15th century.

The relatively narrow range of dates suggests that the changes to these field systems were quite rapid, and the various incarnations of them short-lived. This is further reinforced by the depositional sequence in most of the ditches, with an initial low energy basal fill followed by a more rapidly deposited secondary fill, and intended at least partially to close the ditches.

The LiDAR survey shows extensive ridge and furrow surviving in the western side of the study site, but this must post-date the field systems that were identified during the excavations. None of the linear features that were excavated were considered to be furrows, and several were aligned perpendicular to the direction of the furrows. The ridge and furrow is clear in the survey but was not present in the ground once the top and subsoils had been removed.

It is of note that the last period of pre-ridge and furrow medieval farming activity appears to coincide with the demise of the building complex, and suggests the two are linked. It may be that the ridge and furrow was actually created for orchard use in the post-medieval period rather than a grain crop.

5.4 Environmental evidence, by Elizabeth Pearson

From the 12th century to Phase 7 (17th to 19th century) there is no evidence for cereal crop cultivation and processing was taking place on a large scale as charred crop remains were only present in low levels. Whether this is merely because the excavation did not cover areas of the settlement where agricultural processing was taking place is not known. A more arable signature might be expected as the site is located within the Feldon area of Warwickshire where, for the

duration of the settlement, open fields were more common and arable farming more important than the Arden further north. However, Napton-on-the-Hill is on the eastern edge of this area where there are margins of higher ground where stock pasture played an important role (Hooke 2018). Napton lies on a small discreet area of higher ground. The soils, although of moderate fertility are mostly suited to grass production for dairying or beef, with some cereal production, mostly for feed (British Geological Survey 2018, Cranfield Soil and AgriFood Institute 2018).

On account of poor preservation of animal bone, a catalogue was created of the bone most suitable for analysis (Phase 6; 14th to 15th century). This material was made up mostly of food debris, with little evidence for primary butchery. Cattle and sheep/goat were predominant with some pig, horse and dog. There was some evidence for sheep or goats having been culled for meat, and cattle which appear to have been valued for both meat and secondary products (traction or milk production). The relatively common sheep/goat is consistent with the importance of the wool trade and the lack of manpower during the medieval period.

5.5 Post-medieval return

The evidence for early post-medieval activity is difficult to interpret. In Area 1 it consisted of a probable building platform and a poorly preserved wall foundation, which survived less well than the earlier medieval buildings to the east in Area 2. It is possible that this wall was part of a small enclosure, probably for penning sheep. The walls and culverts seen in Area 2, some of which made use of the remnants of the medieval walls, were possibly of the same function, or were maybe associated with the 18th – 19th century buildings to the north in Areas 3 and 5. These appear on the Ordnance Survey map of 1834 but had disappeared by the 1st edition OS map of 1887 (Walsh 2014, 13). These later post-medieval structures were not fully investigated but suggest a fairly substantial building, probably with a combination of domestic and agricultural functions. By 1887 the site had reverted to a field, given over to pasture until the modern day. Some of the walls could still be seen poking through the turf during the evaluation, and a 1970s sweet wrapper was found stuffed between stones belonging to the 19th century building.

5.6 Research frameworks

There are a number of possible research areas in *The Archaeology of the West Midlands* (Watt 2011), in which the site at Godson's Lane could have furthered our understanding, but the limited nature of the investigations means that there is little solid data to relate to the research areas.

The relatively short-lived structures in Area 2 give a timeframe to the shrinkage of the settlement as a whole, though the cause for such reduction is not understood. The wider social and economic pressures of the period no doubt played a large part in the abandonment of this part of the village, alongside its unfavourable location and relative youth. Further work on the land to the east of this site could help further the understanding of settlement pattern, with the possibility that the manor or farm is the focal point for a small nucleated hamlet.

On balance the building complex is considered to have been agricultural (i.e. a farm) rather than manorial, though a domestic structure was not identified to be able to be certain of the status either way. The artefactual evidence did not suggest that the site was of particularly high status, though again this was due to the nature of the structures both in terms of function and preservation.

6 Publication summary

Worcestershire Archaeology has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, Worcestershire Archaeology intends to use this summary as the basis for publication through local or regional journals. The client is requested to consider the content of this section as being acceptable for such publication.

A programme of archaeological investigations was undertaken for Prospect Archaeology on behalf of AC Lloyd (Homes) Ltd, at Godson's Lane, Napton-on-the-Hill, Warwickshire (NGR SP 46685 61146). The site lies at the foot of a steeply sloping field, on the eastern side of the village.

Following an initial evaluation, a programme of works was outlined to further investigate the medieval potential of the site. Twelve geotechnical test pits were monitored, followed by excavation of three discrete areas, and finally by a watching brief on the site during enabling groundworks.

A Roman ditch was the earliest feature identified on site, overlain by a series of medieval field systems dating from the 12th to the 15th centuries. A late Saxon grave was discovered toward the north end of the site, conjectured to be a deviant burial due to its location outside any known consecrated ground.

A complex of stone buildings and metal surfaces dating to the 13th to 15th centuries was revealed toward the east side of the site. Not enough of the complex was revealed to confirm its function, but it was likely to have been at the least a courtyarded farm, if not a manor house. It was surrounded across the wider site by small fields defined by ditches. The complex was abandoned in the 15th century, and no further occupation of the site was apparent until probably the 18th century, when a new farm complex was built toward the north side of the site. This was abandoned and demolished by 1887, after which the entire site reverted to agricultural use.

The site, though ambiguous in its form and status, nonetheless helps to illustrate the fluctuating fortunes of the village of Napton-on-the-Hill throughout the medieval period, along with offering glimpses into Roman use of the land and late Saxon burial practices.

7 Acknowledgements

Worcestershire Archaeology would like to thank the following for their kind assistance in the successful conclusion of this project, Naomi Field (Prospect Archaeology Ltd), Alistair Clark (AC Lloyd (Homes) Ltd), Adam Stanford (Aerial-Cam), Dr Elaine Dunbar and Philip Naysmith (SUERC).

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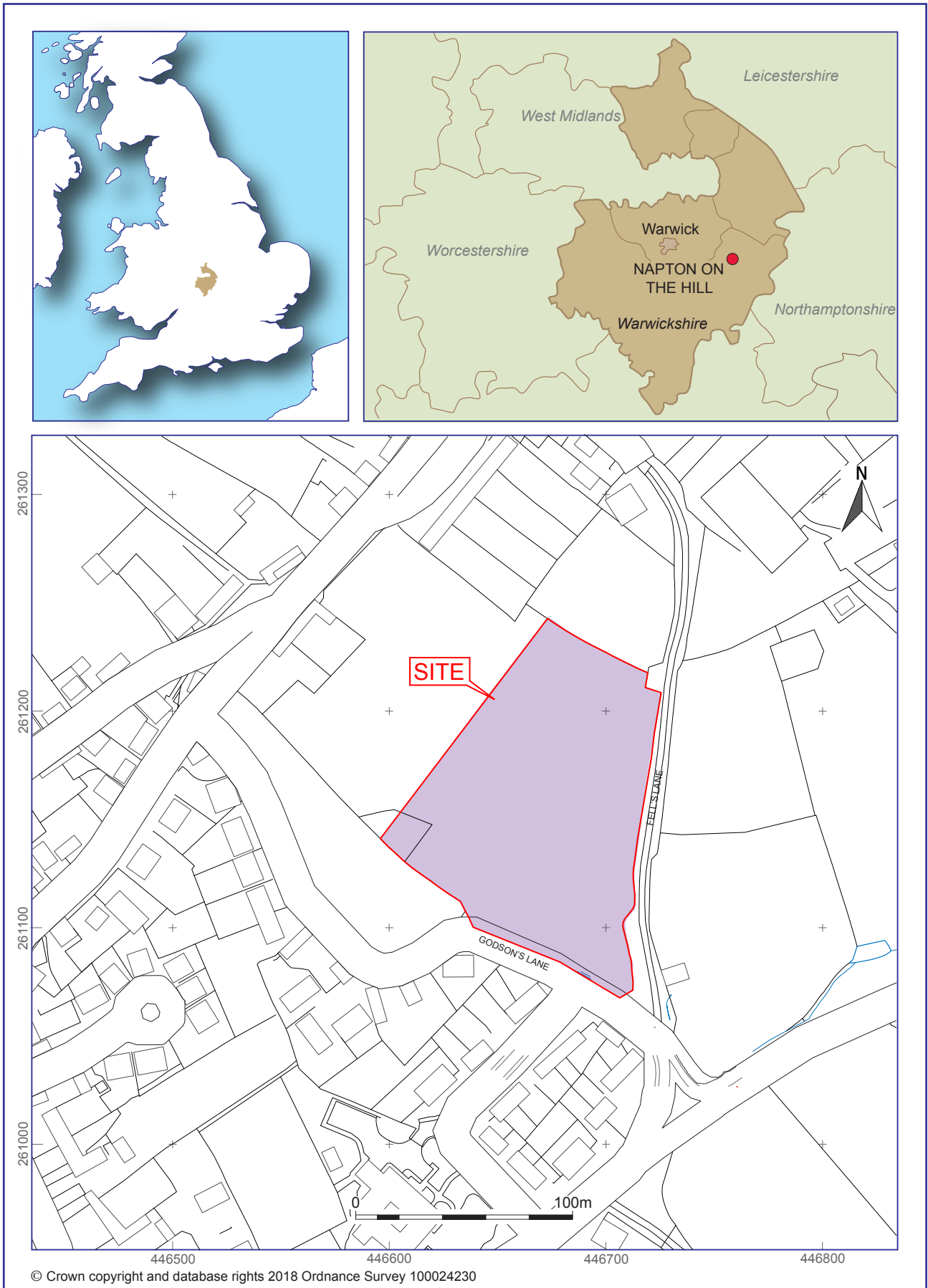
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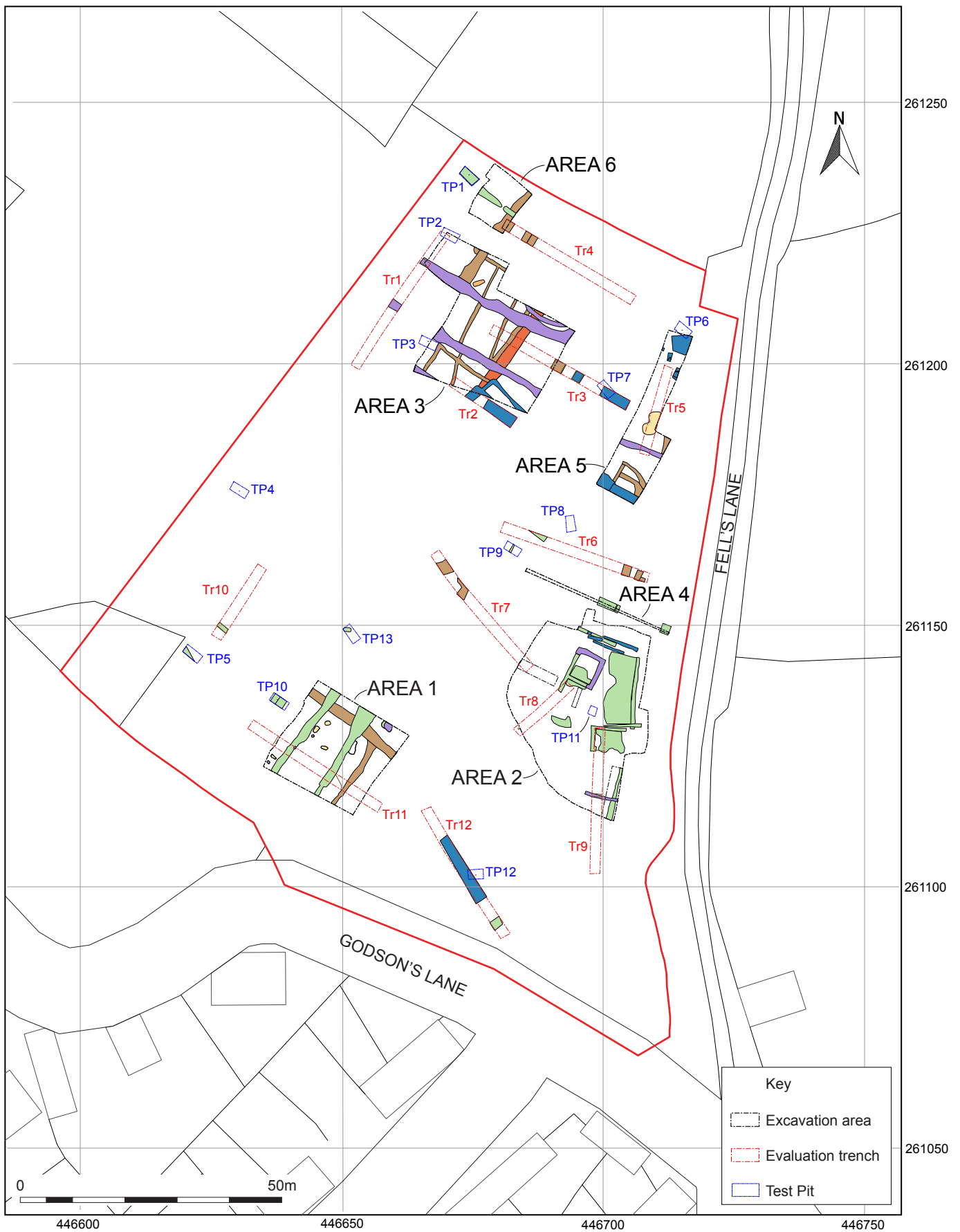
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Figures



Location of the site

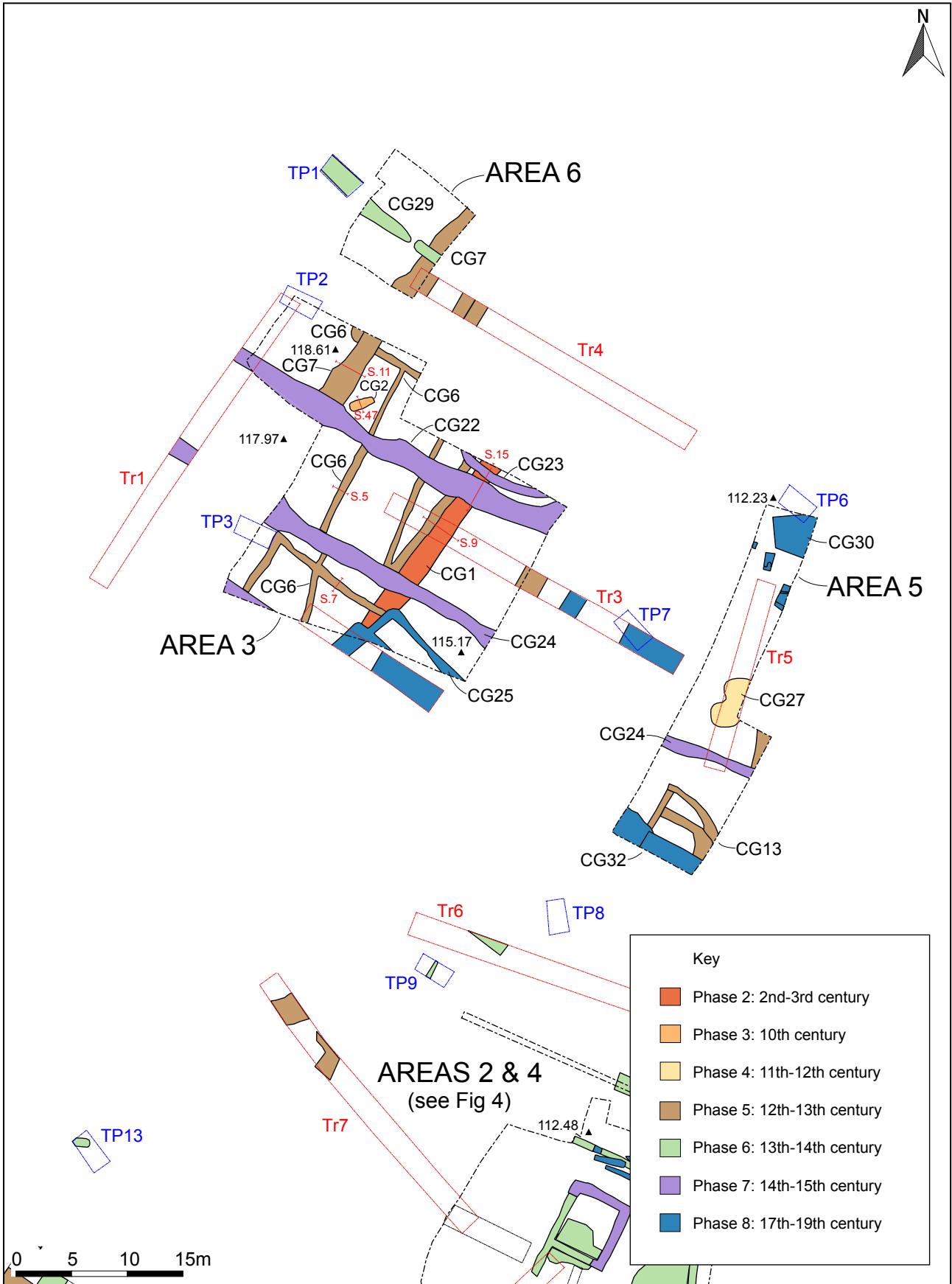
Figure 1



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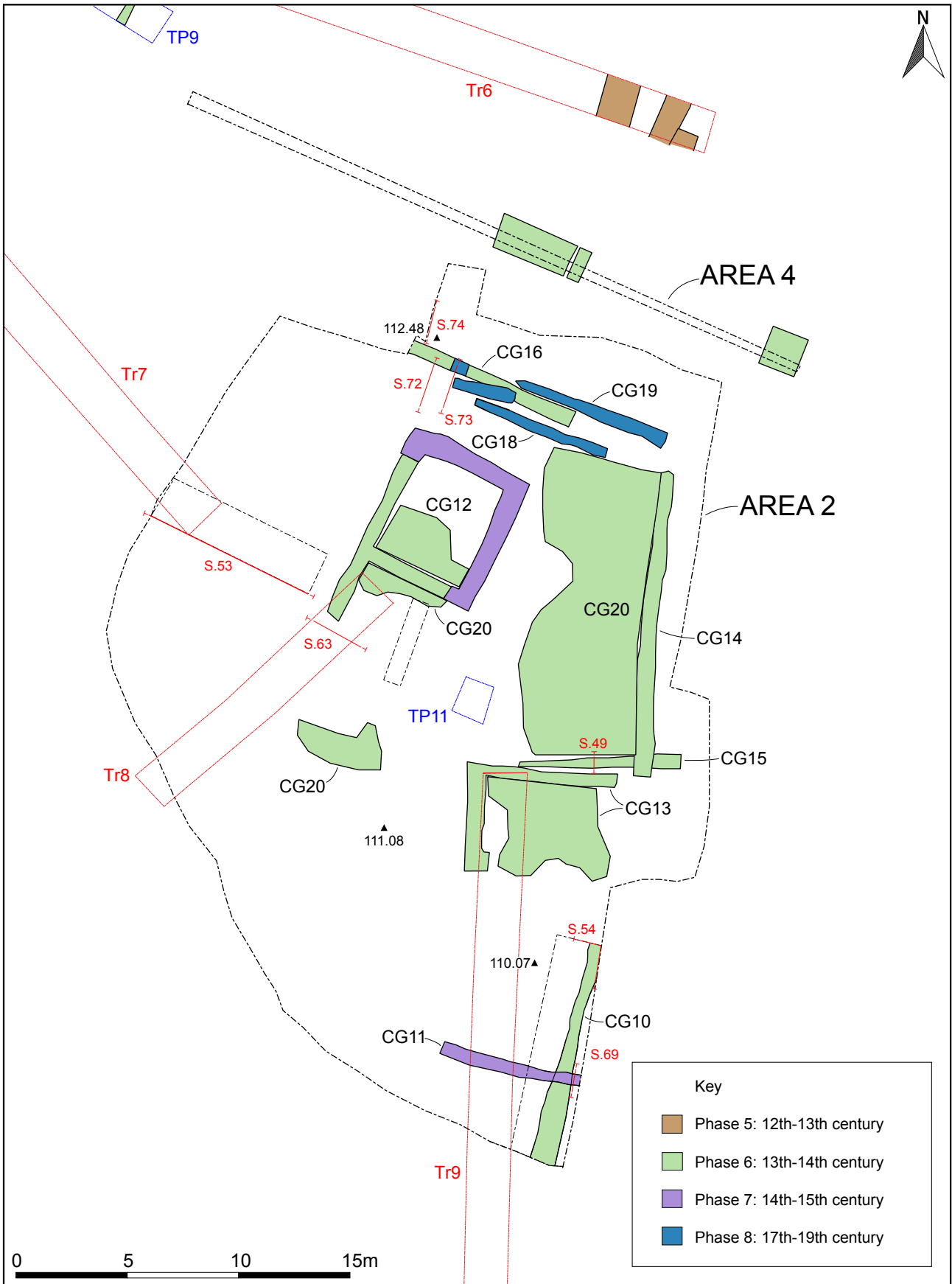
Location of Areas

Figure 2



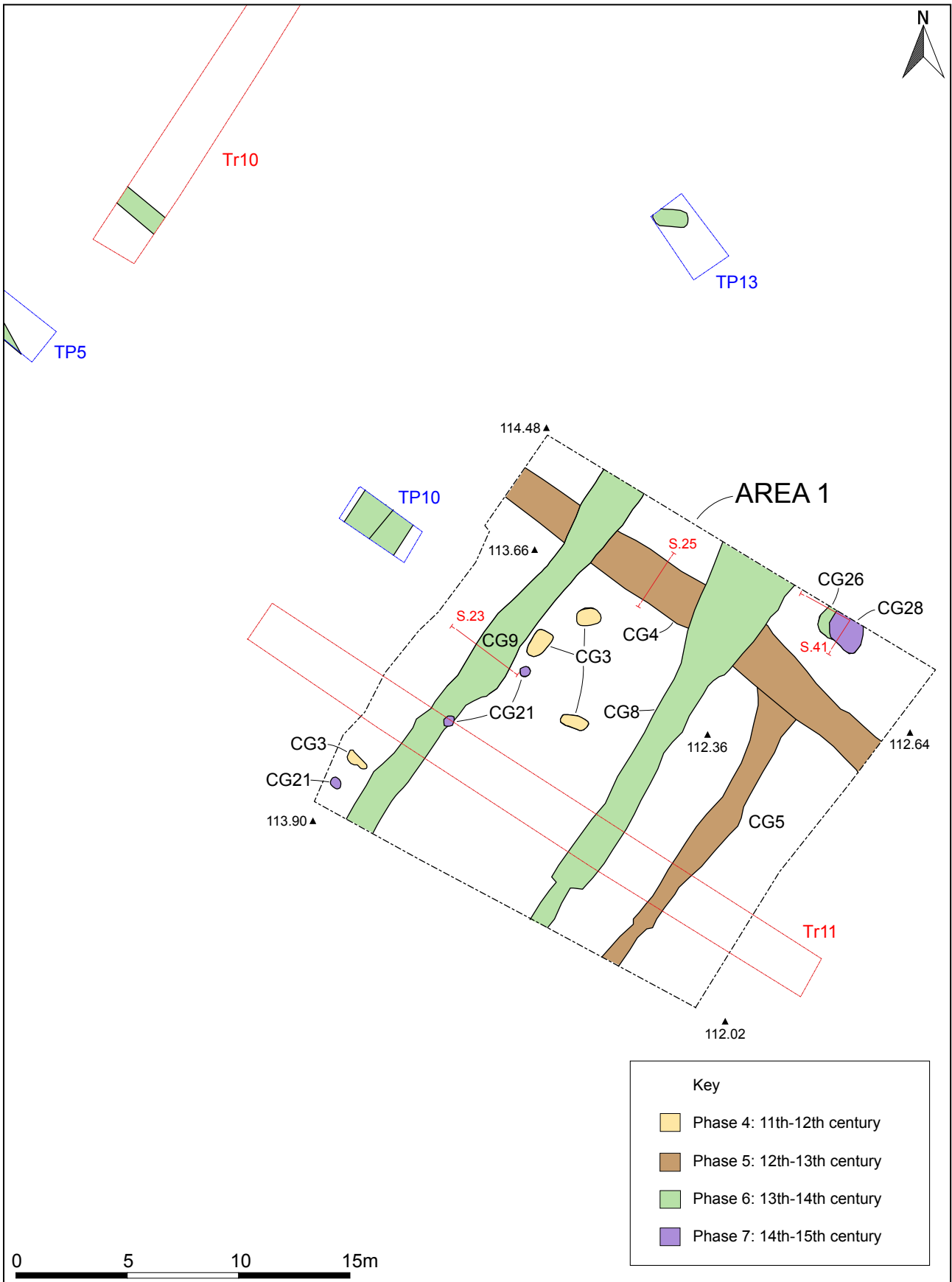
Areas 3, 5 and 6

Figure 3



Areas 2 and 4

Figure 4



Area 1

Figure 5

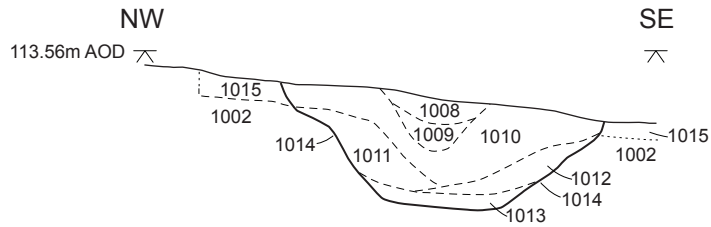


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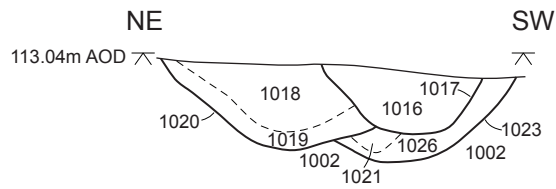
Aerial-Cam photograph of Area 2 with structures highlighted

Figure 6

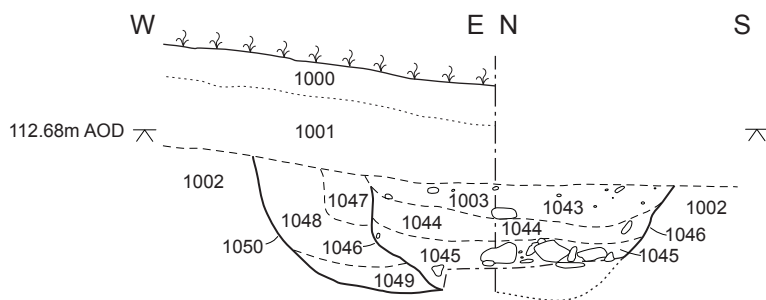
SECTION 23: DITCH 1014



SECTION 25: DITCHES 1017, 1020 AND 1023

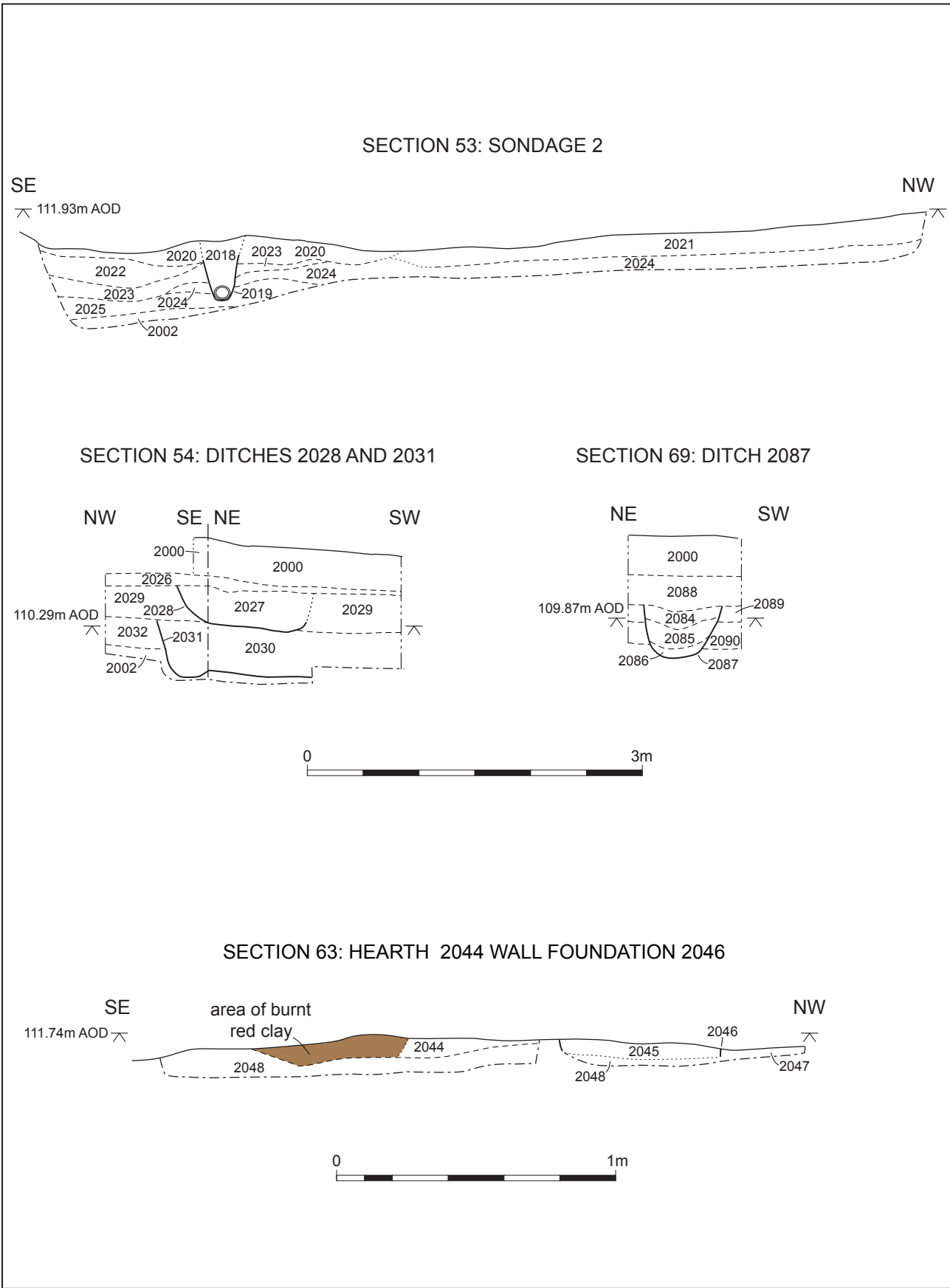


SECTION 41: PITS 1046 AND 1050



Area 1 sections

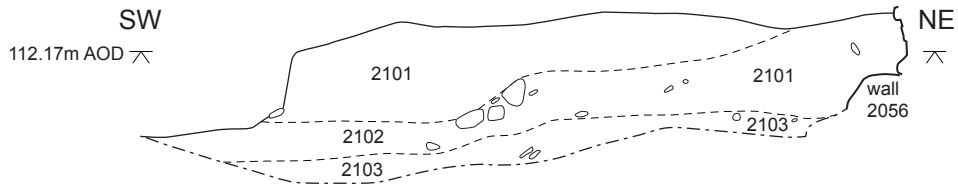
Figure 7



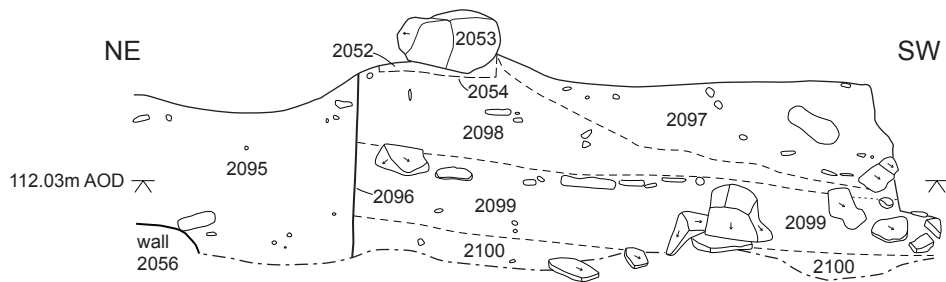
Area 2 sections

Figure 8a

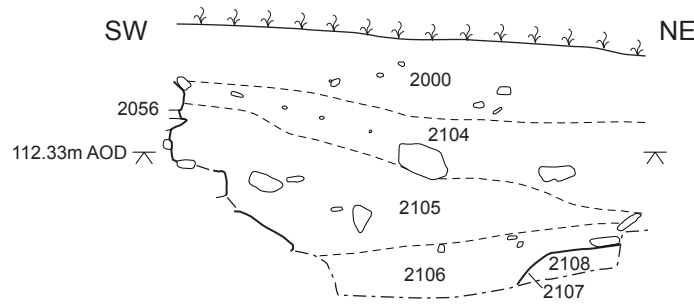
SECTION 72: LAYERS 2101 TO 2103



SECTION 73: WALL 2053 AND ROBBERS CUT 2096

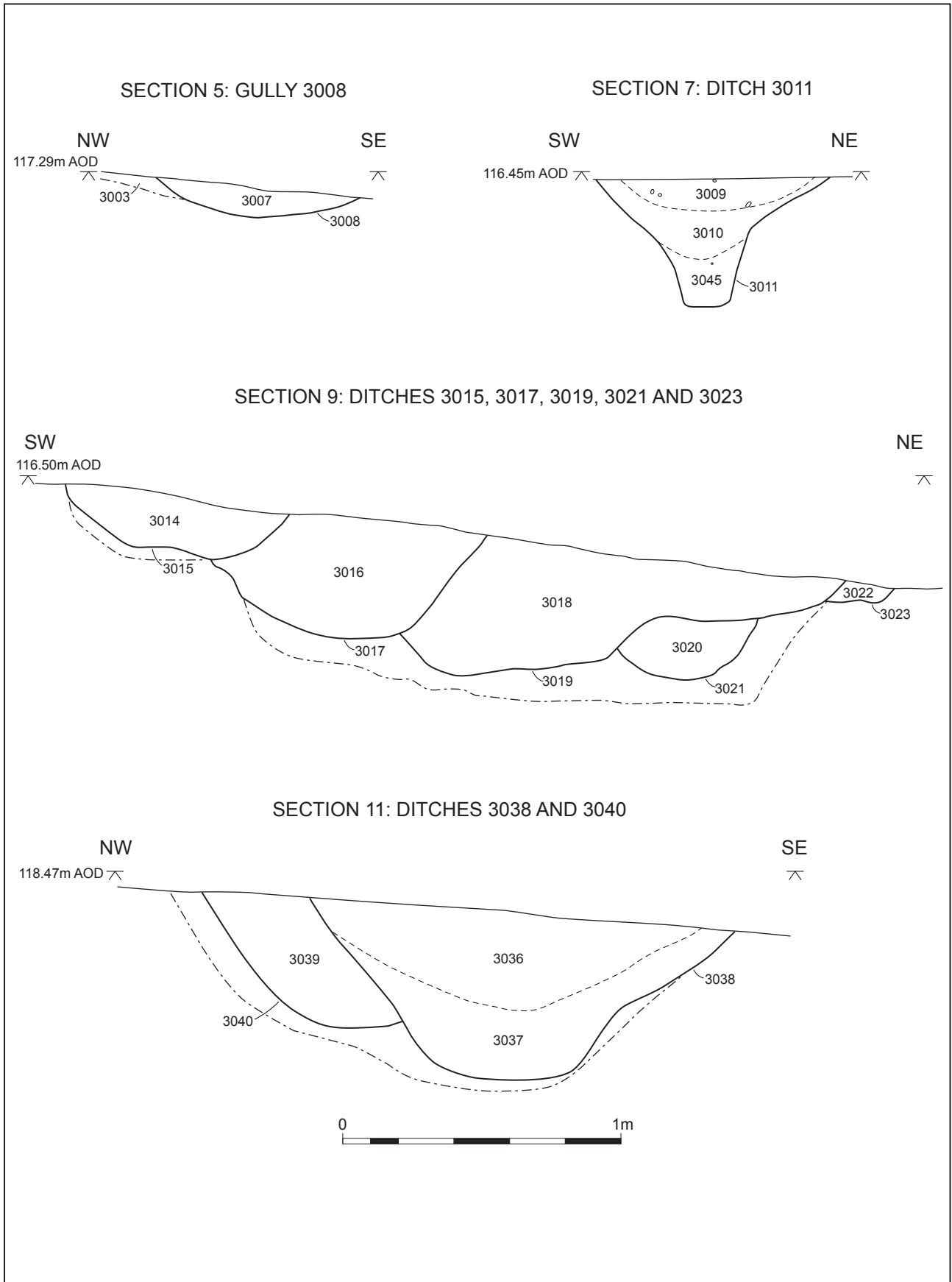


SECTION 74: WALL 2056



Area 2 sections

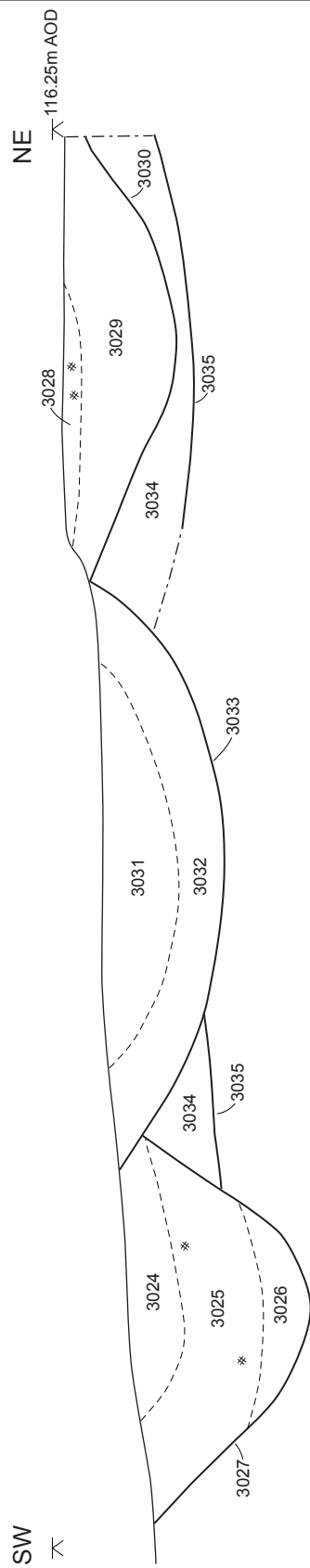
Figure 8b



Area 3 sections

Figure 9a

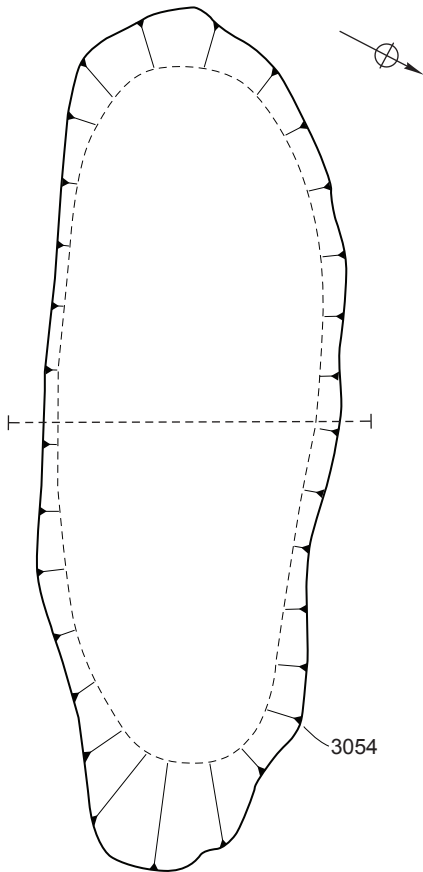
SECTION 15: DITCHES 3027, 3030, 3033 AND 3035



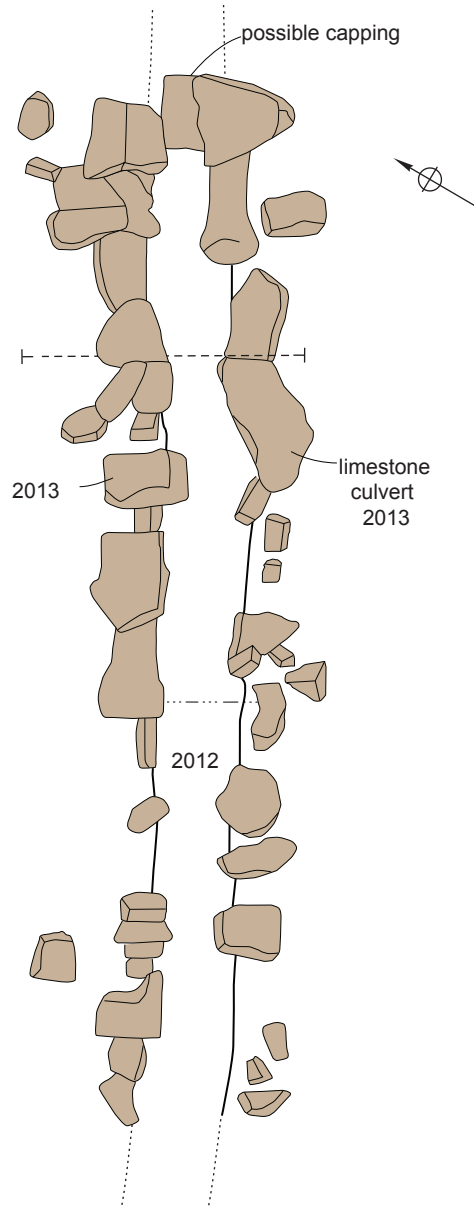
Area 3 sections

Figure 9b

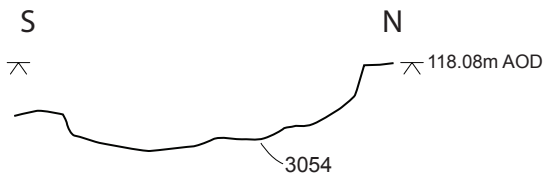
PLAN OF GRAVE CUT 3054



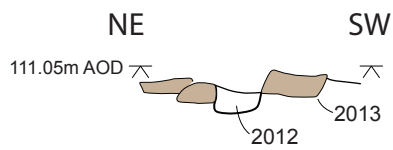
PLAN OF CULVERT 2013



SECTION 47: PROFILE OF GRAVE CUT 3054



SECTION 49: PROFILE OF CULVERT 2013



Grave cut 3054 (Area 3) and culvert 2013 (Area 2): plans and profiles

Figure 9c

Plates



Plate 1 Areas 1-3 during excavation (north-west at top of photo)



Plate 2 Area 1 from the air (north at the top of photo)



Plate 3 Area 2 from the air (west at the top of photo)



Plate 4 Area 3 from the air (north-west at the top of photo)



Plate 5 CG4 Ditches 1017, 1020, 1023, looking north-east (1m scale)



Plate 6 CG28 and CG26 Pits 1046 and 1050, looking north-east (1m scale)



Plate 7 Area 2 showing structures at end of excavation work (south-west at the top of photo)



Plate 8 Area south-west of Building 1 (CG12), including area of burning. Looking north (1m scales)



Plate 9 CG10 Ditch 2092, looking north-east (0.5m scale)



Plate 10 Sondage 2 through building platform in Area 2, looking south-west (1m scales)



Plate 11 Investigation of possible hearth 2044 (CG20) and wall construction cut 2046 (CG12), looking south-west (0.5m and 1m scales)



Plate 12 Robber cut 2040 through wall 2041 (CG12), looking south-west (1m scale)



Plate 13 Slot through material built up against Walls 2053 (CG17) and 2056 (CG16), looking north-east (1m scales)



Plate 14 Elevation of Wall 2056 (CG16), showing upper course poking through turf line. Looking north-east (0.5m scale)



Plate 15 Excavation against eastern side of Wall 2056 (CG16), looking north-west (0.5m and 1m scales)



Plate 16 CG15 Culvert 2013, looking east (1m and 0.1m scales)



Plate 17 CG18 Stone culvert 2060, looking north-east (1m scale)



Plate 18 CG17 Wall 2053, looking south-west (1m scale)



Plate 19 Recording structures on the eastern side of Area 2



Plate 20 Recording Wall 2056 in Area 2



Plate 21 CG6 Ditch 3011, looking north-west (0.5m scale)



Plate 22 CG22 Ditches 3027, 3030, 3033, looking north (1m scales)



Plate 23 CG24 Ditch 3044, looking north-west (1m scale)



Plate 24 CG2 Skeleton 3052 in grave 3054, looking west (1m scales)



Plate 25 CG2 Skeleton 3053



Plate 26 Possible surface and wall in Area 4, looking north-east (1m scales)

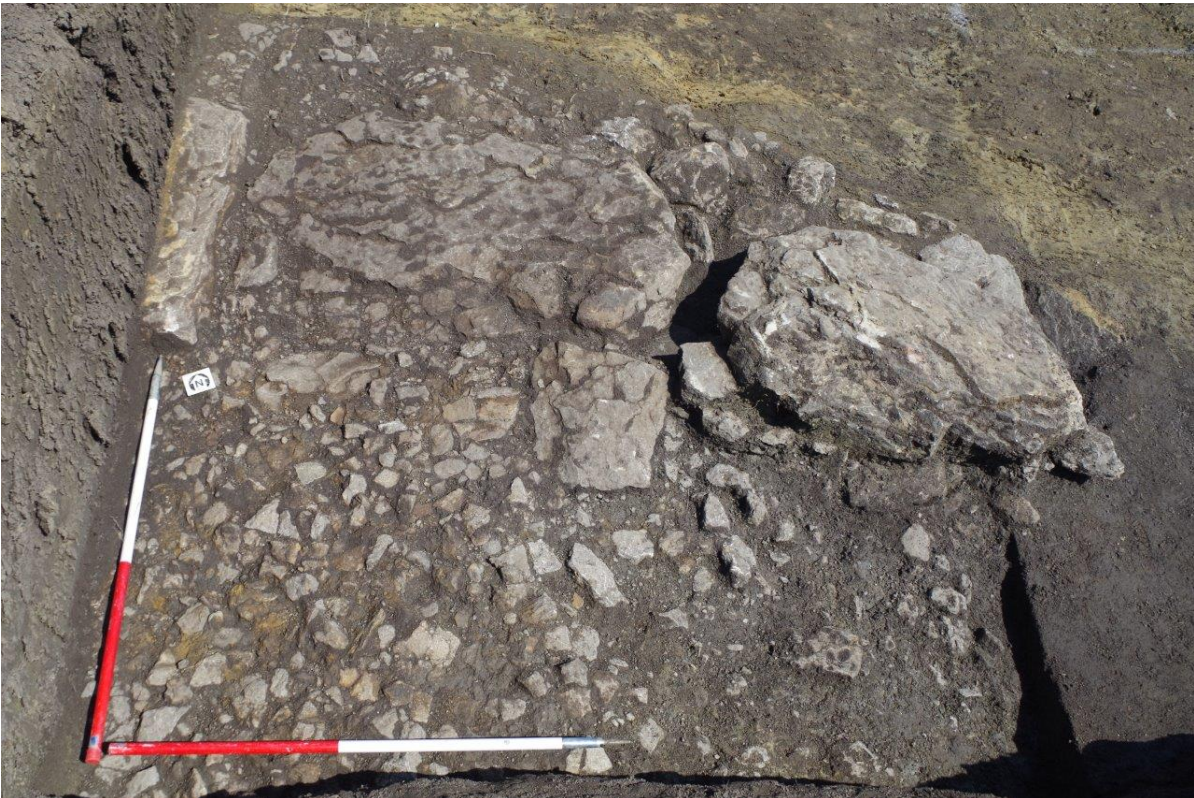


Plate 27 Stone surface 5008, looking north-east (1m scales)



Plate 28 Excavation of the 18th-19th century building CG30 in Area 5



Plate 29 18th-19th century building CG30 in Area 5, looking south-west (1m scales)

Appendix 1 Technical information

The archive (WA project code: P4938)

The archive consists of:

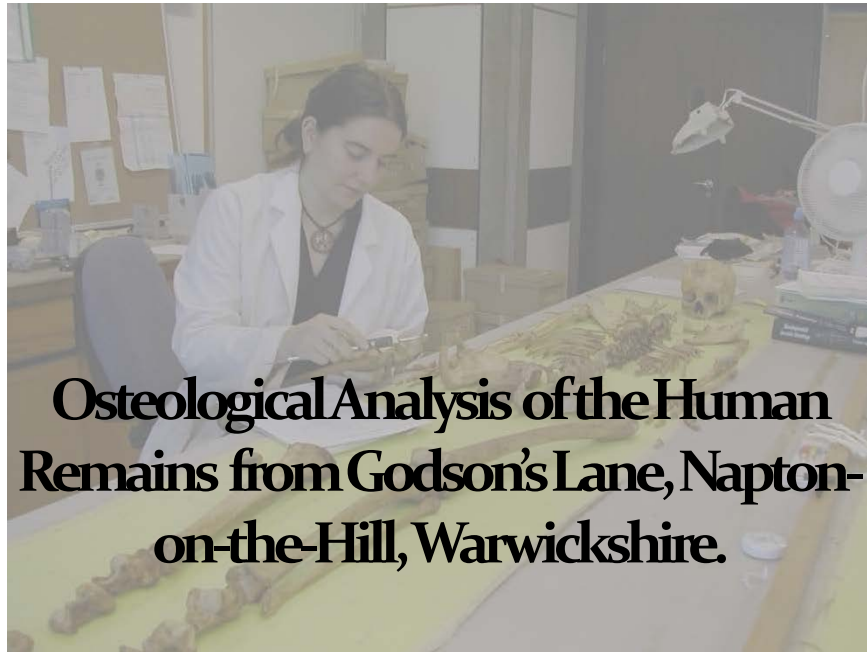
226	Context records AS1
6	Photographic records AS3
526	Digital photographs
454	Aerial digital photographs (JPEG and DNG)
3	Drawing number catalogues AS4
41	Scale drawings
5	Context number catalogues AS5
1	Skeleton records AS6
1	Recorded finds records AS13
1	Sample number catalogues AS18
19	Trench record sheets AS41
12	Skeleton Recording Forms (Ossafreelance)
1	Articulated inhumated database
3	Boxes of finds
1	Bag of flots and sorted remains from residues
.1	Box containing human remains
1	CD-Rom/DVDs
1	Copy of this report (bound hard copy)

The project archive is intended to be placed at:

Warwickshire Museum
The Butts
Warwick
CV34 4SS
Tel. Warwick (01926) 412500

A copy of the report will be deposited with the Historic Environment Record (HER) and the National Monuments Record (NMR) as appropriate.

Appendix 2 Human bone report



Osteological Analysis of the Human Remains from Godson's Lane, Napton- on-the-Hill, Warwickshire.

A Report for Worcestershire Archaeology

December 2017

© Ossafreelance

Project OA1087

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2.2 SKELETAL INVENTORY	5
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1. Introduction

The aim of this report is to present the data obtained from the osteological analysis of human skeletal remains recovered during archaeological excavation undertaken by Worcestershire Archaeology ahead of residential development work on land at Godson's Lane, Napton on the Hill, Warwickshire (NGR: SP 4668561146, project code P4938).

During the course of the archaeological excavation, articulated human remains were discovered in an isolated grave. The burial contained the remains of one inhumated adult individual, SK(3052) (Figure 1). This skeleton was in an extended position, lying supine, and aligned on an approximately W-E axis. No finds were discovered that were directly associated with the burial and there was no evidence of a coffin, corroborated by the lack of post-deposition movement of any of the skeletal elements *in situ* i.e. coffin tumble. AMS dating undertaken on a bone sample obtained from the right tibia of the skeleton returned a date of 969-1030 calAD (95.4% level confidence). The burial was located in the corner of two adjoining medieval ditches and residual medieval pottery was recovered from the backfill of the grave.

Osteoarchaeological analysis was undertaken to assess the condition and completeness of SK(3052) as well as to determine the age, sex and stature of this individual. Any non-metric traits, skeletal and dental pathologies were also recorded. An overview of the observations is presented here in addition to a summary catalogue of the human remains.



Figure 1: SK(3052) *in situ* (Photograph: Worcestershire Archaeology)

2. Methods and Process

The skeletal material was analysed according to the standards laid out in the guidelines recommended by the British Association of Biological Anthropologists and Osteologists in conjunction with the IFA (Guidelines to the Standards for Recording Human Remains, Brickley and McKinley (eds) 2004) as well as by English Heritage (Human Bones from Archaeological Sites: Guidelines for producing assessment documents and analytical reports, Centre for Archaeology Guidelines, 2002).

Recording of the material was carried out using the recognised descriptions contained in Standards for Data Collection from Human Skeletal Remains by Buikstra and Ubelaker (1994). Full recording forms are supplied separately to be archived with any other archaeological recording forms. All skeletal data has been recorded using an MS-Access database(s) which can be found on the CD-Rom provided.

The material was analysed macroscopically and where necessary with the aid of a magnifying glass for identification purposes. Where relevant, digital photographs have been used for illustration and a full digital image archive of all pathologies and any other features of interest has been provided on the CD-Rom enclosed with this report.

The material was analysed without prior knowledge of associated artefacts so that the assessment remained as objective as possible.

2.1 Reasons for the Analysis

Osteological analysis was carried out to ascertain:

- ❑ Inventory of the skeletal material
- ❑ Condition of bone present
- ❑ Completeness of the skeleton
- ❑ Age Assessment
- ❑ Sex Determination
- ❑ Non-metric Traits
- ❑ Stature and Morphometric Data
- ❑ Skeletal Pathology

- Dental Pathology

2.2 *Skeletal Inventory*

An inventory of the skeletal elements present is undertaken to assess the completeness of the skeletal remains and identify the number of individuals present. An inventory also provides information on the specific elements within the skeleton that are present and can be assessed for pathological changes. Each element is recorded as present or absent. The long bones are recorded according to the presence or absence of the proximal (upper), middle and distal (lower) sections as well as the proximal and distal joint surfaces. The completeness of the bones of the axial skeleton (with the exception of the spine) is recorded according to the categories of <25%, 25-50%, 50-75% and 75%>.

A summary inventory of the skeletal elements present for each individual is provided in the skeletal catalogue below (see Section 3). A full inventory can be found on the enclosed CD-Rom.

2.3 *Condition of the Bone Present*

The condition of the bone was assessed macroscopically according to the categories and descriptions provided by the Guidelines to the Standards for Recording Human Remains (Brickley and McKinley, eds, 2004). Since most skeletons exhibit more than one grade of state of preservation, these categories are simplified into 4 main groups of preservation: Good (grades 0-2), Fair (grades 2-4), Poor (grades 4-5+) and Varied (more than 4 grades of condition). The condition of human bone can be influenced by both extrinsic (i.e. taphonomic conditions) and intrinsic (i.e. robustness) factors (Henderson 1987).

Sk(163) were recorded as being in 'good' condition, being scored as grade 0. However, several fragments, particularly those that were high in cancellous bone content such as the pelvis and vertebral bodies, were friable and some elements had undergone additional damage due to post-mortem truncation. Several of the long bones exhibited post-mortem breaks featuring 'breakaway spurs' that had occurred *in situ* while the bone had still contained sufficient collagen to produce this fracture pattern. This is likely to have been the result of the individual being interred in a shallow grave and the grave being subsequently subject to post-deposition load bearing or disturbance.

2.4 *Completeness of Skeletons*

This is a guide to the overall completeness of the individual's skeletal remains and is calculated according to the percentage of the bones present in relation to the total number of bones in a complete human skeleton. Completeness of remains is gauged through an assessment of the amount of material representing different areas of the body. A complete skeleton comprises of:

Skull = 20%

Torso = 40%

Arms = 20%

Legs = 20%

Each area of the skeleton was assessed and then placed into the following four categories of completeness: <25%, 25-50%, 50-75% and 75%> (Buikstra and Ubelaker 1994).

Recording the completeness of the individual can allow an insight to be gained into how much post-depositional activity has occurred as well as to assess how much information can potentially be gained from the remains.

SK(3052) was over 75% complete. Though the pelvis and vertebral bodies were fragmented, the preservation was sufficient to allow identification of the majority of fragments present.

2.5 *Age Assessment*

Establishing the age and sex of individuals from an archaeological assemblage not only provides an insight into the demographic profile of the population but can also be used to inform us of patterns in pathological distributions in a skeletal assemblage.

The age of sub-adults is assessed using both dental development (Smith 1991) and eruption (Ubelaker 1989) as well as long bone lengths (Schaefer *et al.* 2009) and epiphyseal fusion (Scheuer & Black 2004). These methods can usually provide a reasonably accurate age estimation due to a relatively narrow range of variation in normal sub-adult development. Thus, sub-adults can be placed into the following age categories: Foetal (<36 weeks), Neonate (0-1

month), Young Infant (1-6 months), Older Infant (6-12 months), Child (1-5 years), Juvenile (6-12 years) and Adolescent (13-17 years).

Assessment of adult age at death, unfortunately, results in much less specific age estimates due to a much greater individual variation in the features exhibited by the examined elements at particular ages (Cox 2000). Age estimation of adults was assessed from analysis of the auricular surface (Lovejoy et al 1985) and the pubic symphysis (Brookes and Suchey, 1990). Each of these methods examines the deterioration of these surfaces and categorises them accordingly. This deterioration is due in part to due to the health status of the individual but can also be influenced by life-style and so the variation produced by these factors results in much wider age categories: Very Young Adult (18-24), Young Adult (25-34), Middle Adult (35-49) and Old Adult (50+) (Buikstra and Ubelaker, 1984). Dental attrition was also used according to the method of Miles (1962).

SK(3052) was an adult individual with all observable epiphyses, including that of the clavicle, being fully fused. Examination of the pubic symphyses and auricular surfaces indicated the individual was aged between 30 and 45 years of age at death. Dental attrition was graded as stage 3, giving an age estimate of 20-30 years. Overall, SK(3052) was assessed as most likely representing a 'middle aged adult' though possibly belonging to the younger half of this age category.

2.6 Sex Determination

Sex is assessed using the criteria laid out by Buikstra and Ubelaker (1984) in the analysis of morphological features of the skull and pelvis. In addition, metric data is also used where possible, taking measurements of sexually dimorphic elements such as the femoral and humeral head (Bass 1995). Categories ascribed to individuals on the basis of this data were 'Male', 'Possible Male', 'Indeterminate', 'Possible Female', 'Female' and 'Unobservable'. Sex may be ascribed on the basis of metrics alone where no sexually dimorphic traits are observable. Where sex was not observable be either metric or morphological observations, it was recorded as 'Unobservable'. No sexing of sub-adult material is attempted due to the lack of reliable criteria available.

Based upon both morphological and metric assessment, SK(3052) was classified as a male, The majority of observable sexually dimorphic features present in the skeleton were male and overall, the bones were noted to be large and very robust.

2.7 *Non-Metric Traits*

Non-metric traits are morphological features that occur both in bone and dentition. These features have no specific functional purpose and occur in some individuals and not in others. The origins of non-metric traits have now been shown to be highly complex, each having its own aetiology and each being influenced to differing extents by genetics, the environment and by physical activity. A review of the current literature suggests that the undetermined specific origins of these traits and the fact that there is more genetic variation within populations than between them can prevent useful conclusions regarding their presence or absence in skeletal remains from being drawn (Tyrell 2000).

The presence of any non-metric traits is noted in the skeletal catalogue below (see Section 3).

2.8 *Stature and Morphometric Analysis*

Stature of adult individuals can be reconstructed from measurements of long bones of the skeleton. Since the long bones of sub-adults have not yet fully developed it is not possible to provide an estimate of stature for immature remains. Stature is the result of many factors including genetics and environmental influences (Floud *et al.* 1990), such as malnutrition and poor health. Height can be used as an indicator of health status and there is a wide range of literature on the relationships between height, health and social status. Estimated stature was calculated by taking the measurements of the individual long bones and using the formula provided by Trotter (1970). Variation in estimated stature can be up to 3cm.

Metric analysis of the long bones, cranium and mandible may also be undertaken on adult remains to provide comparative information on morphological variability.

Stature was estimated for SK(3052) from the left femur and tibia, which is thought to be the most accurate method for reconstructing stature from the skeleton. Stature was calculated as being approximately 1.82m.

A summary of the morphometric data is provided in the skeletal catalogue.

2.9 *Skeletal Pathology*

Palaeopathology is the study of diseases of past peoples and can be used to infer the health status of groups of individuals within a population as well as indicate the overall success of the adaptation of a population to its surrounding environment. Pathologies are categorised according to their aetiologies; e.g. congenital, metabolic, infectious, traumatic, neoplastic etc. (Roberts and Manchester 1997). Any pathological modifications to the bone are described. The size and location of any lesion is also noted. Distribution of lesions about the skeleton should be noted to allow diagnosis. A differential diagnosis for any pathological lesions should also be provided.

SK(3052) exhibited a number of minor pathological changes. An ovoid cavity was present on the anterior of the body of the first lumbar vertebra on the left hand side (Figure 2). The cavity was not a typical lytic lesion that might be associated with an infection or neoplasm, with no indication of bone resorption leading to the defect. Instead, the lesion was appeared congenital or developmental, with the surface of the smooth wall of the cavity being continuous with the remainder of the surface of the body. It is possible that a soft tissue cyst or similar was present at the site and that the vertebral body has formed around it. One further vertebra, the eighth thoracic vertebra, exhibited a slight reduction in height sagittally in the centre of the vertebral body, a feature associated with the congenital condition of 'butterfly vertebra'. This is a defect that is produced by a failure of the notochord to regress at the correct time during the embryonic development of the vertebra and can result in a complete cleft between the two halves of the vertebral body (Barnes 1994). There was no cleft present in this case and therefore, the defect was only mild.



Figure 2: *Developmental Defect, First Lumbar Vertebra*

Also observed was the separation of the tuberosity from the body of the left navicular of the foot (Figure 3). This can be the result of a developmental failure of the secondary ossification centre to unite to the navicular bone during childhood (Sheth and Martus 2017). An accessory navicular is usually asymptomatic and occurs as a normal variant, present in up to 12% of the population (Sheth and Martus 2017). However, it can result in medial arch pain if the foot is overused and the joint has been subject to microfracture. The navicular tuberosity can also become separated from the body of the navicular following an avulsion fracture of the tubercle of the left navicular was present, with non-union of the fractured fragment. The tuberosity is the attachment site of the *tibialis posterior* muscle; sudden eversion (outward turning) of the mid-front of the foot leading to a sudden pull (traction) of this muscle on the bone may cause it to fracture. Approximately 50% of all fractures to the navicular are avulsion type injuries and these tend to occur as a result of low-energy injuries (Rosenbaum et al. 2014).



Figure 3: *Accessory Navicular or Non-union of Tuberosity following Fracture*

A possible ossified haematoma was also noted on the right side of the inferior portion of the sternum, adjacent to the notch for the fifth costal cartilage (Figure 4). The lesion consisted of a rounded blastic deposit of lamellar bone that was irregular and rough on the surface and measured c. 9.7mm in diameter. Injury to the sternal cartilage at the attachment site, possibly as a result of traction from the *pectoralis major* muscle, could possibly have led to a bony blastic deposit. A differential diagnosis of a button osteoma was also considered but these are usually smooth surfaced (Salter 1999).



Figure 4: *Possible Ossified Haematoma*

Very deep and rugous attachments were observed bilaterally in skeletal elements of the upper limb, principally the costoclavicular ligament attachment sites at the medial ends of the clavicles as well as the attachment sites of the long head of *triceps brachii* muscle at the lateral border of the scapulae (Figures 5 and 6). The long head of *triceps brachii* comes under traction during retroversion and adduction of the arm (i.e. rotating and pulling the arm backwards, such as is seen in rowing and swimming, for example) and also acts as an antagonist or control to the biceps and brachialis muscles (Platzer 2004). The costoclavicular ligament also acts to stabilise the shoulder at the sternoclavicular joint and therefore, a rugous attachment site for the ligament indicates a long-term, repetitive strain on the joint. The bilateral nature of this robusticity in the arms is indicative of a strenuous physical activity being undertaken with both arms, though not necessarily simultaneously.

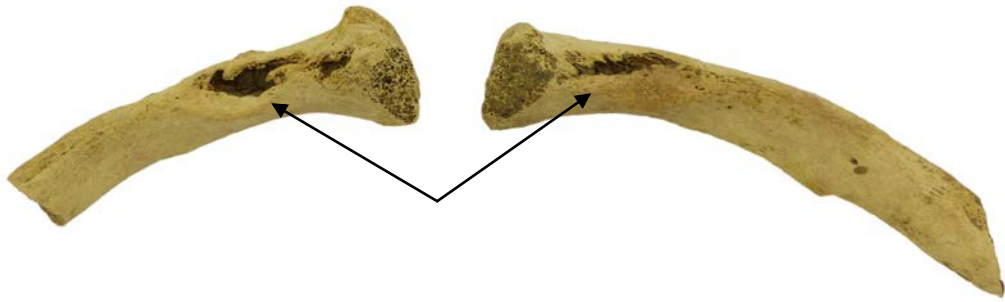


Figure 5: Deep insertion sites for the costoclavicular ligaments on the medial aspects of the clavicles



Figure 6: Extensive Attachment Sites for the Long Head of Triceps Brachii

Only one minor case of degenerative joint disease was noted, consisting of microporosity and osteophytic lipping that was present on the right costal facet and contiguous rib head of the twelfth thoracic vertebra. No other joint disease was present.

2.10 Dental Pathology

Dental diseases include conditions that not only directly affect the teeth but also the soft tissue surrounding them, sometimes observable in changes to the underlying alveolar bone (Hillson 1986). Each condition can give an indication of different aspects of lifestyle and health of the individual. For example, caries is associated with diets high in sucrose content. The presence of calculus can inform us about dental hygiene whilst enamel hypoplastic defects testify to developmental stresses that an individual has undergone in childhood (Goodman and Armelagos 1985, Hutchinson and Larsen 1988, Dobney and Goodman 1991). The analysis of dental disease, therefore, not only informs us of specific oral conditions but provides complimentary data regarding overall health status and cultural practices.

Rotation and malocclusion of the lateral right maxillary incisor was observed as well rotation of the right mandibular lateral incisor. Minor enamel hypoplastic defects were present in the anterior dentition of SK(3052), which may be related to bouts of febrile illness or malnutrition during childhood. Moderate dental calculus was also observed, particularly on the lingual surfaces of the mandibular anterior dentition and buccal surfaces of the maxillary anterior dentition, which was likely to have caused the minor periodontal disease present throughout. There were no caries or dental abscesses.

2.11 Diet from Stable Isotope Analysis

Carbon and nitrogen values were returned as part of the AMS dating procedure undertaken on the bone sample from the right tibia of SK(3052) (Table 1).

	$\delta^{13}\text{C}$ relative to VPDB	$\delta^{15}\text{N}$ relative to Air	C/N Ratio (Molar)
SK3052	-20.1‰	11.0‰	3.5

Table 1: Carbon and Nitrogen Stable Isotope Values

The carbon and nitrogen stable isotope values found in human bone are an indicator of the type of diet consumed by the individual under analysis. Differences in nitrogen and carbon isotopic values are indicative of variation in the composition of diet relating to the intake of terrestrial and marine foods, more specifically protein. Marine environments provide enriched $\delta^{13}\text{C}$ and

$\delta^{15}\text{N}$ compared to terrestrial environments and therefore the isotopic values of marine and terrestrial foodstuffs vary. These isotopes are taken up by human bone after dietary consumption and their values can be detected through stable isotope analysis (Mays and Beaven 2011). Due to the fact that bone is remodelled, the values will relate to the diet consumed within a few years before death, in contrast to tooth enamel, which does not remodel and therefore provide information on diet during childhood development (Tykot 2004).

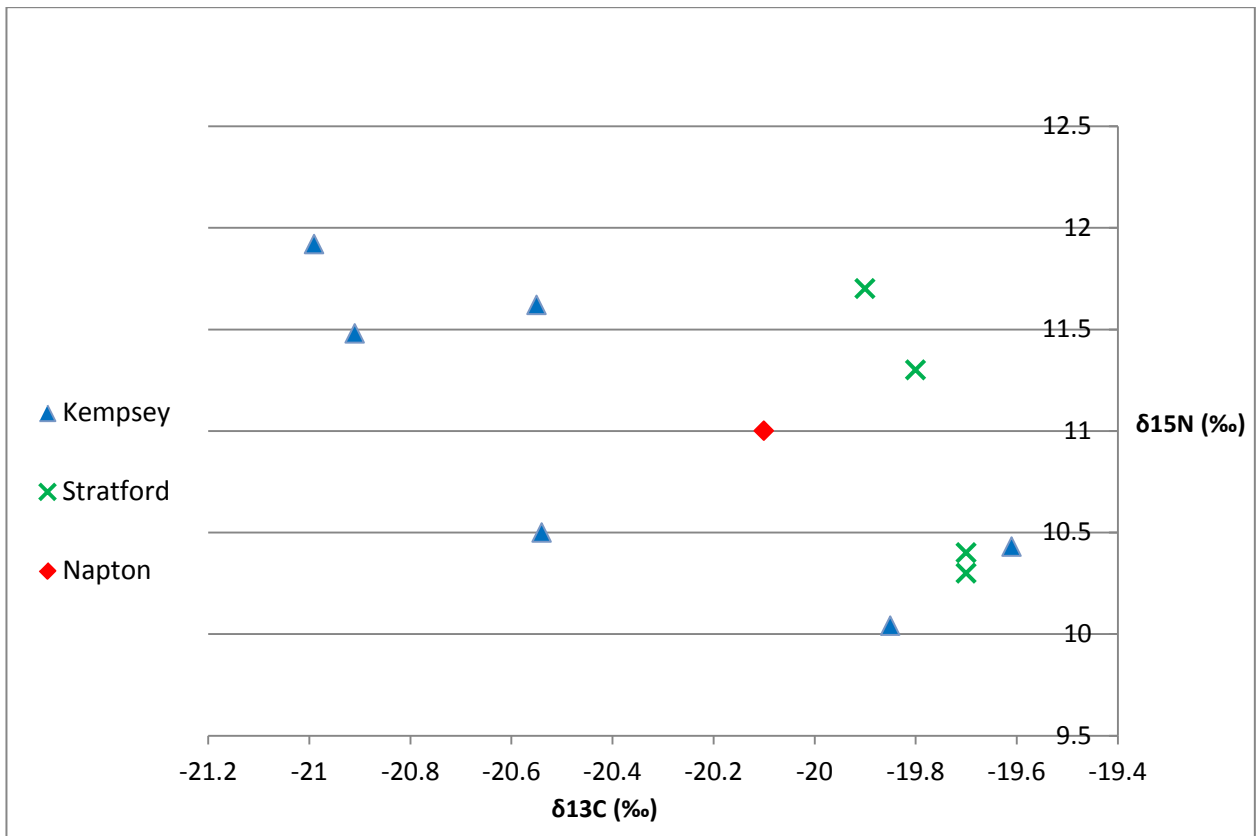


Figure 7: Comparison of Contemporary Stable Isotope Values from Kempsey (Worcestershire), Stratford-upon-Avon (Warwickshire) and Napton-on-the-Hill (Warwickshire).

Ideally, values from human samples are referenced to carbon and nitrogen values obtained from a local faunal assemblage so that the effects of trophic enrichment occurring within the human body upon consumption can be accurately gauged. Unfortunately, no local values from local faunal assemblages are known. However, comparison to carbon and nitrogen stable isotope values from regional contemporary human skeletal assemblages indicate that the isotope values from SK(3052) falls within the ranges from Kempsey, Worcestershire and Stratford-upon-Avon (Figure 7). Compared to the mean values suggested for terrestrial and fish dietary sources (Table 2), the values for SK(3052) suggest a terrestrial diet.

<i>Diet Source Values</i>	$\delta^{13}\text{C} \text{‰}$	$\delta^{15}\text{N} \text{‰}$
Terrestrial Plants	-21.8	4.9
Terrestrial Animals	-20.5	9.9
Eel/Freshwater Fish	-22.5	12.2
Salmonoids/Marine Fish	-13.5	13.0

Table 2: *Food Sources and Their Isotopic Values in Early Anglo-Saxon England, after Mays and Beaven (2011)*

Further analysis of the oxygen or strontium stable isotopes from SK(3052) may be able to shed light on the origins this individual.

3. Discussion

Osteological analysis of the human skeletal remains from Napton-on-the-Hill suggests that this individual was a middle aged man, aged between 30 and 45 years at death. Stature was estimated at 1.82m. There were several indications about the skeleton suggesting this individual was not only tall but of a very robust, muscular build and had been physically active during life. Interred in the corner of a field delineated by ditches, the only dating evidence for the skeleton at the time of the excavation was residual medieval pottery. However, the AMS radiocarbon date for SK(3052) of between 969 and 1030 calAD (95.4% confidence level) clearly predates this period and provides solid evidence that the burial dates to the late Saxon period.

To date, several Saxon burials and cemeteries have been reported from Warwickshire but all are recorded as dating to the Early Saxon period. Once such burial was discovered in 1927 at the west end of Napton Hill, accompanied by a long sword and shield boss (HER No: MWA739). Three other possible medieval burials in Napton-on-the-Hill were discovered in the 1720's approximately 100m south of Pillory Green in a field recently known as Grimes' Field but at the time was referenced as 'Dead Leys' field in a Crowners' Quest report into the discovery at the time (HER No: MWA6213). It was unclear if the skeletons were associated with plague burials or may have originated from a graveyard of the chapel. No other burials dating to these periods have been recorded. The earliest parts of the present church of St Lawrence are thought to date to the 12th century, though burials on the site may predate its construction.

This discovery of an isolated burial dating to the late Saxon period is rare but a small number of similar burials have been reported across the country (Buckberry 2010). Also noted by Reynolds (2002, after Buckberry 2010) are references to the burials of named individuals in late Saxon charter bounds, burials that arguably belonging to the contemporary period rather than being a reference to ancient interments. Although the Christian church was well founded in England by this period and most burials are known to have taken place in community burial grounds (with or without the presence of a church building), it is clear from recent archaeological excavations that in this early part of its history there is considerable variation in the manner, form and location of burials (Buckberry 2010). Burials only became much more stringently regulated and localised in the Medieval period. For example, the minster church of St Mary's in Southampton (Hamwic) was well documented to hold the monopoly on burials in the town in the post-Conquest period. Accidental findings of smaller groups of burials outside of St. Mary's grounds within the settlement that have been radiocarbon dated to the late Saxon period suggest that this was not the case earlier in its history and that satellite burial grounds or plots co-existed with the main churchyard (Cherryson 2010).

This late Saxon burial is therefore an important and unique find in Napton-on-Hill and in the further region of Warwickshire. Its discovery helps to elucidate the earlier history of the settlement during the Saxon period, for which, to date, there has been little documentary evidence or archaeological evidence.

4. Catalogue of Human Remains

A summary catalogue of SK(3052) has been compiled below. A full inventory and recording of the human skeletal remains can be found on the MS Access database.

SK3052

Inventory: Complete cranial vault (no orbits observable) but fragmented; no lacrimal or nasal bones; no vomer, ethmoid or hyoid (or highly fragmented and unobservable); mandible; C1-L5 vertebrae; 12 left ribs; 12 right ribs; Complete but fragmented humerii, radii and ulnae; Complete but fragmented femora, tibiae and fibulae; Complete but fragmented pelvis; Complete but fragmented sacrum; Incomplete scapulae; Complete but fragmented clavicles; Complete patellae; Coccyx; Right and left scaphoid, lunate, triquetral, capitate, hamate, trapezium and

trapezoid and left pisiform; All metacarpals; 28 hand phalanges; All tarsals except the right first and second cuneiform and right navicular; all metatarsals; 15 foot phalanges.

Completeness: 75%>

Condition: Good (Grade 0)

Dental Inventory and Pathology:

3052	<i>Observable dentition</i>	<i>Observable tooth sockets</i>	<i>Ante-mortem loss</i>	<i>Caries</i>	<i>Calculus</i>	<i>Periodontal disease</i>	<i>Enamel hypoplasia</i>	<i>Abscess</i>
<i>n</i>	32	30	0	0	31	32	15	0

Calculus was present on the majority of the dentition, with moderate deposits on the lingual and buccal surfaces of the anterior dentition.

Age Assessment: Age: 30-45. Pubic Symphyses stages late 4-early 5 (35-45); Auricular surfaces stage: Left 4 (35-39); Dental Attrition Left and Right stage 3 (20-30).

Sex Determination: Male. Pelvic and cranial morphology, male; Metric data, male

Stature: 1.82m (Femur and Tibia)

Non-Metric Traits: Left palatine torus, Right Allen’s fossa.

Skeletal Pathology: Developmental defect L1 body, cavity in anterior body. ‘Minor butterfly vertebra’ like defect T8; Accessory navicular or avulsion fracture of navicular tuberosity, left side; DJD right costal facet T12 and rib head, possible ossified haematoma sternum; rugous attachments sites for costoclavicular ligaments (clavicles) and long head of triceps brachii (scapulae) bilateral.

5. Acknowledgements

Osteological analysis and report writing were carried out by Gaynor Western of Ossafreelance. Thanks are due to Liz Pearson and Tom Vaughan of Worcestershire Archaeology for the provision of context data.

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THE ARCHIVE

Type	No	Type	No
Skeleton Recording Form A	1	Skeleton Recording Form L	0
Skeleton Recording Form B	1	Skeleton Recording Form P	1
Skeleton Recording Form D	1	Skeleton Recording Form Q	1
Skeleton Recording Form E	1	Skeleton Recording Form R	1
Skeleton Recording Form F	1	Skeleton Recording Form S	0
Skeleton Recording Form G	1	Skeleton Recording Form V	0
Skeleton Recording Form H	1	Skeleton Recording Form W	0
Skeleton Recording Form I	1	Articulated Inhumated Db	1
Skeleton Recording Form J	1		
Skeleton Recording Form K	1		

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Appendix 3 Radiocarbon dating (SUERC)

RADIOCARBON DATING CERTIFICATE

22 January 2018

Laboratory Code SUERC-76923 (GU46458)
Submitter Liz Pearson
Worcestershire Archaeology
The Hive
Sawmill Walk
The Butts
Worcester WR1 3PB
Site Reference Godson's Lane, Napton, Warwickshire
Context Reference 3052
Sample Reference P4938/3052
Material Bone : Human
 $\delta^{13}\text{C}$ relative to VPDB -20.1 ‰
 $\delta^{15}\text{N}$ relative to air 11.0 ‰
C/N ratio (Molar) 3.5
Radiocarbon Age BP 1036 \pm 25

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon* 58(1) pp.9-23.

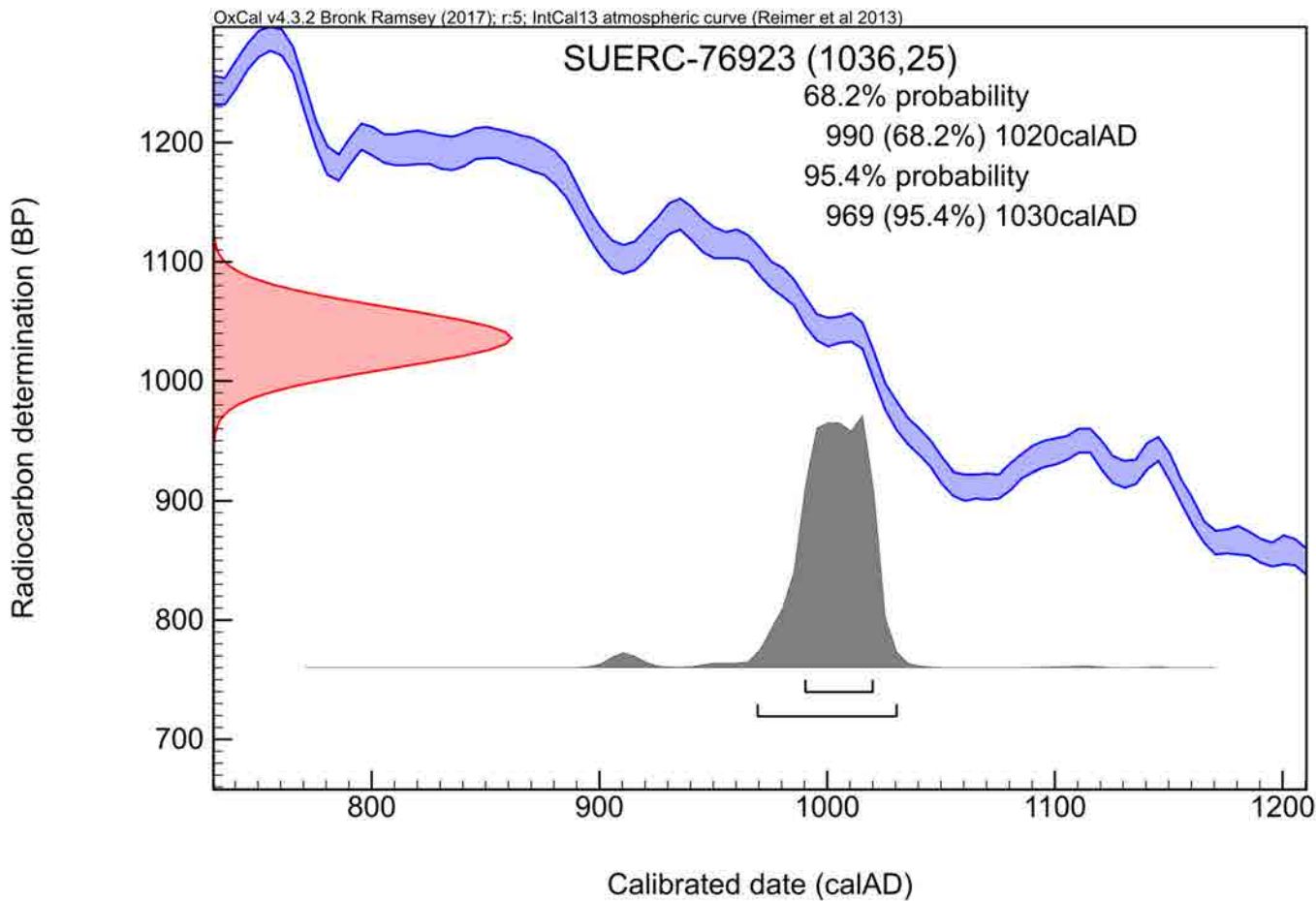
For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

E. Dunbar

Checked and signed off by :

P. Nayson



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

* Bronk Ramsey (2009) *Radiocarbon* 51(1) pp.337-60

† Reimer et al. (2013) *Radiocarbon* 55(4) pp.1869-87