

Archaeological excavation at Lowbrook Farm, Lowbrook Lane, Tidbury Green, Solihull



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Archive and Archaeology Service
The Hive, Sawmill Walk,
The Butts, Worcester
WR1 3PD

Status: Revision 2: 18 October 2017
Date: 13 October 2017
Author: Andrew Mann amann@worcestershire.gov.uk
Contributors: Elizabeth Pearson, C Jane Evans and Rob Hedge
Illustrator: Carolyn Hunt
Project reference: P5122
Report reference: 2502
Oasis id: fieldsec1-297955

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Andrew Mann

With contributions by Elizabeth Pearson, C Jane Evans and Rob Hedge

Illustrations by Carolyn Hunt

Summary

An archaeological excavation was undertaken at Lowbrook Farm, Lowbrook Lane, Tidbury Green, Solihull (centred on NGR SP 097 760). It was commissioned by Orion Heritage, whose client intends to develop the site for residential purposes and for which a planning application has been granted. Eight excavation areas targeted archaeological features identified during an earlier evaluation in areas of the site that would be subjected to greater disturbance during the development.

The excavation largely confirmed the results of the desk based assessment and evaluation, that there was a low density scatter of prehistoric activity across the site. The earliest activity, a prehistoric cooking pit and associated postholes which may have formed a windbreak contained frequent fire-cracked stones, dated from the Late Neolithic-Early Bronze Age and is indicative of mobile, transient groups, having passed through the valley, but who did not remain long.

Later activity consisted of a number of postholes, stakeholes and pits that are broadly dated to between the Late Bronze Age and Late Iron Age. These are also considered to be the remains of temporary activity, probably indicating the occupation of the site on a seasonal basis. The date of the features may also suggest the presence of a more formalised Iron Age landscape locally.

A small quantity of residual Roman pottery hints at low level activity in the vicinity in the Roman period, although no features of this date were identified within the site itself. Later medieval and post-medieval remains comprised field boundaries and furrows indicating that this site was primarily used for rural agricultural activity. The lack of any density of features or cultural material from any period indicates that the site has probably not been used for intensive or permanent settlement before the present farm, established in the 16th century.

Report

1 Background

An archaeological excavation was undertaken at Lowbrook Farm, off Lowbrook Lane, Tidbury Green, Solihull (centred on NGR SP 097 760; Fig 1). It was commissioned by Orion Heritage, whose client intends to develop the site for residential purposes and for which a planning application was submitted to Solihull Metropolitan Borough Council (PL/2012/01568/FULM) and which was granted conditional planning permission following appeal (APP/Q4625/13/2192128).

No brief was prepared, but the project conformed to the generality of briefs which have been previously issued, and with the Written Scheme of Investigation (WSI) prepared by Orion Heritage (2017) which was approved in consultation with Anna Stocks (Archaeological Planning Advisor, Solihull Metropolitan Borough Council).

The project conformed to the *Standard and guidance: Archaeological field excavation* by the Chartered Institute for Archaeologists (CIfA 2014a).

2 Aims and objectives

The principal aims of the archaeological excavation were to:

- determine the presence or absence of archaeological remains;
- determine the character, extent, date, complexity, integrity, state of preservation and quality of any archaeological remains present, therefore ensuring their preservation by record;
- to carry out post-excavation analysis, reporting and archiving.

The general objectives were to ensure:

- the protection and recording of archaeological assets discovered during the archaeological works;
- that any below-ground archaeological deposits exposed were promptly identified; and
- the recording of archaeological remains, to place this record in its local context and to make this record available.

3 Methods

3.1 Personnel

The project was led by Andrew Mann (BA (hons.), MSc), who joined Worcestershire Archaeology in 2004 and has been practising archaeology since 2001, assisted by Graham Arnold (BA (hons.), MSc) and Jamie Wilkins (BA (hons.)). The project manager responsible for the quality of the project was Tom Vaughan (BA (hons. Dunelm); MA; ACIfA). Elizabeth Pearson (MSc; ACIfA) contributed the environmental report and Jane Evans (BA, MA, MCIfA) and Robert Hedge (MA Cantab) the finds report. Illustrations were prepared by Carolyn Hunt (BSc (hons.); PG Cert; MCIfA).

3.2 Documentary research

An archaeological desk-based assessment (DBA) of the site had previously been prepared (CgMs 2012). The DBA consulted both the Worcestershire and Warwickshire Historic Environment Records (HER) and English Heritage's National Monuments Record (NMR), assessing a search area with a 1km radius from the centre of the site. This provided access to records of archaeological sites, monuments and findspots within the search area, as well as readily available archaeological and historical information from related documentary and cartographic sources, including Ordnance Survey historic and modern mapping. The assessment is summarised in Section 4.2 below.

3.3 Fieldwork strategy

The excavation formed the final stage of a phased programmed of field investigation which included a geophysical survey (Magnitude Surveys 2016) and archaeological evaluation (Bradley 2016). The excavation was undertaken between 19 June and 7 July 2017. The Worcestershire Archaeology project number is P5122.

To inform the scope of mitigation, ten additional evaluation trenches (Fig 2: Trenches 51-58, 67 and 68) were opened within areas determined to be of the highest potential during the original evaluation (Bradley 2016). These trenches each measured 1.80m wide by 30.0m long.

Three small excavation areas (59, 60 and 61, Fig 2) were located to further investigate archaeological features identified in evaluation Trenches 2, 6 and 40 respectively. The WSI also proposed that three larger excavation areas be excavated across the development site. One of these (excavation area 62) was located to investigate archaeological features identified in evaluation Trench 35 (Fig 2) in the area of a proposed attenuation pond. Two further large excavation areas were proposed to investigate archaeological features identified in a number of evaluation trenches. As it became apparent during the excavation stage that archaeological remains were much less densely focussed than had been expected from the evaluation it was decided, following discussions between Cathy Patrick (Orion Heritage) and Anna Stocks (Planning Archaeologist, Warwickshire County Council) to reduce the size of these excavation areas. As a result eight excavation areas of varying sizes were opened across the site, totalling an area of 5,519m² (0.55 hectares) (Fig 2: excavation areas 59-66).

A further double width evaluation trench (Trench 69, Fig 2) was excavated inside the area of a curvilinear ditch exposed in excavation Trench 66 to confirm whether it enclosed a settlement area. This evaluation trench measured 3.70m wide by 34m long.

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 2014) and trench and feature locations surveyed using a differential GPS with an accuracy limit set at <0.04m. On completion of excavation, the evaluation trenches were reinstated by replacing the excavated material and the excavation areas edges were battered to <45° and left open.

3.4 Structural analysis

All fieldwork records were checked and cross-referenced. Analysis was effected through a combination of structural, artefactual and ecofactual evidence, allied to the information derived from other sources. The results of the evaluation (Bradley 2016) have been amalgamated into this stage of the report.

3.5 Artefact methodology, by C Jane Evans and Rob Hedge

The finds work reported here conforms with the following guidance: for finds work by ClfA (2014b), for pottery analysis by PCRG/SGRP/MPRG (2016), for archive creation by AAF (2011), and for museum deposition by SMA (1993).

3.5.1 Artefact recovery policy

The artefact recovery policy conformed to standard Worcestershire Archaeology practice (WA 2014; appendix 2).

3.5.2 Method of analysis

All hand-retrieved finds were examined. They were identified, quantified and dated to period. A *terminus post quem* date was produced, where possible, for each stratified context. The date was

used for determining the broad date of phases defined for the site. All information was recorded on a pro forma database.

Artefacts from environmental samples recovered during the evaluation were examined and included in the assessment, but no finds were recovered from environmental samples from the excavation.

The pottery and ceramic building material was examined under x20 magnification and referenced where appropriate to the Warwickshire fabric type series (Soden and Ratkai 1998).

The following categories/types of material could be considered for discard unless there is a specific request to retain them (and subject to the collection policy of the relevant depository):

- where unstratified
- post-medieval material in general, and;
- generally where material has been specifically assessed by an appropriate specialist as having no obvious grounds for retention.

3.6 Environmental archaeology methodology, by Elizabeth Pearson

The environmental project conforms to relevant sections of the *Standard and guidance: Archaeological field excavation* (ClfA 2014a), *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).

3.6.1 Sampling policy

Samples were taken according to standard Worcestershire Archaeology practice (WA 2014) and *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage 2011). A total of eight samples (each of up to 20 litres) were taken from the evaluation stage and 19 samples (each of up to 40 litres) from the excavation. In total, 26 samples were assessed from both the evaluation and excavation phases (Table 1).

3.6.2 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 hammscale. 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).

Charcoal was examined under a low power MEIJI stereo light microscope in order to determine the presence of oak and non-oak charcoal. Where non-oak charcoal was readily identifiable under low power (for example *Alnus/Carpinus/Corylus* sp) charcoal, identifications was based on reference texts (Schweingruber 1978 and Hather 2000) and reference slides housed at Worcestershire Archaeology.

Context	Sample	Feature type	Fill of	Phase	Period	Sample volume (L)	Volume processed (L)	Residue assessed	Flot assessed
<i>Evaluation</i>									
117	1	Furrow		5	Medieval to Post-medieval	10	10	Yes	Yes
1906	3	Pit	1905	3	Late Bronze Age	10	10	Yes	Yes
1907	4	Pit	1905	3	Late Bronze Age	20	10	Yes	Yes
1909	5	Pit	1908	3	Late Bronze Age to Late Iron Age	5	5	Yes	Yes
1910	6	Pit	1908	3	Late Bronze Age to Late Iron Age	10	10	Yes	Yes
2604	7	Posthole	2603	3	Late Bronze Age to Late Iron Age	10	10	Yes	Yes
2903	2	Pit	2905	3	Late Bronze Age to Late Iron Age	10	10	Yes	Yes
3505	9	Pit	3506	3	Late Bronze Age to Late Iron Age	10	10	Yes	Yes
<i>Excavation</i>									
5807	3	Tree bowl	5809	3	Middle Iron Age	20	10	Yes	Yes
6205	1	Stakehole	6206	3	Middle Iron Age	10	10	Yes	Yes
6207	2	Tree bowl	6208	?	undated	10	10	Yes	Yes
6304	4	Posthole	6305	3	Late Bronze Age to Late Iron Age	10	10	Yes	Yes
6306	5	Posthole	6307	3	Middle Iron Age to Early Roman	10	10	Yes	Yes
6310	6	Stakehole	6311	3	Early Iron Age	0.7	1	Yes	Yes
6312	7	Stakehole	6313	3	Early Iron Age	0.5		Yes	Yes
6314	8	Stakehole	6315	3	Early Iron Age	5	5	Yes	Yes
6316	9	Stakehole	6317	3	Early iron Age	10	10	Yes	Yes
6404	10	Stakehole	6405	3	Late Bronze Age to Late Iron Age	10	10	Yes	Yes
6611	11	Posthole	6612	3	Late Bronze Age to Late Iron Age	5	5	Yes	Yes
6615	12	Posthole	6616	3	Late Bronze Age to Late Iron Age	5	5	Yes	Yes
6619	13	Stakehole	6620	3	Late Bronze Age to Late Iron Age	10	10	Yes	Yes
6623	14	Pit	6624	3	Early Iron Age	20	10	Yes	Yes
6626	15	Pit	6628	3	Middle Iron Age	40	10	Yes	Yes
6630	16	Pit	6629	2	Early Bronze Age	20	10	Yes	Yes
6633	17	Pit	6629	2	Early Bronze Age	40	10	Yes	Yes
6635	18	Posthole	6634	2	Early Bronze Age	5	5	Yes	Yes
6637	19	Posthole	6636	2	Early Bronze Age	10	10	Yes	Yes

Table 1: List of bulk samples taken from the evaluation and excavation

3.6.3 Discard policy

Remaining sample material and scanned residues will be discarded after a period of 6 months following submission of this report unless there is a specific request to retain them.

3.7 Radiocarbon dating methodology, by Elizabeth Pearson

As few artefactual remains were recovered from the site it was decided to obtain radiocarbon dates for a number of features so that the archaeological remains could be placed into a firm chronology. A single radiocarbon date was obtained during the evaluation and a further seven were used during the mitigation works.

As the preservation of environmental remains was poor, particularly where short-lived material such as charred cereal grains or short-lived tree species was concerned, it was necessary to submit fragments of oak (*Quercus robur/petraea*) charcoal for dating in four cases. As oak trees can live for several hundred years, and sometimes over 1000 years, there is a high potential for an 'old wood effect' for oak samples. However, as there was no other way to date these features it

was considered worthwhile to submit this material in order to establish at least a broad date for the activity.

3.8 Statement of confidence in the methods and results

The methods adopted allow a high degree of confidence that the aims of the project have been achieved within the limitations of the low quantity of artefactual and environmental remains present.

4 The application site

The following information is taken from Bradley 2016.

4.1 Topography, geology and current land-use

The site comprises several pasture fields extending northwards from derelict farm complex, and is located along the western edge of the village of Tidbury Green. It is accessed via a drive from Lowbrook Lane to the south.

The site is bounded by the gardens of residential properties to the south and east, woodland to the north, and the River Cole to the west. This watercourse also forms the boundary between the West Midlands and Worcestershire. The eastern half of the site area is on a flat plateau of land around 151m AOD and the western half slopes down to the River Cole, at around 139m AOD.

The underlying solid geology comprises mudstone of the Mercia Mudstone Group. Superficial deposits are mostly Glacial Till, with alluvial deposits in close proximity to the River Cole (BGS 2016). The soil type across the site is recorded as the fine loamy over clay soils of the Oak 1 Soil Association (Ragg *et al* 1984, 255-257).

4.2 Archaeological context

An archaeological desk-based assessment (DBA; CgMs 2012) identified that there were no designated archaeological assets or significant undesignated assets in the site, although there were the locally important but poorly preserved remains of a probable 16th century farmhouse close to the location of extant farm buildings in the southernmost part of the site area (HER MSI10422). The farm complex has been subject to a level two Historic Building Record prior to demolition. This identified that significant alteration of buildings and re-use of 16th/17th century timbers had occurred in the 18th to 19th centuries (Wessex Archaeology 2016). Historic map evidence consulted during the preparation of the DBA suggested that the surrounding landscape was in agricultural use from at least the post-medieval period, whilst a subsequent geophysical survey did not identify any archaeological features beyond the remains of former agriculture (Magnitude Surveys 2016).

There are a limited number of heritage assets in the surroundings of the site, none of which pre-date the medieval period. A small moated site is located approximately 160m to the north (HER MSI3057, NMR 331428) and ridge and furrow agricultural remains are also present to the north (HER MSI9030), east (HER MSI9033) and south-east (HER MSI9029).

No previous intrusive archaeological work had been undertaken within the site area prior to the Worcestershire Archaeology evaluation. As noted above, building recording (Wessex Archaeology 2016) and geophysical survey (Magnitude Surveys 2016) had been undertaken prior to implementing this mitigation strategy.

5 Results

5.1.1 Radiocarbon dating, by Elizabeth Pearson

A total of eight samples were submitted for radiocarbon dating from pits, postholes, stakeholes and a tree throw (Table 2). The dates ranged from the Late Neolithic/Early Bronze Age (6633) at the earliest, to the Middle Iron Age/Early Roman (6306) at the latest. Some dates, for example (6310) and (6623), covered a particularly wide date range of up to 350 years, probably because the uncalibrated radiocarbon (BP) date intercepts a relatively flat part of the calibration curve dating to

the Early Iron Age, known as the 'Hallstatt plateau' (Hamilton, Haselgrove and Gosden 2015). Based on advice sought from Peter Marshall (Scientific Dating Coordinator, Historic England) chronological modelling of the radiocarbon dates is unlikely to refine the dates corresponding to the Halstatt Plateau as stratigraphic relationships and associated artefactual remains are sparse. The oak samples all date to the Early to Middle Iron Age, but given the potential old wood effect, the features themselves could potentially be later or earlier than the date recorded.

The results are conventional radiocarbon ages (Stuiver and Polach 1977) and are listed in Table 2. The calibrated date ranges for the samples have been calculated using the maximum intercept method (Stuiver and Reimer 1986), and are quoted with end points rounded outwards to ten years. The probability distributions of the calibrated dates, calculated using the probability method (Stuiver and Reimer 1993) are shown in Appendix 1. They have been calculated using OxCal v4.2 (Bronk Ramsey 2009) and the current internationally-agreed atmospheric calibration dataset for the northern hemisphere, IntCal13 (Reimer *et al* 2013).

Laboratory code	Context number	Fill of	Material	$\delta^{13}\text{C}$ (‰)	Conventional Age	OxCal calibrated age (95.4% probability or 2 sigma)
SUERC-74620 (GU45059)	6306	6307	Charcoal: <i>Corylus avellana</i>	-25.1 %	2052 ± 29 BP	170 cal BC – 20 cal AD
SUERC-74621	6310	6311	Charcoal <i>Quercus robur/petraea</i>	-30.0 %	2452 ± 29 BP	750 – 400 cal BC
SUERC-74622 (GU45061)	6633	6629	Charcoal: <i>Corylus avellana</i>	-24.9 %	3862 ± 27 BP	2470 – 2200 cal BC
SUERC-74623 (GU45062)	6626	6628	Charcoal <i>Quercus robur/petraea</i>	-24.1 %	2215 ± 26 BP	380 – 190 cal BC
SUERC-74624 (GU45063)	6623	6624	Charcoal <i>Quercus robur/petraea</i>	-25.0 %	2479 ± 29 BP	780 – 430 cal BC
SUERC-74625 (GU45064)	5807	5809	Charcoal Cf <i>Alnus/Carpinus/Corylus</i> sp	-27.7 %	2208 ± 28 BP	380 – 190 cal BC
SUERC-74626 (GU45065)	6205	6206	Charcoal <i>Quercus robur/petraea</i>	23.7 %	2200 ± 31 BP	380 – 170 cal BC
SUERC-71088 (GU43016)	1907	1908	Charcoal <i>Alnus</i> sp	-25.9 %	2743 ± 30 BP	980 – 810 cal BC

Table 2: Radiocarbon dating results

5.2 Structural analysis

The excavation areas and features recorded are shown in Figures 2-9 and Plates 1-12. The results of the evaluation (Bradley 2016) have been amalgamated into this stage of the report. Please see the evaluation report for evaluation features discussed but not illustrated within this report.

A very small quantity of artefacts was identified evaluation or excavation and, although occasional modern pottery sherds were seen in the topsoil, no finds were recovered from either the topsoil or subsoil during the excavation. Only three artefacts (two Roman pottery sherds and one prehistoric flint) were recovered from the archaeological features excavated. As a result a larger number of radiocarbon dates than might otherwise have been undertaken were submitted to date the archaeological features excavated.

5.2.1 Phase 1: Natural deposits

The natural substrate was encountered in all of the excavated areas at between 0.24m and 0.50m from the ground surface. As the site covers a wide area, there were a number of slight variations in colour and consistency, but the natural substrate was characterised in most trenches as compact

light/mid-yellowish brown sandy clay with frequent gravels and patches of pinkish-red brown marl (Glacial Till). A number of variations in the natural, consisting of light greyish yellow sand patches were also tested to confirm whether they were of archaeological origin. As all of those investigated were of irregular form with diffuse edges they were considered to be either of geological origin or tree throws/bowls.

The natural was overlain by a moderately compact reddish brown sandy clay subsoil and a loose and friable greyish brown sandy silt topsoil.

5.2.2 Phase 2: Late Neolithic-Early Bronze Age

The earliest dated feature was a sub-circular pit [6629] containing frequent fire-cracked stones and charcoal fragments located towards the western end of excavation area 66. The pit was 1.44m long, 1.40m wide and 0.34m deep, with moderate to steep concave sides gradually breaking to a flat base (Plate 1 and Figures 7 and 8). The lower pit fill (6630), a dark greyish brown/black sandy clay contained occasional small angular fire-cracked stones and moderate charcoal flecks. This was overlain by a layer of redeposited natural (6631) which was in turn overlain by a dump of medium sized angular fire cracked stone fragments (6633). It is likely the two fills (6631) and (6633) represent two phases of activity, possibly cooking, separated by a period of inactivity, represented by the redeposited natural (6631) between them. *Corylus Avellana* charcoal from within the upper fill (6633) was radiocarbon dated to 2470-2200 cal BC (95.4% probability), during the Late Neolithic to Early Bronze Age transition.

Two postholes, [6636] and [6634], located to the immediate south of the pit also contained frequent fire-cracked stone fragments and are therefore considered to be of comparable date and possibly formed part of a wind break to shield the activities occurring around the pit [6629] (Plate 2, Fig 8). Two other postholes, [1808] and [1812] located only 10m to the north-west, in evaluation Trench 18, also contained occasional fire-cracked stone fragments and therefore may also be of comparable date (Fig 7).

5.2.3 Phase 3: Late Bronze Age-Late Iron Age

Across the remaining excavation areas a number of small pits, postholes and stakeholes were distributed across a wide area. Although some of these appeared to be grouped none formed identifiable structures. Seven of these features were dated to between the Late Bronze Age and Late Iron Age (Section 5.1.1). Although, as oak charcoal had to be submitted for radiocarbon dating, it is possible the features themselves may be earlier or later in date than the radiocarbon dates due to the old wood effect. As a result the features have been grouped together in a broad later prehistoric (Late Bronze Age to Late Iron Age) phase. Given the broad, but consistently Late Bronze Age to Late Iron Age, radiocarbon dates it is likely that most of the other discrete features (pits, postholes and stakeholes) identified during the evaluation and excavation are also of this phase.

Excavation area 60

A small undated pit [605] containing slumped natural was identified at the edge of Trench 6 during the evaluation and although it provided the focus for a small excavation area (Tr 60) no other features were identified in its vicinity. The excavation did however confirm the feature to be an oval pit, which was 1.30m long, 0.74m wide and 0.21m deep with a bowl shaped profile.

Excavation area 62

Excavation area 62 was located around the northern half of evaluation Trench 35 which contained two isolated, small and shallow pits (3504 and 3506), 27m apart (Fig 4). Both had single, homogenous and fairly sterile fills, although there was some charcoal present, and fill (3505) in pit [3506] did include a few heat-cracked stones, suggesting a possible prehistoric date. Very few other features were identified in Trench 62, but close to pit [3504] were two small stakeholes [6204] and [6206] each containing a charcoal rich clayey sand fill (Plate 3). Stakehole [6206] was dated to

380-170 cal BC (95.4% probability) and it is likely the other discrete features, including the pits excavated during the evaluation are of comparable date.

Excavation area 66

Two clusters of features were identified in excavation area 66; a group of three postholes to the northern edge of the trench (6612, 6614, 6616) and a roughly linear arrangement of two postholes (6618, 6620) and two small pits (6628, 6624) to the east (Fig 7).

The postholes to the north did not appear to form a structure and were variable in plan with U-shaped profiles, measuring upto 0.36m wide and 0.30m deep. Each contained mid greyish brown silty sand containing occasional charcoal flecks.

The two stakeholes to the east of the trench (6618 and 6620) were rounded in plan and had V-shaped profiles measuring up to 0.32m in diameter and 0.20m deep. Each were filled with a dark brown clayey sand containing moderate, small charcoal flecks. These were located close to two oval pits (6624 and 6628) with similar clayey sand fills containing frequent charcoal flecks (Plates 4-5). These were radiocarbon dated to between 780-430 cal BC and 380-190 cal BC (95.4% probability) respectively. This group of features was located c 3m to the south of pit [1203] identified at the western end of evaluation Trench 12. The irregular oval-shaped pit [1203] measured 1.88m long, 1.75m wide and 0.36m deep and contained two main fills, the lowest of which included frequent charcoal pieces. The charcoal rich fills seen in pits [1203], [6628] and [6624] are conjectured to be dumps of waste hearth material.

Other discrete features identified during the evaluation were found to be isolated within excavation area 66. These included another posthole identified in Trench 14 [1412] and a small circular pit in Trench 15 [1504]. The small and shallow posthole [1412] was oval shaped, packed with small sub-round stones and included frequent charcoal. Pit [1504] was shallow and truncated by a land drain. It contained a dark charcoal-rich fill that included a 0.36m long and 0.16m wide smoothed stone (possibly shaped but of uncertain use; photographed but not retained; Plate 12).

Excavation area 63

Three closely grouped pits were identified in evaluation Trench 19, which formed the focus of excavation area 63. The smallest pit [1903], was located at the south-west end of the Trench 19 (Fig 5). This was sub-circular, 0.15m in depth, with a relatively sterile fill that included rare charcoal flecks. A further 1.6m to the north-east was sub-circular pit [1905], 0.80m in diameter and 0.30m deep. This was fully excavated and although no artefacts were recovered, contained an upper fill (1907) that was rich in heat-cracked stone and charcoal, thought to be dump of fire or cooking waste (Plate 6). Charcoal from this was dated to 980-810 cal BC (95.4% probability).

A third pit [1908] was located 2.5m to the north-east, and measured 1.02m long, 0.82m wide and 0.42m deep. This pit contained a more complex sequence of infilling, perhaps demonstrating a slightly longer period of use and although only a few heat-cracked stones were recovered from this pit, the fills were charcoal-rich and ashy, again which indicate the probable deposition of hearth waste. Although pits [1903] and [1908] remain undated their close proximity to [1905] and in the case of [1908] their similarity of fills suggests they are of comparable date.

Although no other pits were identified in the excavation trench, seven stakeholes and postholes were excavated. Those closest to the evaluation pits (6311, 6313, 6315, 6309 and 6317) appeared to be small stakeholes, with vertical sides and V-shaped bases measuring between 0.18-0.35m in diameter and upto 0.16m deep. One of these [6311] was dated to between 750-400 cal BC (95.4% probability).

To the southern end of excavation area 63 were two postholes [6305] and [6307] that appeared more substantial than any other postholes or stake holes identified at the site. These were circular in plan with vertical sides and rounded bases, measuring upto 0.40m in diameter and 0.35m deep (Plate 7). Due to their alignment the trench was extended to the south to identify any other

postholes, although none were identified. Posthole [6307] was dated to 170 cal BC-20 cal AD (95.4% probability).

Excavation area 64

A large tree throw [5809] excavated in evaluation Trench 58, contained numerous bands of charcoal rich material, fragments of which were dated to 380-190 cal BC (95.4% probability) suggesting that the tree was felled during this phase (Plate 8, Figs 6 and 9). The throw had a typical crescent shape in plan with an internal vertical side and an angled outer edge. Charred root or branch fragments found in the fills of the tree throw suggest that the tree may have been purposefully felled by fire or that at the least the root bowl was burnt, possibly in an attempt to clear it.

Due to the size of the tree throw and the apparent anthropogenic involvement with the tree's felling, it formed the focus of excavation area 64. As in the other the other excavation areas the trench contained occasional discrete features, including two postholes [6405] and [2603], the latter having been previously excavated during the evaluation. Both were circular in plan and had U-shaped profiles and measured between 0.30-0.40m in diameter and upto 0.27m deep. A small fragment of glass of uncertain date came from an environmental sample from posthole [2603], which is thought to be intrusive.

Excavation area 65

At the south-east end of Trench 29 were two undated pits. Pit [2905] was sub-circular in shape and shallow (0.15m), with an upper charcoal-rich deposit of burnt material. Adjacent to this was pit [2907], an oval feature lacking in any dateable material. These formed the focal point for excavation area 65, however no other features were found in this trench and the pits appear isolated.

5.2.4 Phase 4: Roman/Post-Roman

A curvilinear ditch, Context Group 1 (CG 1), was originally identified in evaluation trenches 15 [1506], 16 [160] and 18 [1810] and as had been conjectured in the evaluation report was shown to be the same gully as it ran through the western end of excavation area 66 (Plate 9, Figs 7 and 9). The ditch (CG 1) had a rounded bowl-shaped profile and measured upto 0.63m wide and 0.26m deep. It was filled with sterile, soft mid-brownish grey clayey sand which is thought to have naturally accumulated. Two heavily abraded conjoining sherds of Roman date were recovered from ditch slot [6610], which indicates a Roman or more likely a post-Roman date for the ditch. The size of the gully, the lack of cultural remains in its fills and the apparent lack of internal features within the area enclosed by the ditch (as observed in evaluation trenches 17 and 69) suggests that it acted as an agricultural field boundary rather than an enclosure ditch for a settlement.

The route of this boundary was not established fully as it was not located in any other trenches and was not visible on the geophysical survey (Magnitude Surveys 2016). Other similar small ditches, containing comparable fills were however identified in Trenches 51 [5104] and 58/64 [5804]. It is considered likely that these were also field boundaries of comparable date. As these ditches are not visible on the 1840 Solihull Tithe map it suggests they date to sometime between the Roman period (43-410 AD) and 1840 AD when that map was created (Plate 10).

5.2.5 Phase 5: Medieval/post-medieval deposits

A significant number of features across the site appeared to represent a pattern of former agriculture, being field boundaries and furrows that reflect the historic map evidence and anomalies visible on the geophysical survey. Although there was little artefactual evidence to date these, the presence of a 16th century farm would suggest that they are likely to be associated with this and be of similar late-medieval to post-medieval date.

In the western part of the site evaluation Trench 1 contained twelve east to west aligned parallel furrows spaced roughly 3-3.5m apart. A 12m gap at the northern end of the trench (possibly a

headland) separated these from a shallow ditch on the same alignment [105], 0.32m in depth, which was probably a former field boundary. This did not contain any finds.

A similar sequence of eight east to west parallel furrows was observed in evaluation Trench 35 some of which were also visible in excavation area 62. In some cases these aligned with furrows identified in evaluation Trenches 32, 33 and 34 in the same field. Further south, furrows were also present in evaluation Trenches 42, 43, 48 and 49. Furrow [4308] in Trench 43 was investigated. It was 1.65m in width and 0.12m in depth, but did not contain any dating evidence.

In the eastern part of the site, east to west furrows were recorded in evaluation Trenches 18, 27 and 29, correlating well with the alignment of geophysical anomalies in this area. These were again observed excavation Trenches 64 and 65. The presence of the furrows and the land drains in the excavation areas provides little more information than previously gained in the evaluation.

Evaluation Trench 30 was positioned across a former north to south boundary, still visible as a raised bank in the field with an alignment of trees both to the north and south. Two parallel ditches were present within the trench; 5.5m apart and either side of the raised bank. The western of the pair, [307], was not excavated but was 0.70m in width and clearly cut through the subsoil, containing a humic sandy fill with frequent rooting. The eastern ditch, [304], contained a similar soft dark blackish-grey sandy fill. This feature was 0.68m in width and 0.30m in depth. No finds were recovered but as these boundary ditches cut through the subsoil they are considered to be of post-medieval date as this included finds of general 17th to 20th century date.

5.2.6 Phase 6: Modern deposits

Frequent parallel linear anomalies that had been highlighted on the geophysical survey were encountered during the evaluation, particularly in the eastern half of the site. Most were 0.30-0.40m in width and had been backfilled with stony re-deposited natural, suggesting that they were land drains. A small group was orientated north to south (Trenches 8 and 10), but the majority were east to west aligned (Trenches 3, 13, 14, 16, 18, 20, 21, 22, 23, 24, 28 and 29). In the south and west parts of the site, a herringbone pattern of drainage was identifiable (Trenches 31, 32, 35, 36, 37, 41, 42, 48 and 49). These were frequently encountered during the excavation but were most obvious in Trench 66.

Additional drainage features were also noted in Trenches 45, 46, 47 and 50, probably connecting to an open culvert that drained water from the farmyard down towards the river.

Other modern features included geotechnical trial hole pits, visible in Trenches 11 and 17; ground investigation boreholes, in Trenches 3 and 24; and a made ground deposit of re-deposited natural with brick and general inclusions of ceramic building material (CBM), up to 0.50m deep, in Trench 46 (4601). Also, Trench 43 contained a dump of modern rubbish in a cut feature along the western edge of the trench [4304].

The ditch terminus [4108] identified in evaluation Trench 41, was shown to cut through the subsoil during the excavation, which contained finds of 18th to 20th century date suggesting the ditch was of modern origin and probably a field boundary.

5.2.7 Undated deposits

Excavation area 59

Evaluation Trench 2 contained an elongated oval pit, or perhaps a terminus of a ditch, extending from the northern edge of the trench [207]. This was 0.93m in width and 0.51m in depth, containing a number of slumped natural fills, but no dating evidence. This was re-excavated during the excavation and although it was shown to be a ditch terminus during the excavation it remains undated (Plate 11, Fig 3). No other features were identified around the ditch during the excavation. The lack of cultural material or charcoal within the ditch does however suggest it was some distance from any occupation area and may therefore be a field boundary.

5.3 Artefacts, by C Jane Evans and Rob Hedge

The artefactual assemblage recovered is summarised in Tables 3 and 4.

5.3.1 Artefact analysis

The evaluation assemblage came from 19 stratified contexts and could be dated from the prehistoric/early Roman period onwards, although the majority of the assemblage was post-medieval and modern in date (see Table 3). Using pottery as an index of artefact condition, this was generally fair with the majority of sherds displaying high levels of abrasion, although the average sherd size, at 15.8g, was above average. The excavation produced only a handful of finds, from a further two contexts; a flint flake and two sherds of Roman pottery.

	Period	Material class	Material subtype	Object specific type	Count	Weight(g)
evaluation	prehistoric/early Roman	ceramic		unident	1	1
	medieval/post-medieval	ceramic		roof tile	1	201
	post-medieval	ceramic		pot	6	245
	post-medieval	ceramic		tile	1	45
	post-medieval	glass		window	1	2
	post-medieval/modern	ceramic		brick/tile	1	22
	post-medieval/modern	ceramic		clay pipe	4	11
	post-medieval/modern	ceramic		flowerpot	2	38
	post-medieval/modern	ceramic		pot	27	278
	post-medieval/modern	ceramic		sanitary ceramic	1	5
	post-medieval/modern	glass		vessel	2	41
	post-medieval/modern	slag	slag(glass)	pot	1	9
	undated	glass		unident	1	1
	undated	organic	charcoal	charcoal	1	1
	undated	organic	shell	oyster shell	15	279
undated	stone		burnt stone	1	6	
excavation		stone	flint	flake	1	1.02
	Roman	ceramic	earthenware	pot	2	7

total	69	1193.02
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Table 3: Quantification of the assemblage

	Broad period	fabric class	Fabric common name	count	weight(g)
evaluation	Post-medieval	MB	Red sandy ware	3	226
	Post-medieval/modern	MGW	Porcelain	4	48
	Modern	MGW	Modern china	23	220
	Post-medieval		Miscellaneous post-medieval wares	3	29
excavation	Roman		sandy oxidised ware	2	7
total				35	530

Table 4: Quantification of the pottery by fabric

5.3.2 Summary artefactual evidence by period

For the finds from individual features, including specific types of pottery, consult Tables 5 and 4 in that order and in combination.

Prehistoric and Roman

The finds evidence from the evaluation for prehistoric and Roman activity was inconclusive. Fill (1811) of posthole [1812] in Trench 18 yielded the only secure artefactual evidence from a cut feature. A fragment of burnt stone and small quantity of charcoal were recovered, along with a very small piece of undiagnostic sandy, oxidised ceramic material, possibly fired clay but bearing some similarity in consistency and fabric to Severn Valley Ware pottery; a prehistoric or early Roman date is thought possible, but this is in no way conclusive. The feature, therefore, remains as un-phased in the site sequence.

The excavation produced one small flake of dark grey translucent flint — not closely dateable — from fill (5807) of tree-throw [5809]. Although in relatively fresh condition, there are signs of edge-damage, but it is not possible to conclude whether this represents use-wear or post-depositional abrasion. It is, however, highly likely to be older than the c 4th-2nd BC radiocarbon date for the feature, so may be residual. Slight evidence for Roman activity in the vicinity was provided by two heavily abraded sherds in a sandy oxidised fabric, otherwise undiagnostic and only broadly datable to the Roman period. These were found in the fill (6603) of a small curvilinear ditch (6604) and are considered likely to be residual.

Post-medieval/modern

The evaluation produced a small quantity of post-medieval and modern material. A single piece of roof tile may stretch back into the later medieval period, although it is more likely to be post-medieval in date. The remainder of the assemblage can be dated from the later 18th to 20th century, with the highest concentration being 19th century in origin. The majority was present within topsoil and subsoil deposits or infilling furrows.

A range of typical domestic ceramics were represented, including:

- later 18th century engine-turned dipped earthenwares, including a base and foot ring of a mocha-decorated hemispherical bowl dating c 1790-1820,
- coarse 18th century black-glazed redwares,

- 19th or early 20th century porcelain, and
- Large quantities of 19th and early 20th century stone china (fabric 85)

The condition of the pottery was generally poor, and consistent with having been incorporated into arable soils from middens and domestic refuse.

Clay tobacco pipe fragments and small quantities of vessel glass and ceramic building material, likewise of 18th to early 20th century date, were also present, along with a single fragment of glass slag.

Of note was a deposit of oyster shells within rubble and soil deposit (5000) in evaluation Trench 50 adjacent to the farmyard. Although use of shellfish as fertiliser is well-documented, it is probably more likely that these represent kitchen waste from consumption of oysters, which were a cheap, abundant and nutritious foodstuff before the mid-20th century.

context	material class	material subtype	object specific type	count	weight(g)	start date	end date	TPQ date range
101	ceramic		pot	1	15	1768	1950	1768 - 1950
	ceramic		pot	1	160	1600	1800	
900	ceramic		clay pipe	1	2	1600	1910	1600 - 1910
1100	ceramic		clay pipe	1	1	1600	1910	1600 - 1910
1400	ceramic		sanitary ceramic	1	5	1800	2000	1800 - 2000
1811	ceramic		unident	1	1	-4000	410	4000BC - 410AD
	stone		burnt stone	1	6			
	organic	charcoal	charcoal	1	1			
1813	ceramic		pot	1	5	1800	1900	1800 -1900
2000	ceramic		clay pipe	1	7	1800	1910	1800 - 1910
2205	ceramic		flowerpot	2	38	1800	2000	1800 - 2000
2604	glass		unident	1	1			undated
2800	ceramic		pot	1	59	1600	1800	1600 - 1800
3010	ceramic		pot	5	4	1800	1950	1800 - 1950
	ceramic		pot	1	1	1750	1950	
3400	slag	Slag (glass)	pot	1	9	1600	2000	1600 - 2000
3500	ceramic		pot	1	7	1600	1800	1770 - 1900
	ceramic		pot	1	2	1770	1900	

3501	ceramic		roof tile	1	201	1200	1800	1800 - 1950
	ceramic		pot	4	30	1800	1950	
3601	ceramic		clay pipe	1	1	1600	1910	1600 - 1910
4200	ceramic		pot	1	12	1790	1820	1790 - 1820
4604	ceramic		tile	1	45	1600	1900	1600 - 1900
4905	ceramic		brick/tile	1	22	1600	1950	1600 - 1950
5000	organic	shell	oyster shell	15	279			1800 - 1950
	ceramic		pot	13	181	1800	1950	
	glass		vessel	2	41	1800	1950	
	glass		window	1	2	1700	1900	
	ceramic		pot	3	47	1750	1950	
5807	stone	flint	flake	1	1.02	-10000	43	10000 BC- 43AD
6603	ceramic		pot	2	7	43	410	43 - 410

Table 5: Summary of context dating based on artefacts.

5.3.3 Recommendations

It is considered that no further work on the assemblage is required.

5.3.4 Discard and retention

Although the final decision rests with the receiving museum, the assemblage is not considered sufficiently significant to warrant retention.

5.4 Environmental remains, by Elizabeth Pearson

In total, 26 samples were assessed from both the evaluation and the excavation, which were taken from features belonging to Phases 2, 3 and 5. The results are summarised in Tables 6, 7 and 8. Uncharred remains, consisting mainly of 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.

Context	Sample	Charcoal	Artefacts
<i>Evaluation</i>			
1906	3	abt	abt heat-cracked stones
1907	4	mod	abt heat-cracked stones
1909	5	abt	
1910	6	mod	
2604	7	occ	occ glass
2903	2	mod	occ heat-cracked stones
3505	9	occ	
<i>Excavation</i>			
6205	1	abt	occ Quartz
5807	3	mod	occ worked flint.
6205	1	abt	
6207	2	abt	
6303	4	occ	
6306	5	mod	

6310	6	abt	
6312	7	abt	
6314	8	occ	
6316	9	abt	
6404	10	mod	
6611	11	occ	
6615	12	occ	
6619	13	abt	
6623	14	mod	
6626	15	abt	
6630	16	occ	
6633	17	occ	
6635	18	occ	
6637	19	occ	

Table 6: Summary of remains from bulk samples (occ = occasional, mod = moderate, abt = abundant)

Context	Sample	Preservation type	Species detail	Category remains	Quantity/diversity	Comment
5807	3	ch	<i>Quercus robur/petraea</i> wood	misc	++/low	
6205	1	ch	<i>Quercus robur/petraea</i> wood, unidentified wood fragments	misc	++/low	
6205	1	?wa	unidentified herbaceous root fragments	misc	++++/low	
6207	2	ch	<i>Quercus robur/petraea</i> wood	misc	++/low	large well-preserved fragments
6207	2	?wa	unidentified herbaceous root fragments	misc	+++/low	
6207	2	?wa	<i>Rumex cf crispus</i>	seed	+/low	
6207	2	?wa		puparia	+/low	
6207	2	ch	unidentified wood fragments	misc	+/low	
6304	4	ch	<i>Quercus robur/petraea</i> wood, <i>Alnus/Carpinus/Corylus</i> sp wood, unidentified wood fragments	misc	+/low	
6306	5	ch	<i>Alnus/Carpinus/Corylus</i> sp wood, unidentified wood fragments, non-oak wood	misc	++/low	
6306	5	?wa	unidentified herbaceous root fragments	misc	+++/low	
6306	5	ch	unidentified wood fragments	misc	++/low	
6310	6	ch	<i>Quercus robur/petraea</i> wood, unidentified wood fragments	misc	++/low	
6310	6	ch		large mammal	++/low	small burnt bone fragment
6310	6	?wa	unidentified herbaceous root fragments	misc	+/low	
6312	7	ch	<i>Quercus robur/petraea</i> wood, unidentified wood fragments	misc	+/++/low	

6312	7	?wa	unidentified herbaceous root fragments	misc	+///low	
6314	8	ch	<i>Quercus robur/petraea</i> wood, <i>Alnus/Carpinus/Corylus</i> sp wood, unidentified wood fragments	misc	+/low	
6314	8	?wa	unidentified herbaceous root fragments	misc	+/low	
6316	9	?wa	unidentified herbaceous root fragments	misc	+/low	
6316	9	?wa	<i>Ranunculus acris/repens/bulbosus</i>	misc	+/low	
6316	9	ch	unidentified wood fragments	misc	+++/low	
6316	9	ch	<i>Quercus robur/petraea</i> wood, <i>Alnus/Carpinus/Corylus</i> sp wood, unidentified wood fragments	misc	+++/low	
6404	10	ch	unidentified wood fragments, non-oak wood,	misc	+++/low	
6404	10		unidentified herbaceous root fragments	misc	+++/low	
6611	11	ch	unidentified wood fragments	misc	+/low	
6611	11	?wa	unidentified herbaceous root fragments	misc	++/low	
6615	12	?wa	Poaceae sp indet stem frags, unidentified herbaceous root fragments	misc	++/+++/low	
6615	12	ch	unidentified wood fragments	misc	+/low	
6619	13	ch	<i>Quercus robur/petraea</i> wood, unidentified wood fragments, non-oak wood	misc	+/low	
6623	14	ch	<i>Quercus robur/petraea</i> wood, unidentified wood fragments	misc	+/low	
6626	2	ch	<i>Quercus robur/petraea</i> wood	misc	+++/low	large well-preserved fragments
6626	15	?wa	unidentified wood fragments	misc	+/low	
6630	16	ch	<i>Alnus/Carpinus/Corylus</i> sp wood, unidentified wood fragments, non-oak wood	misc	+++/low	mostly non-oak
6633	17	?wa	unidentified herbaceous root fragments	misc	+++/low	
6633	17	ch	<i>Alnus/Carpinus/Corylus</i> sp, unidentified wood fragments	misc	+++/low	large fragments
6635	18	ch	<i>Quercus robur/petraea</i> wood, unidentified wood fragments, non-oak wood	misc	+/low	
6635	18	?wa	unidentified herbaceous root fragments	misc	+++/low	
6637	19	ch	<i>Quercus robur/petraea</i> wood, unidentified wood fragments, non-oak wood	misc	+///low	
6637	19	?wa	unidentified herbaceous root fragments	misc	+++/low	

Table 7: Plant remains from bulk samples from excavation.

Context	Sample	Preservation type	Species detail	Category remains	Quantity/diversity	Comment
1096	3	ch	<i>Alnus glutinosa</i> (wood), non-oak wood	misc	+++/low	good preservation, some large fragments, <i>Alnus</i> wood submitted for C14 dating
1906	3	?wa*	unidentified herbaceous root fragments	misc	+++/low	
1907	4	?wa*	unidentified herbaceous root fragments	misc	+++/low	
1907	4	ch	<i>Alnus glutinosa</i> (wood), unidentified wood fragments, non-oak wood	misc	++/+++/low	<i>Alnus</i> charcoal submitted for C14 dating. Good preservation, mostly non-oak?
1909	5	?wa*	unidentified herbaceous root fragments	misc	+/low	
1909	5	ch	<i>Quercus robur/petraea</i> wood	misc	+++/low	mostly oak?
1910	6	?wa*	unidentified herbaceous root fragments	misc	++/low	
1910	6	ch	<i>Quercus robur/petraea</i> wood	misc	+/low	mostly oak?
2604	7	?wa*	unidentified herbaceous root fragments	misc	+/low	
2604	7	?wa*	<i>Sambucus nigra</i>	seed	+/medium	
2604	7	ch	unidentified wood fragments	misc	+/low	tiny fragments, all unidentifiable
2903	2	?wa*	unidentified herbaceous root fragments	misc	+++/low	
2903	2	?wa*	<i>Polygonum aviculare</i> , <i>Atriplex</i> sp, <i>Chenopodium/Atriplex</i> sp	seed	+/low	
2903	2	ch	<i>Quercus robur/petraea</i> wood, unidentified wood fragments	misc	++/low	mostly small fragments, some identifiable
3505	9	?wa*	unidentified herbaceous root fragments	misc	+++/low	

Table 8: Plant remains from bulk samples from evaluation.

Key for Tables 7 and 8

Preservation	Quantity
ch = charred	+ = 1 - 10
min = mineralised	++ = 11- 50
wa = waterlogged	+++ = 51 - 100
?wa = waterlogged or uncharred	++++ = 101+
	* = probably modern and intrusive

5.4.1 Phase 2: Late Neolithic-Early Bronze Age

(Contexts 6630, 6633, 6635 and 6637)

Charcoal fragments were abundant in pit fills (6630) and (6633) of pit [6629]. Non-oak wood in this pit appeared to consist mainly of alder/ hornbeam/hazel (*Alnus/Carpinus/Corylus* sp), but preservation was poor and fragments relatively small, therefore the potential to distinguish between the three species was low. Oak (*Quercus robur/petraea*) was identified in small quantities in fills (6637) and (6635) of postholes [6634] and [6636] and in the fill (2903) of pit [2905].

5.4.2 Phase 3: Late Bronze Age to Iron Age

(Contexts 1906, 1909, 1910, 2604, 2903, 3504, 5807, 6205, 6304, 6306, 6310, 6312, 6314, 6316, 6404, 6612, 6611, 6615, 6619, 6626)

Assemblages of charcoal of a similar composition to the above phase were recorded. The fill (6626) of a Middle Iron Age pit [6628] appeared to be solely made up of large, well preserved oak heartwood charcoal: a composition of different character to the remaining samples. This suggests selective fuel wood selection, perhaps for a specific activity rather than for general domestic use. However, little other interpretation could be made.

5.4.3 Phase 5: Medieval to post-medieval

One sample was processed from a furrow (117) but not assessed.

5.4.4 Undated

Large well-preserved fragments oak (*Quercus robur/petraea*) were recovered from the fill (6207) of an undated tree bole [6208] which may be the remains of burning an oak tree stump.

5.4.5 Summary of the environmental remains

Charcoal survival was widespread across the site, although as fragments were mostly small and diversity low, no further work was recommended. Of note was the lack of charred cereal crop residue amongst the charcoal, suggesting that arable cultivation and processing was of low importance. This may reinforce the interpretation that this was an area of (pastoral) agriculture, ephemeral or seasonal activity.

6 Synthesis

The excavation results appear to confirm the results of the previous stages of works including the desk-based assessment (CgMs 2012) and archaeological evaluation (Bradley 2016) in that the site appears to occupy an area of land that was used for rural agricultural activity, particularly in the post-medieval period, with little indication of permanent settlement in the preceding centuries.

The earliest dated feature excavated, pit [6629], indicates that there has been some limited prehistoric activity at the site from the Late Neolithic/Early Bronze Age. The pit and associated postholes, which are conjectured to have formed a screen or wind break, are likely to reflect the temporary occupation of the area by a small transient group. The fire-cracked stones found in the pit, probably waste from cooking processes, suggest that some food had probably been prepared close to or possibly in the pit itself, although the pit's edges did not show any signs of in-situ burning and no hearths were identified around it. The river stones and cobbles used for cooking and discarded in the pits and postholes are not found within the natural geology and are likely to have been collected from the banks and bed of the River Cole around 250 metres to the west. Given the date of this activity and as the resources of the river valley appear to have also been used it is likely that further similar features, reflecting the use of hot stone technologies, will be located in the valley bottom to the west of the development site. There is the potential that a burnt mound will also be present, as these typically Bronze Age monuments are thought to have performed various roles for the transient, mobile communities of the earlier prehistoric periods.

The remaining prehistoric features at the site are typical of the general pattern of evidence for occupation in prehistory, consisting solely of postholes, pits and pit clusters. The thin scatter of stakeholes, postholes and pits is again indicative of small transient groups having occupied and cooked at the site for short periods of time. No houses were recorded although the stakeholes and postholes excavated may have formed parts of temporary, lightweight shelters and/or structures. The Iron Age date of these remains does however conflict slightly with the perceived development of prehistoric communities and settlements in the Midlands during the period. Within the accepted model Iron Age settlements become increasingly bounded by enclosure ditches, in a more partitioned landscape during the period in a response to increasing pressure on resources, caused by population increases and as a result of more broad sociopolitical changes. The remains seen at Lowbrook Farm appear to be sparse and temporal and are more indicative of the transient/mobile communities prevalent during the preceding periods. How many people were accessing and moving through the valley during this period is however difficult to confirm, but it may only have been a few individuals rather than large groups. It is also possible that the site may be at the edge of a more traditional, settled Iron Age landscape, one dominated by enclosed farmsteads in a bounded and partitioned landscape.

There is some limited evidence for Roman activity in the area in the form of two small pottery sherds from Trench 66. However, as this small assemblage was heavily abraded it suggests Roman occupation was located some distance from the site. The field boundary in which it was found suggests a Roman date for the feature, but given the abraded nature of the pottery is likely to be post-Roman. A number of small ditches and gullies, probably other field boundaries, found during the investigations are likely to be of comparable later date although the lack of cultural material in them makes it difficult to confirm their date.

Traces of former ridge and furrow agriculture were located across many parts of the site but no other medieval features or artefacts were identified and the evaluation had previously indicated that the farm complex in the south of the development site has not evolved from an earlier, medieval complex.

7 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:

An archaeological excavation was commissioned by Orion Heritage, at Lowbrook Farm, Lowbrook Lane, Tidbury Green, Solihull (centred on NGR SP 097 760).

The excavation largely confirmed the results of a previous evaluation which suggested that there a thin scatter of prehistoric features at the site. The earliest activity, a prehistoric cooking pit and associated postholes for a possible windbreak, contained frequent fire-cracked stones dated to the Late Neolithic/Early Bronze Age. Later activity, consisted of a number of postholes, stakeholes and pits that are considered to broadly date to the Late Bronze Age to Late Iron Age were also excavated. These are conjectured to be the remains of temporary settlements, probably occupied on a seasonal basis, but may also suggest the presence of a more formal Iron Age landscape locally.

A small quantity of residual Roman pottery hints at low level activity in the vicinity in the Roman period, although no features of this date were identified within the site itself. Later medieval and post-medieval remains comprised field boundaries and furrows indicating that this site was primarily used for rural agricultural activity. The lack of any density of features or cultural material from any period indicates that the site has probably not been used for intensive or permanent settlement before the present farm, established in the 16th century.

8 Acknowledgements

Worcestershire Archaeology would like to thank the following for their kind assistance in the successful conclusion of this project, Cathy Patrick (Orion Heritage), Elaine Dunbar (SUERC), Peter Marshall (Scientific Dating Coordinator, Historic England) and Anna Stocks (Planning Archaeologist, Warwickshire County Council).

9 Bibliography

AAF 2011 *Archaeological archives: a guide to the best practice in the creation, compilation, transfer and curation*, Archaeological Archives Forum, <http://www.archaeologyuk.org/archives/>

AEA 1995 *Environmental archaeology and archaeological evaluations. Recommendations concerning the environmental component of archaeological evaluations in England*, Working Papers of the Association for Environmental Archaeology, **2**

BGS 2016 *Geology of Britain Viewer*, <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>, British Geological Survey, accessed 26 August 2016

Bradley, R, 2016 *Archaeological evaluation at Lowbrook Farm, Lowbrook Lane, Tidbury Green, Solihull*, Worcestershire Archaeology, Worcester County Council, unpublished report **2373**, revision 2 dated 21 October 2016

Bronk Ramsey, C, 2009 Bayesian analysis of radiocarbon dates, *Radiocarbon*, **51**, 337-60

Cappers, TRJ, Bekker, RM, and Jans, JEA, 2012 *Digitale Zadenatlas van Nederland: Digital seed atlas of the Netherlands*, *Groningen Archaeological Studies*, **4**, Barkhuis Publishing and Groningen University Library: Groningen

CgMs 2012 *Archaeological Desk Based Assessment: Lowbrook Farm, Tidbury Green, Solihull*, CgMs Consulting, unpublished report **WB/13876**

CIfA 2014a *Standard and guidance: Archaeological excavation*, Chartered Institute for Archaeologists, <http://www.archaeologists.net/codes/ifa>

CIfA 2014b *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*, Chartered Institute for Archaeologists, <http://www.archaeologists.net/codes/ifa>

English Heritage 2011 *Environmental archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation*, Centre for Archaeology Guidelines

Hamilton, D, Haselgrove, C and Gosden, C, 2015 The impact of Bayesian chronologies on the British Iron Age, *World Archaeology*, **47:4**, 642-660

Hather, J G, 2000 *The identification of the northern European hardwoods: a guide for archaeologists and conservators*, Archetype Publications Ltd

Magnitude Surveys 2016 *Land at Lowbrook Farm, Solihull: Geophysical Survey Report*, Magnitude Surveys, unpublished report, **MSSP25**

Orion Heritage, 2017, Lowbrook Farm, Solihull, Archaeological written scheme of investigation. Unpublished document dated May 2017, **PN 1305 (QU-0509)**

Prehistoric Ceramic Research Group, Study Group for Roman Pottery, Medieval Pottery Research Group, 2016 *A standard for pottery studies in archaeology*

Ragg, J M, Beard, G R, George, H, Heaven, F W, Hollis, J M, Jones, R J A, Palmer, R C, Reeve, M J, Robson, J D, and Whitfield, W A D, 1984 *Soils and their use in midland and western England*, Soil Survey of England and Wales, **12**

Reimer, P J, Bard, E, Bayliss, A, Beck, J W, Blackwell, P, Bronk Ramsey, C, Buck, C E, Cheng, H, Edwards, R L, Friedrich, M, Grootes, P M, Guilderson, T P, Hafflidason, H, Hajdas, I, Hatté, C,

Heaton, T J, Hoffmann, D L, Hogg, A G, Hughen, K A, Kaiser, K F, Kromer, B, Manning, S W, Niu, M, Reimer, R W, Richards, D A, Scott, E M, Southon, J R, Staff, R A, Turney, C S M, and van der Plicht, J, 2013 IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP, *Radiocarbon*, **55**, 1869–87

Schweingruber, FH, 1978 *Microscopic wood anatomy: structural variability of stems and twigs in recent and subfossil woods from central Europe*, Swiss Federal Institute of Forestry Research

SMA 1993 *Selection, retention and dispersal of archaeological collections*, Society for Museum Archaeology, <http://www.socmusarch.org.uk/publica.htm>

Soden, I, and Ratkai, S, 1998 *Warwickshire Medieval and Post Medieval Pottery Type Series*, Northamptonshire Archaeology for Warwickshire Museum

Stace, C, 2010 *New flora of the British Isles*, Cambridge University Press, 3rd edition

Stuiver, M, and Polach, HA, 1977 Reporting of 14C data, *Radiocarbon*, **19**, 355–63

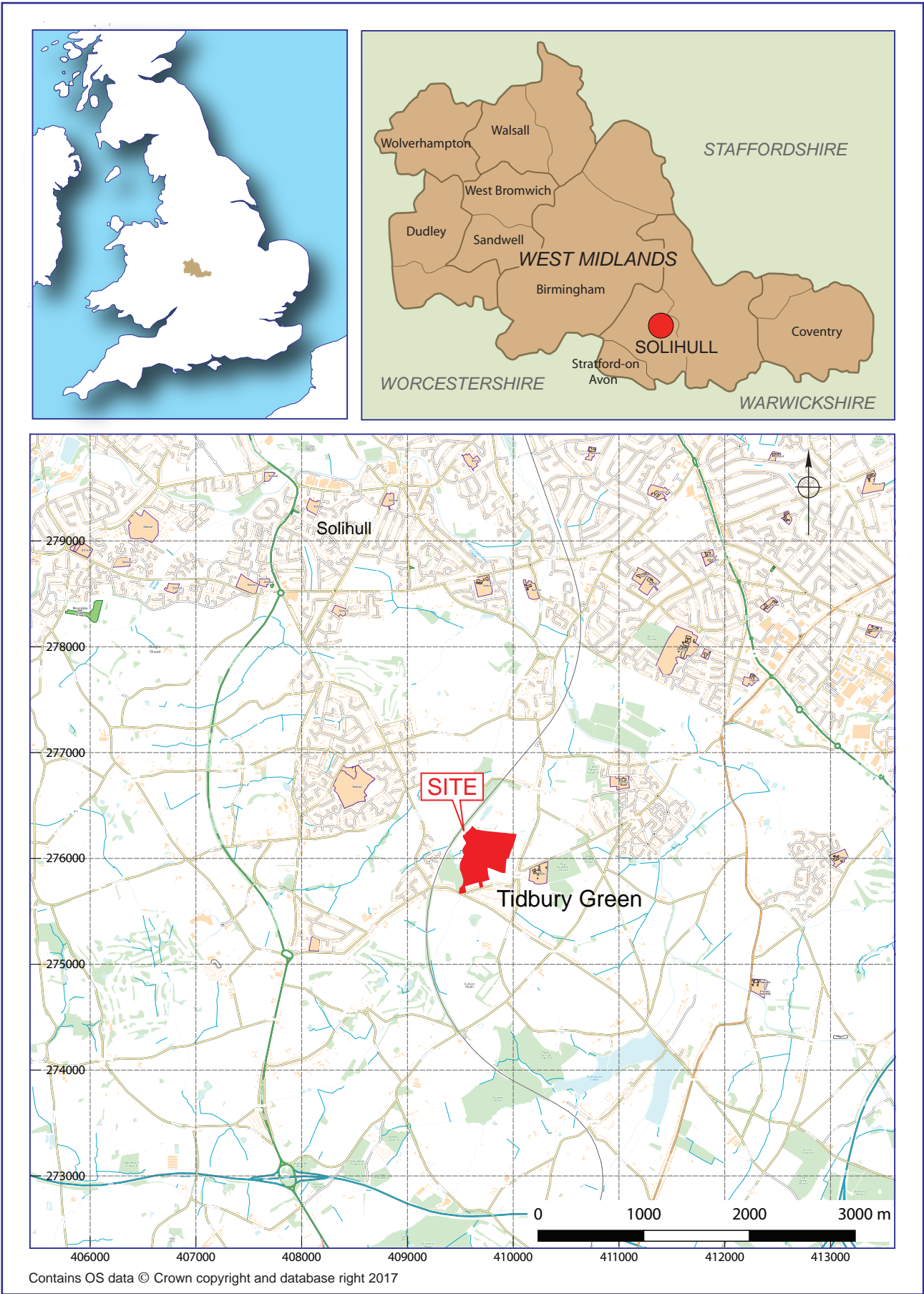
Stuiver, M, and Reimer, PJ, 1986 A computer program for radiocarbon age calculation, *Radiocarbon*, **28**, 1022–30

Stuiver, M, and Reimer, PJ, 1993 Extended 14C data base and revised CALIB 3.0 14C age calibration program, *Radiocarbon*, **35**, 215–30

WA 2014 *Manual of service practice, recording manual*, Worcestershire Archaeology, Worcestershire County Council, report **1842**

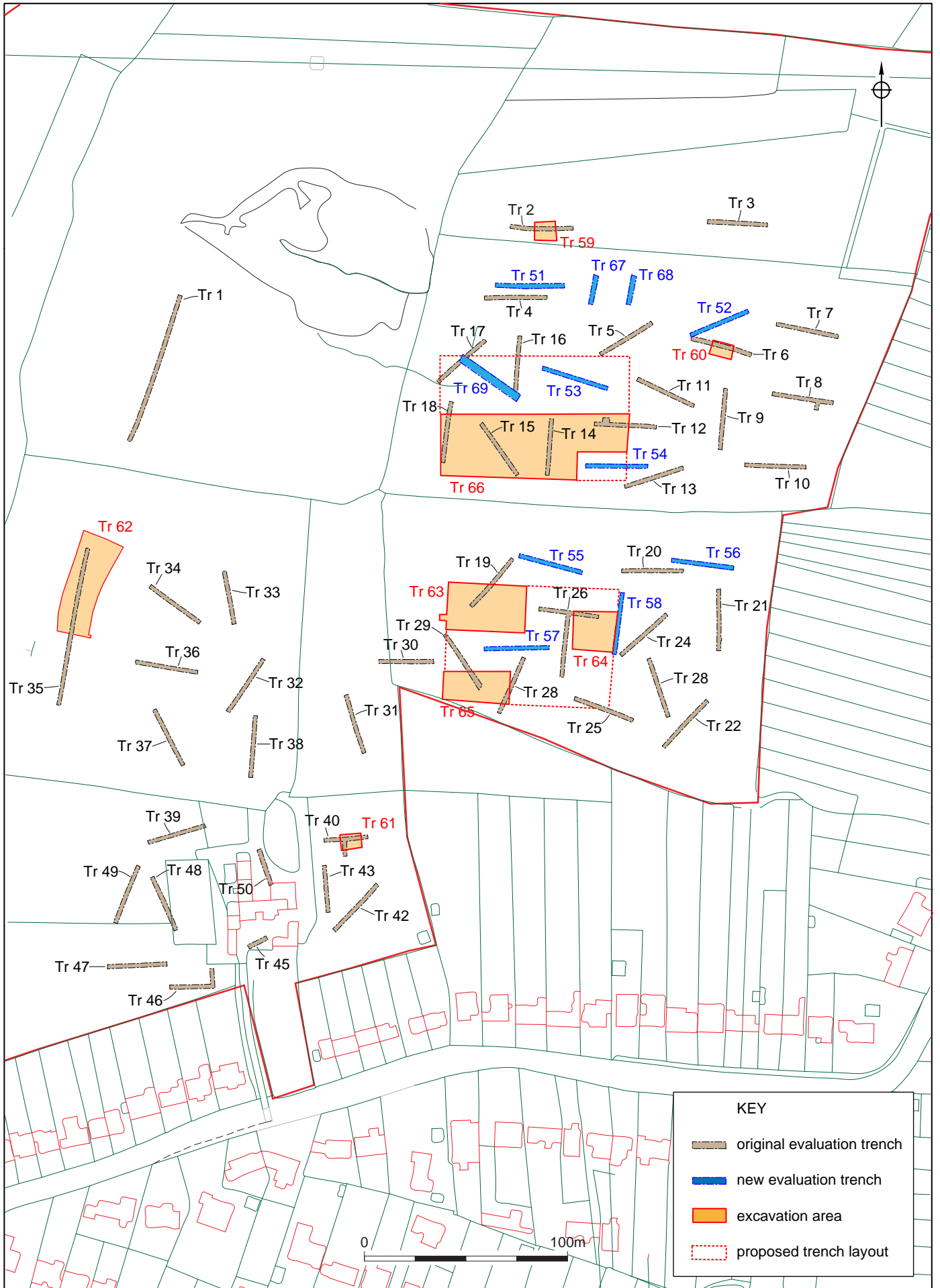
Wessex Archaeology 2016 *Lowbrook Farm, Tidbury Green, Solihull, West Midlands: Historic Building record*, Wessex Archaeology, unpublished report, **113610.01**

Figures



Location of the site

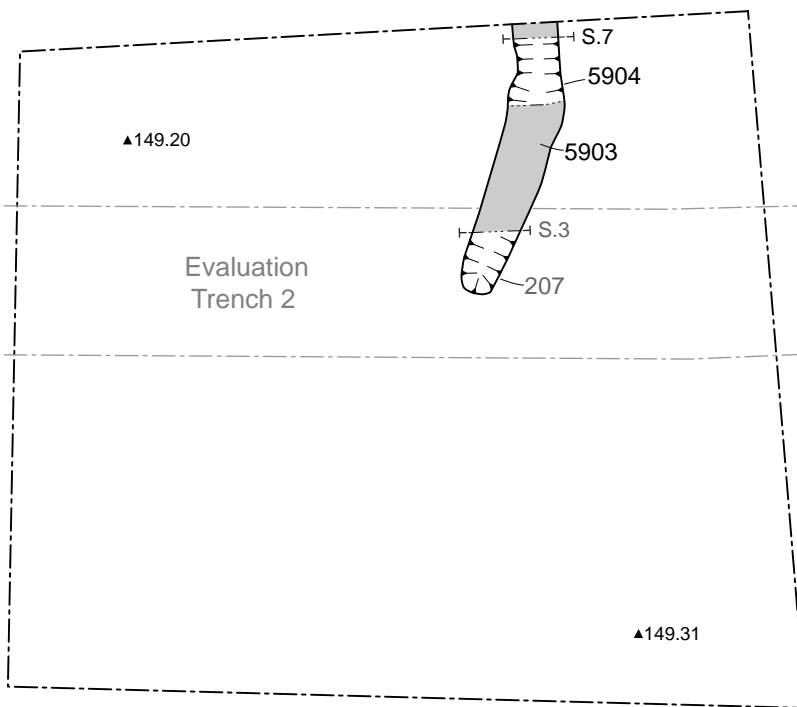
Figure 1



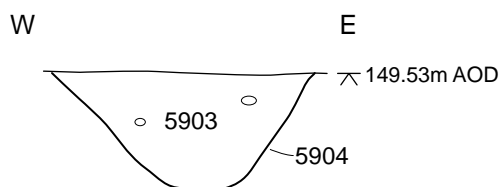
Trenches and Excavation Areas location plan

Figure 2

PLAN OF EXCAVATION AREA 59

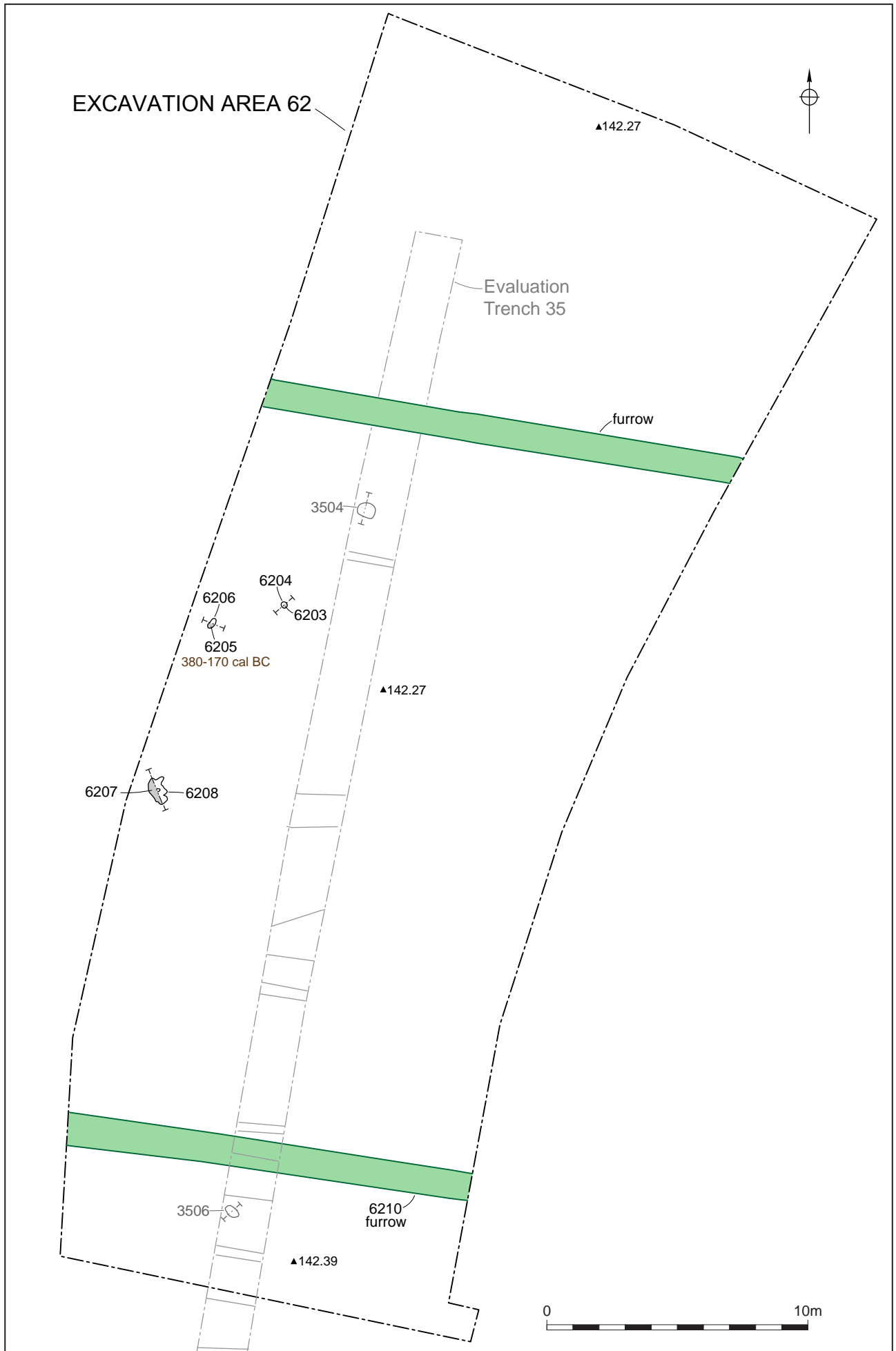


SECTION 7: DITCH 5905



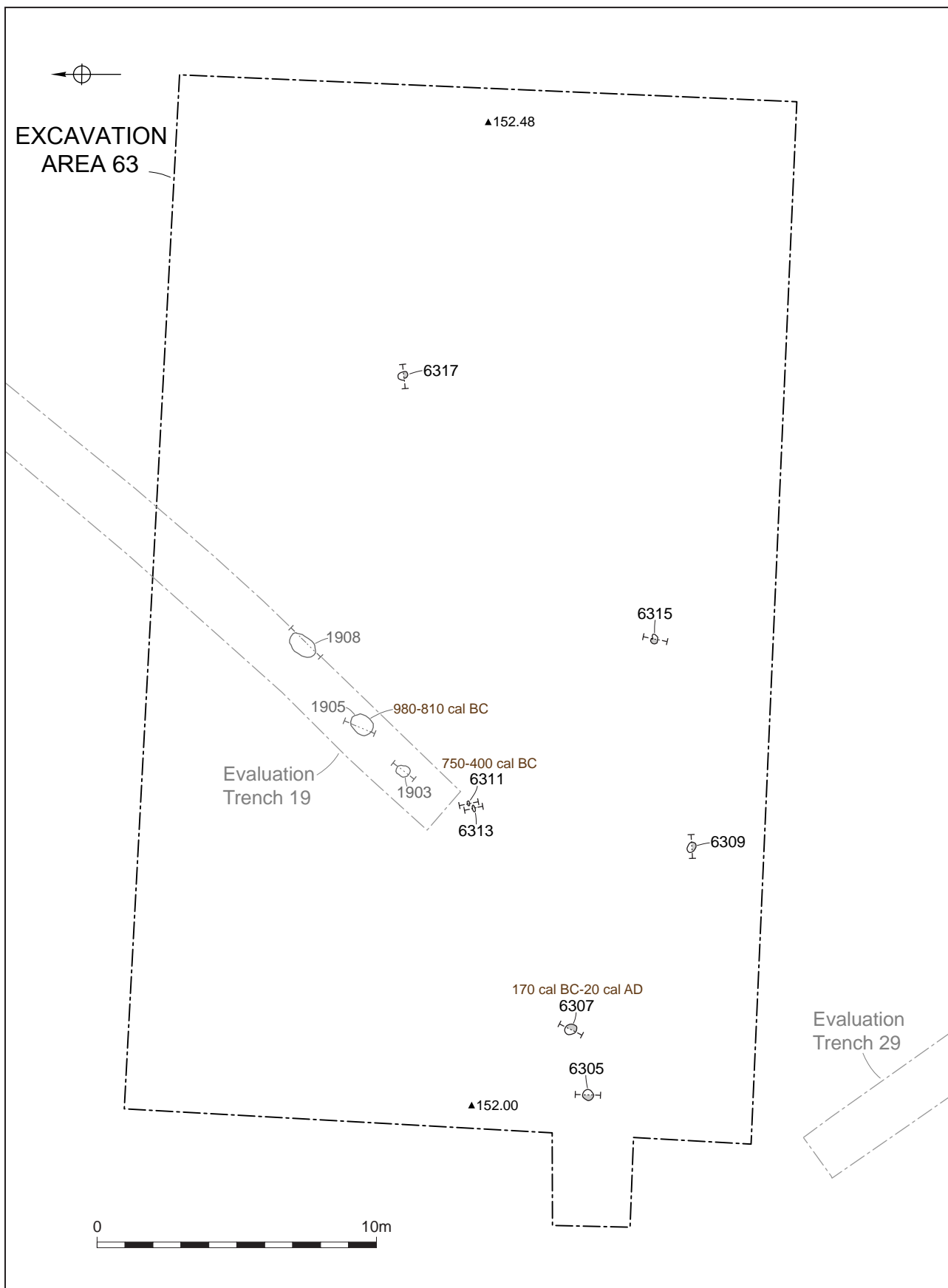
Excavation Area 59

Figure 3



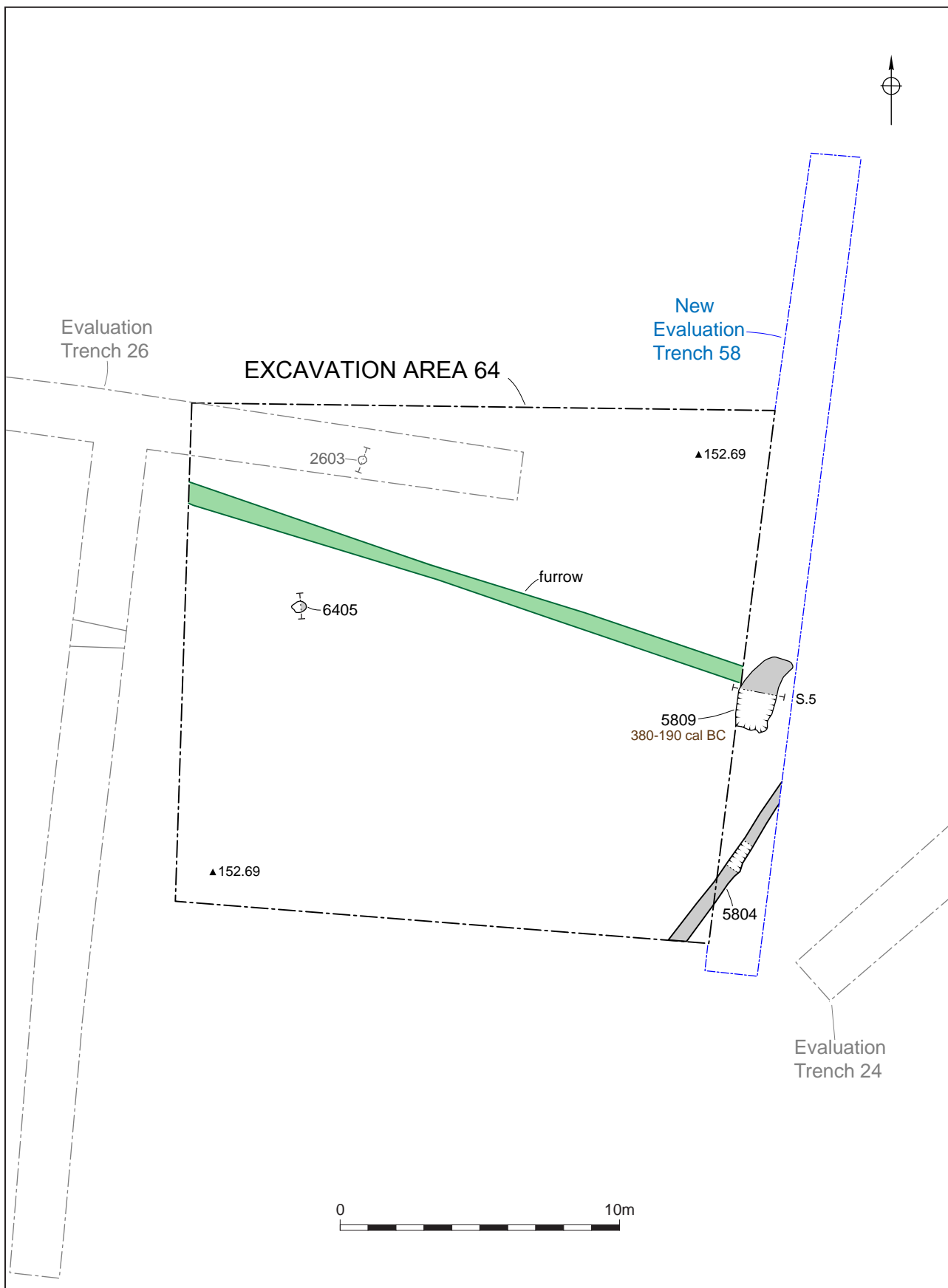
Plan of Excavation Area 62

Figure 4



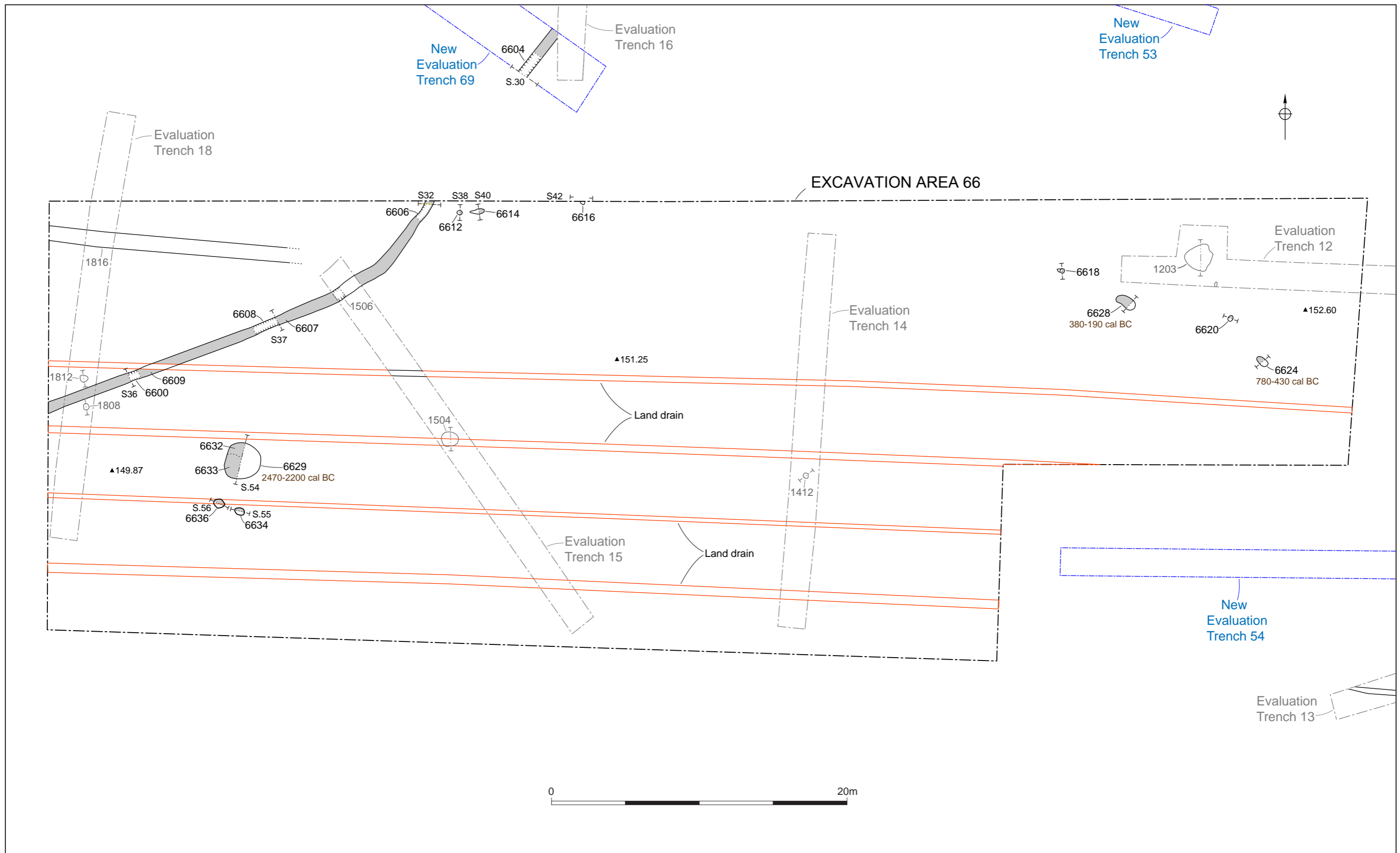
Plan of Excavation Area 63

Figure 5



Plan of Excavation Area 64

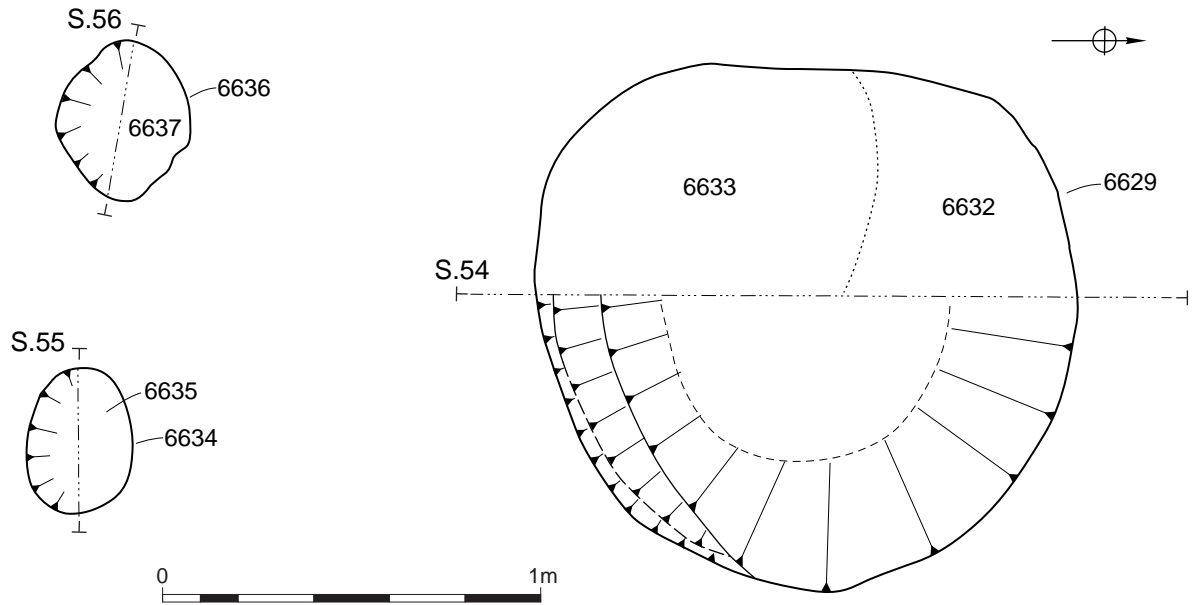
Figure 6



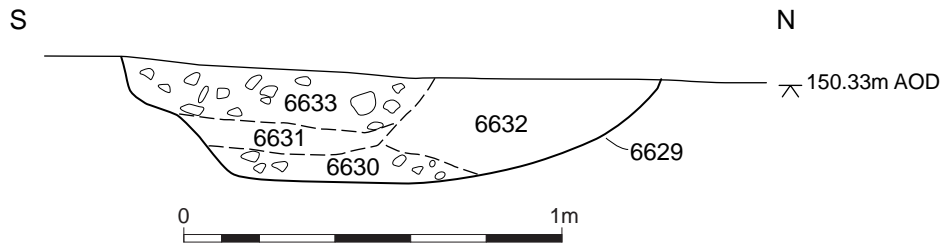
Plan of Excavation Area 66

Figure 7

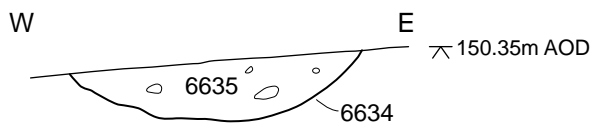
PLAN OF PIT 6629 AND POSTHOLES 6634 AND 6636



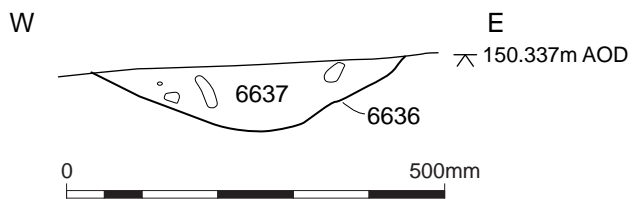
SECTION 54: PIT 6629



SECTION 55: POSTHOLE 6634



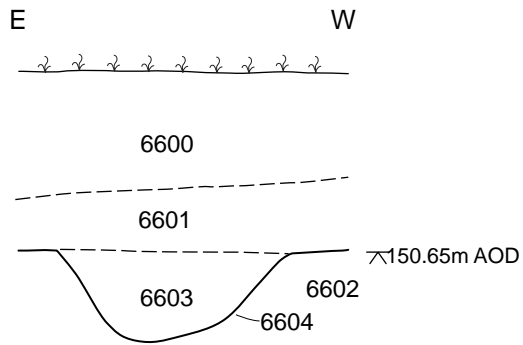
SECTION 56: POSTHOLE 6636



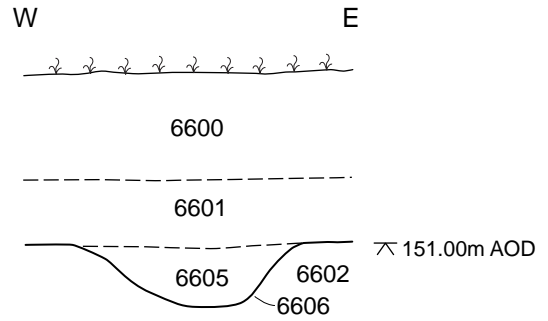
Pit 6629; postholes 6634 and 6636: plan and sections

Figure 8

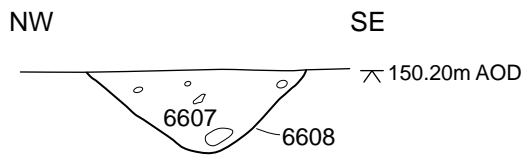
SECTION 30: DITCH 6604



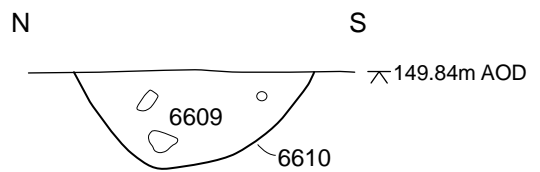
SECTION 32: DITCH 6606



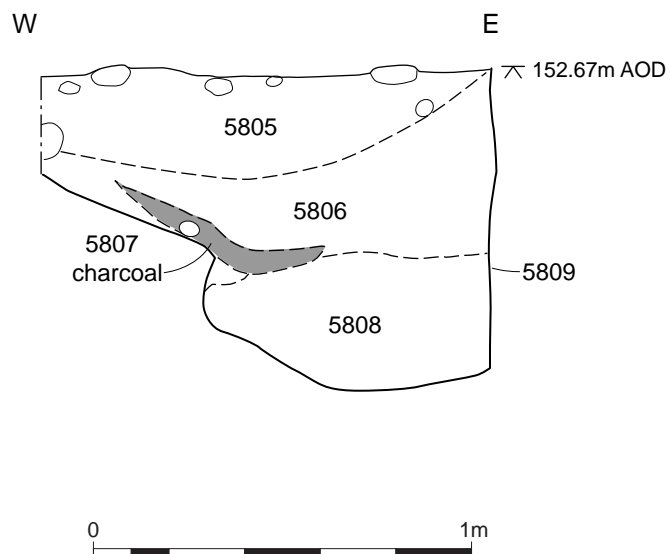
SECTION 34: DITCH 6608



SECTION 36: DITCH 6610



SECTION 5: TREE THROW 5809



Sections

Figure 9

Plates



Plate 1: Pit [6629], facing west, 1m scale



Plate 2: Pit [6629] and postholes [6634] and [6636] pre-excavation, facing north, 2 x 1m scales

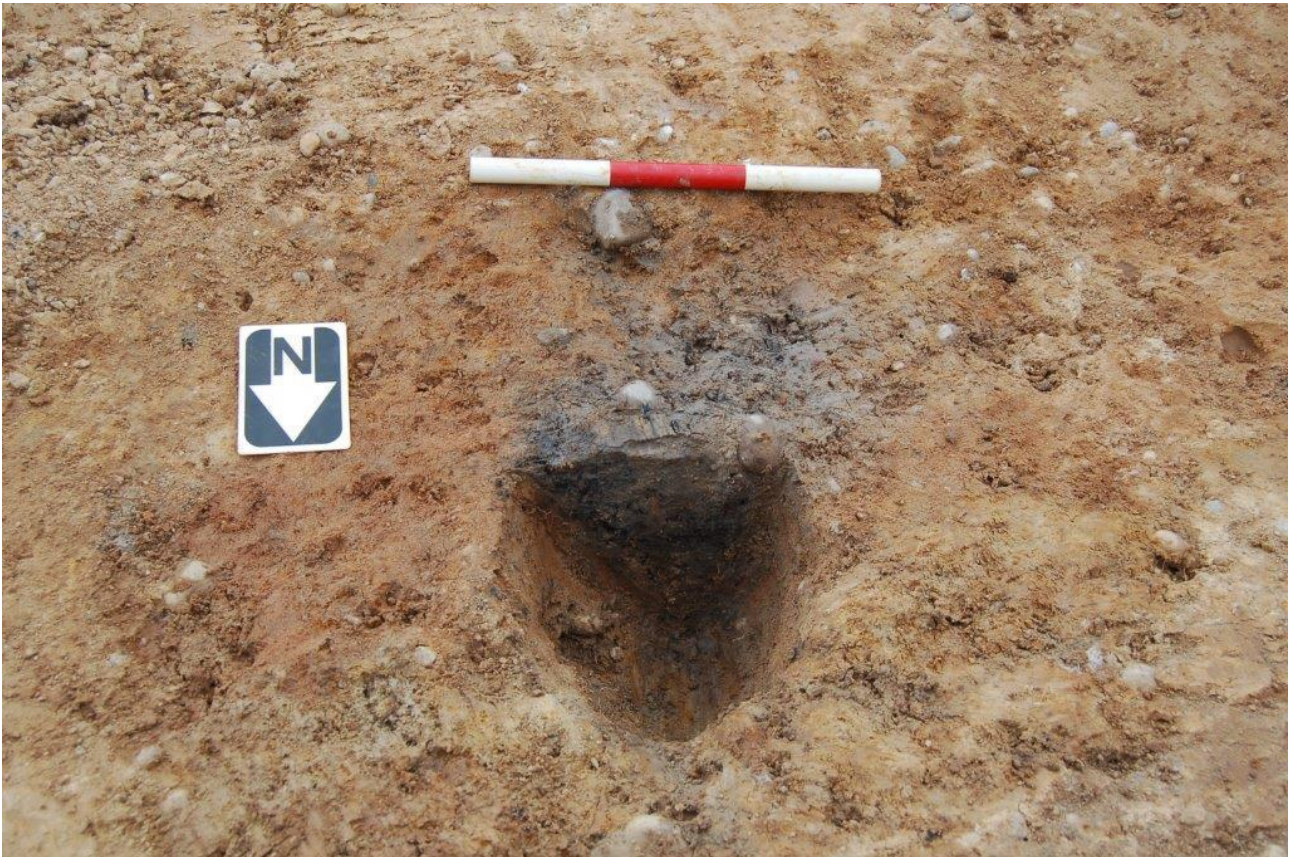


Plate 3: Stakehole [6206] facing south, 0.3 m scale



Plate 4: Pit [6624] facing north west, 0.5 m scale



Plate 5: Pit [6628] facing north west, 1m and 0.5 m scales



Plate 6: Pit [1905] in Trench 19, facing east, 1m scale



Plate 7: Posthole [6307] facing west, 0.5m scale



Plate 8: Tree-throw [5809] facing north, 2 x 1m scales



Plate 9: Ditch [6604] (CG 1) facing east, 1m and 0.5m scales



Plate 10: Ditch [5104] facing west, 0.5m and 0.4m scales



Plate 11: Ditch [5904] facing north, 1m and 0.5m scales



Plate 12: stone from pit [1504] in evaluation Trench 15, 0.40m scales

Appendix 1 Radiocarbon dating results



RADIOCARBON DATING CERTIFICATE

30 August 2017

Laboratory Code SUERC-74620 (GU45059)
Submitter Liz Pearson
Worcestershire Archaeology
The Hive
Sawmill Walk
The Butts
Worcester WR1 3PB
Site Reference Lowbrook Farm, Solihull
Context Reference 6306
Sample Reference P5122/6306/5
Material Charcoal : *Corylus avellana*
 $\delta^{13}\text{C}$ relative to VPDB -25.1 ‰
Radiocarbon Age BP 2052 \pm 29

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.

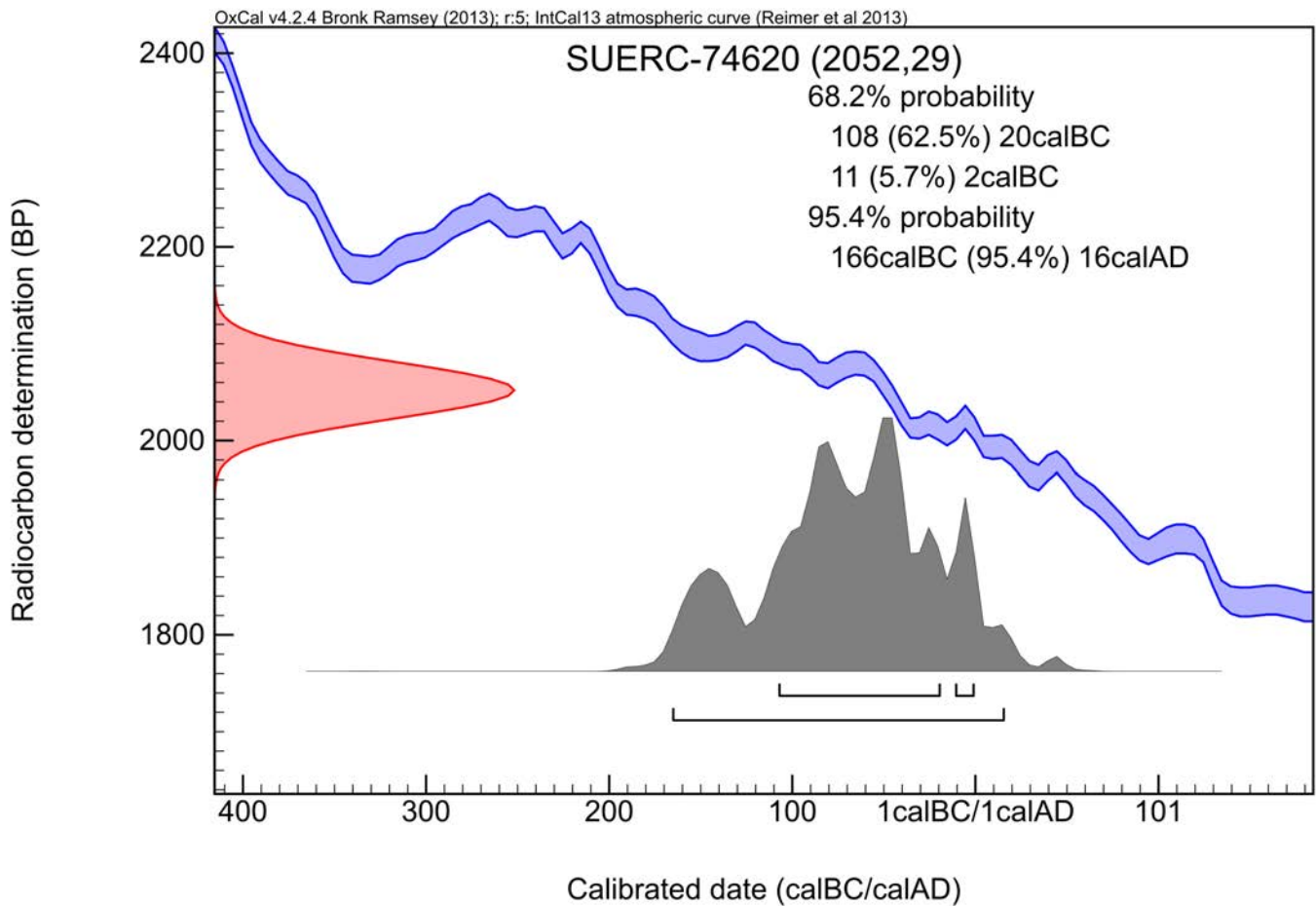
For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

E. Dunbar

Checked and signed off by :

P. Naynt



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

RADIOCARBON DATING CERTIFICATE

30 August 2017

Laboratory Code SUERC-74621 (GU45060)

Submitter Liz Pearson
Worcestershire Archaeology
The Hive
Sawmill Walk
The Butts
Worcester WR1 3PB

Site Reference Lowbrook Farm, Solihull

Context Reference 6310

Sample Reference P5122/6310/6

Material Charcoal : Quercus robur/petraea

$\delta^{13}\text{C}$ relative to VPDB -30.0 ‰

Radiocarbon Age BP 2452 \pm 29

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.

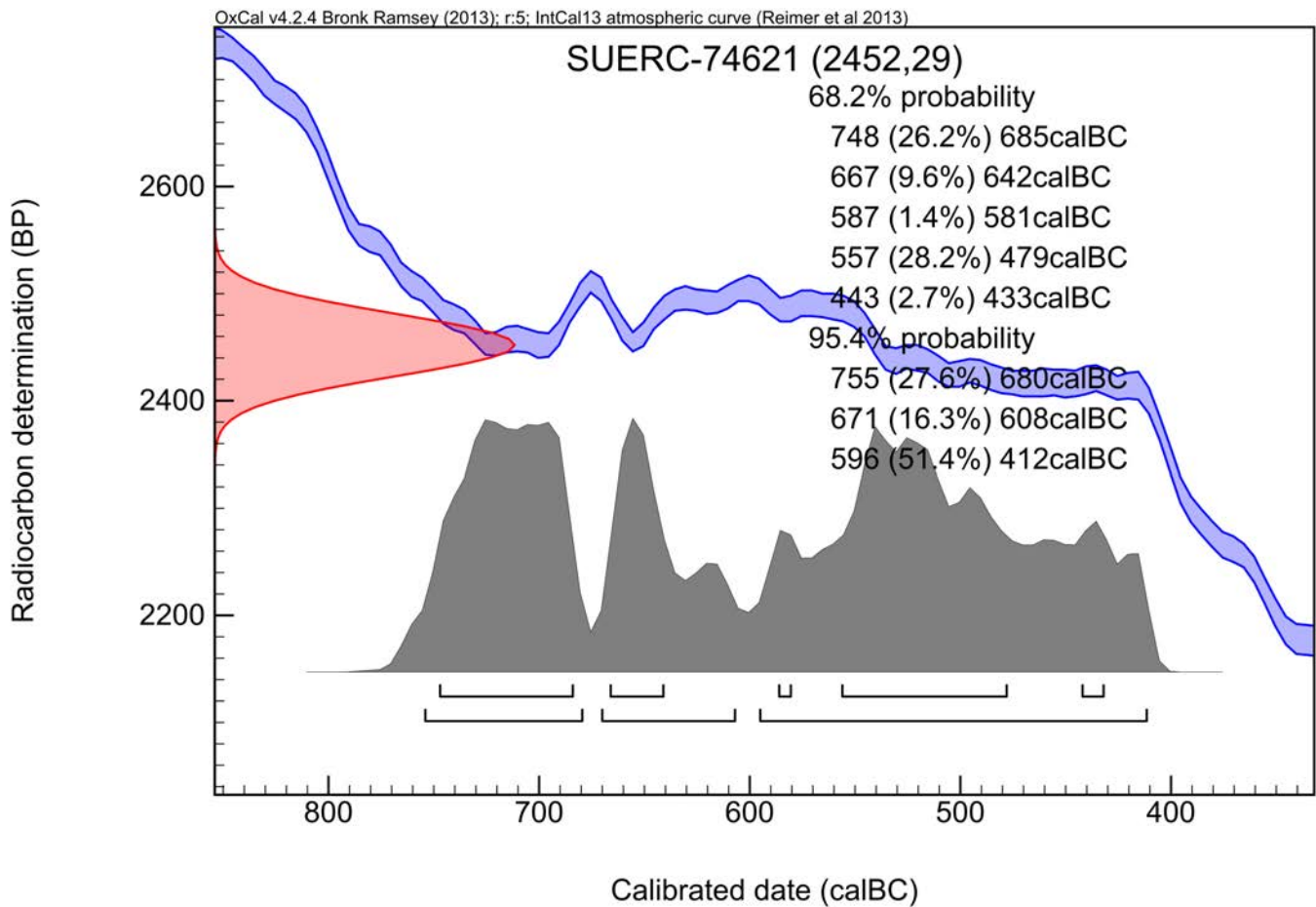
For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

E. Dunbar

Checked and signed off by :

P. Naynab



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

RADIOCARBON DATING CERTIFICATE

30 August 2017

Laboratory Code SUERC-74622 (GU45061)

Submitter Liz Pearson
Worcestershire Archaeology
The Hive
Sawmill Walk
The Butts
Worcester WR1 3PB

Site Reference Lowbrook Farm, Solihull

Context Reference 6633

Sample Reference P5122/6633/17

Material Charcoal : *Corylus avellana*

$\delta^{13}\text{C}$ relative to VPDB -24.9 ‰

Radiocarbon Age BP 3862 \pm 27

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.

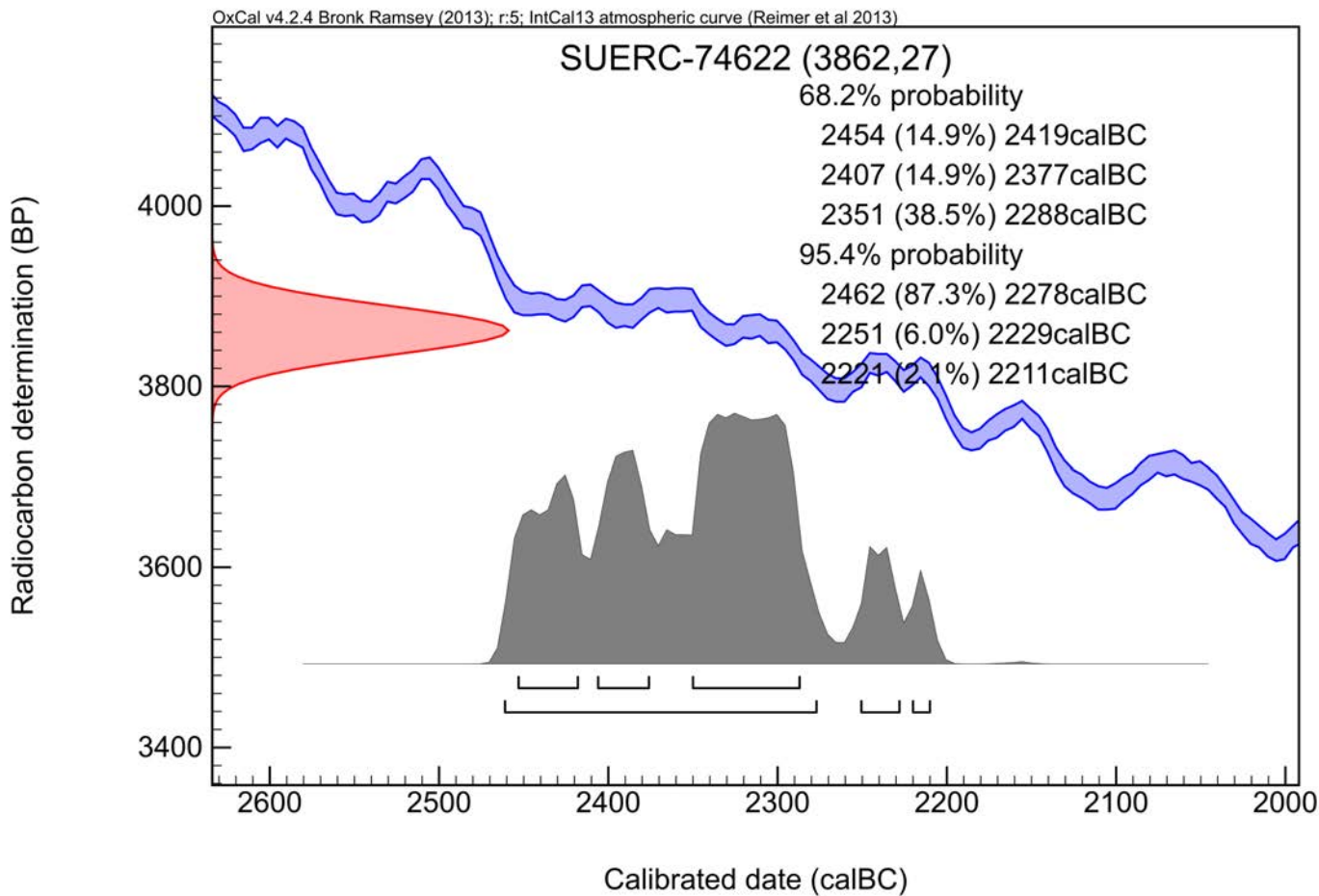
For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

E. Dunbar

Checked and signed off by :

P. Naynab



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

RADIOCARBON DATING CERTIFICATE

30 August 2017

Laboratory Code SUERC-74623 (GU45062)

Submitter Liz Pearson
Worcestershire Archaeology
The Hive
Sawmill Walk
The Butts
Worcester WR1 3PB

Site Reference Lowbrook Farm, Solihull

Context Reference 6626

Sample Reference P5122/6626/15

Material Charcoal : Quercus robur/petraea

$\delta^{13}\text{C}$ relative to VPDB -24.1 ‰

Radiocarbon Age BP 2215 \pm 26

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.

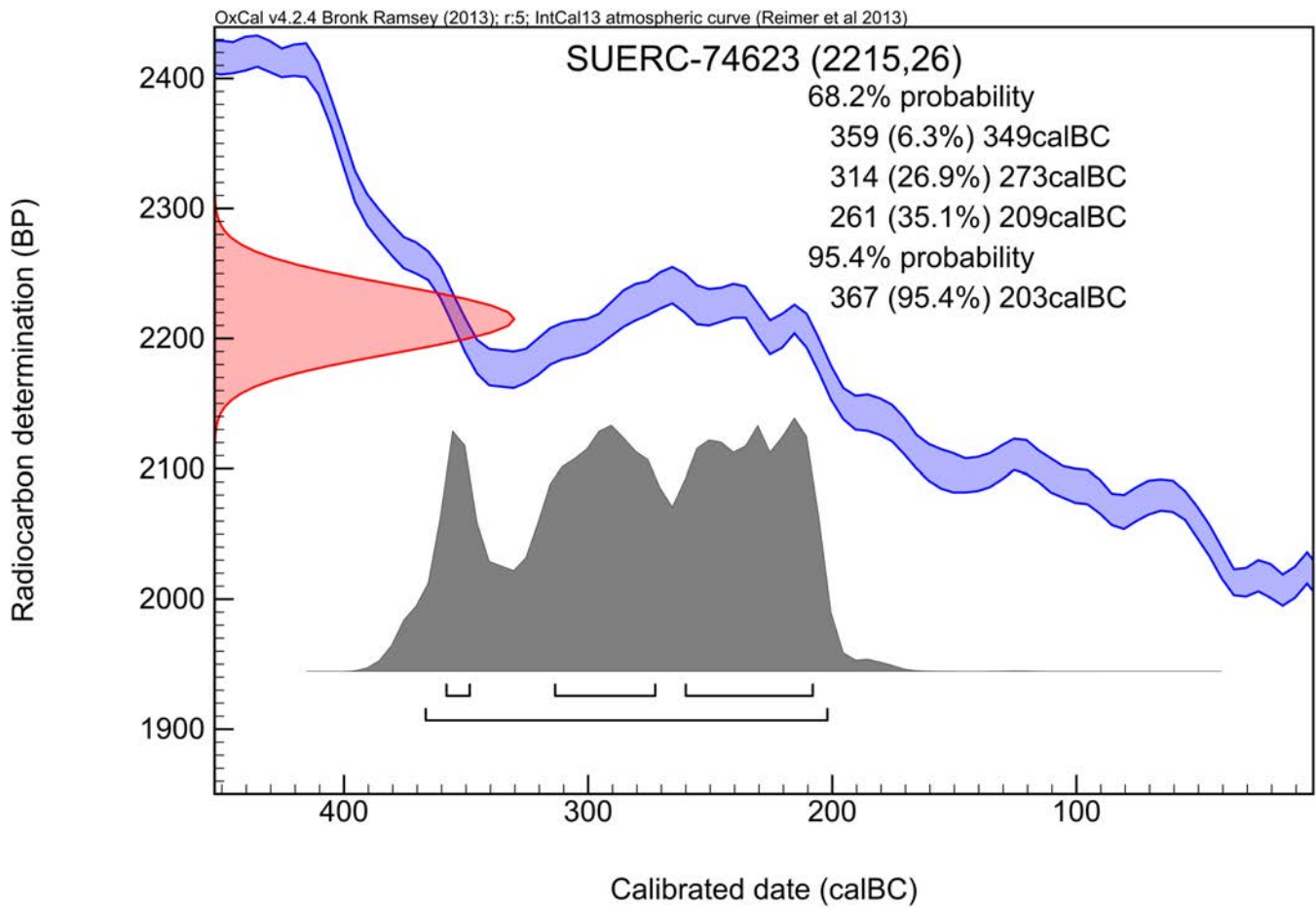
For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

E. Dunbar

Checked and signed off by :

P. Naynt



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

RADIOCARBON DATING CERTIFICATE

30 August 2017

Laboratory Code SUERC-74624 (GU45063)

Submitter Liz Pearson
Worcestershire Archaeology
The Hive
Sawmill Walk
The Butts
Worcester WR1 3PB

Site Reference Lowbrook Farm, Solihull

Context Reference 6623

Sample Reference P5122/6623/14

Material Charcoal : Quercus robur/petraea

$\delta^{13}\text{C}$ relative to VPDB -25.0 ‰

Radiocarbon Age BP 2479 \pm 29

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.

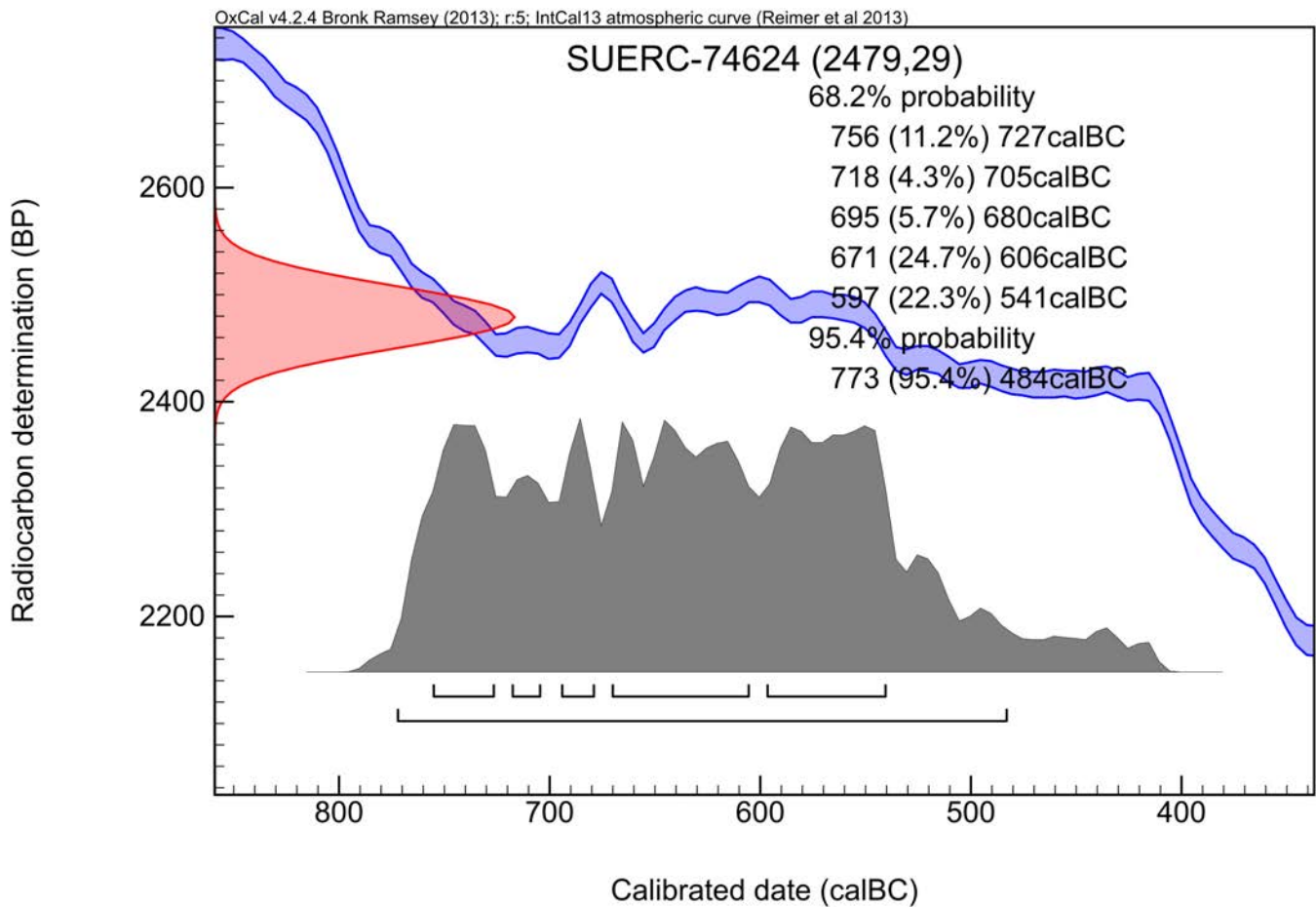
For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

E. Dunbar

Checked and signed off by :

P. Naynab



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

RADIOCARBON DATING CERTIFICATE

30 August 2017

Laboratory Code SUERC-74625 (GU45064)
Submitter Liz Pearson
Worcestershire Archaeology
The Hive
Sawmill Walk
The Butts
Worcester WR1 3PB
Site Reference Lowbrook Farm, Solihull
Context Reference 5807
Sample Reference P5122/5807/3
Material Charcoal : cf Alnus/Carpinus/Corylus
 $\delta^{13}\text{C}$ relative to VPDB -27.7 ‰

Radiocarbon Age BP 2208 \pm 28

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.

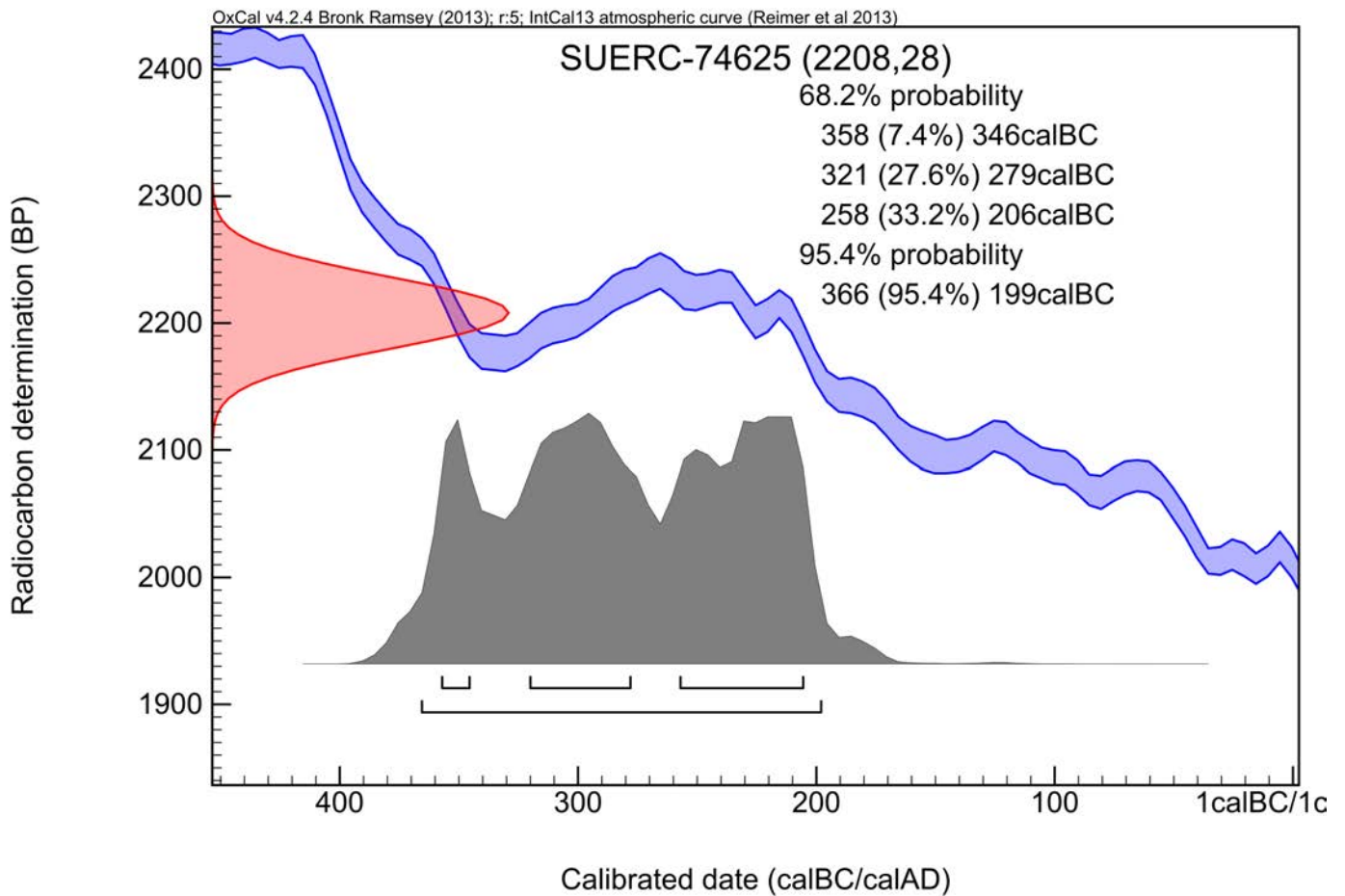
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Conventional age and calibration age ranges calculated by :

E. Dunbar

Checked and signed off by :

P. Naynab



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

RADIOCARBON DATING CERTIFICATE

30 August 2017

Laboratory Code SUERC-74626 (GU45065)

Submitter Liz Pearson
Worcestershire Archaeology
The Hive
Sawmill Walk
The Butts
Worcester WR1 3PB

Site Reference Lowbrook Farm, Solihull

Context Reference 6205

Sample Reference P5122/6205/1

Material Charcoal : Quercus robur/petraea

$\delta^{13}\text{C}$ relative to VPDB -23.7 ‰

Radiocarbon Age BP 2200 \pm 31

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.

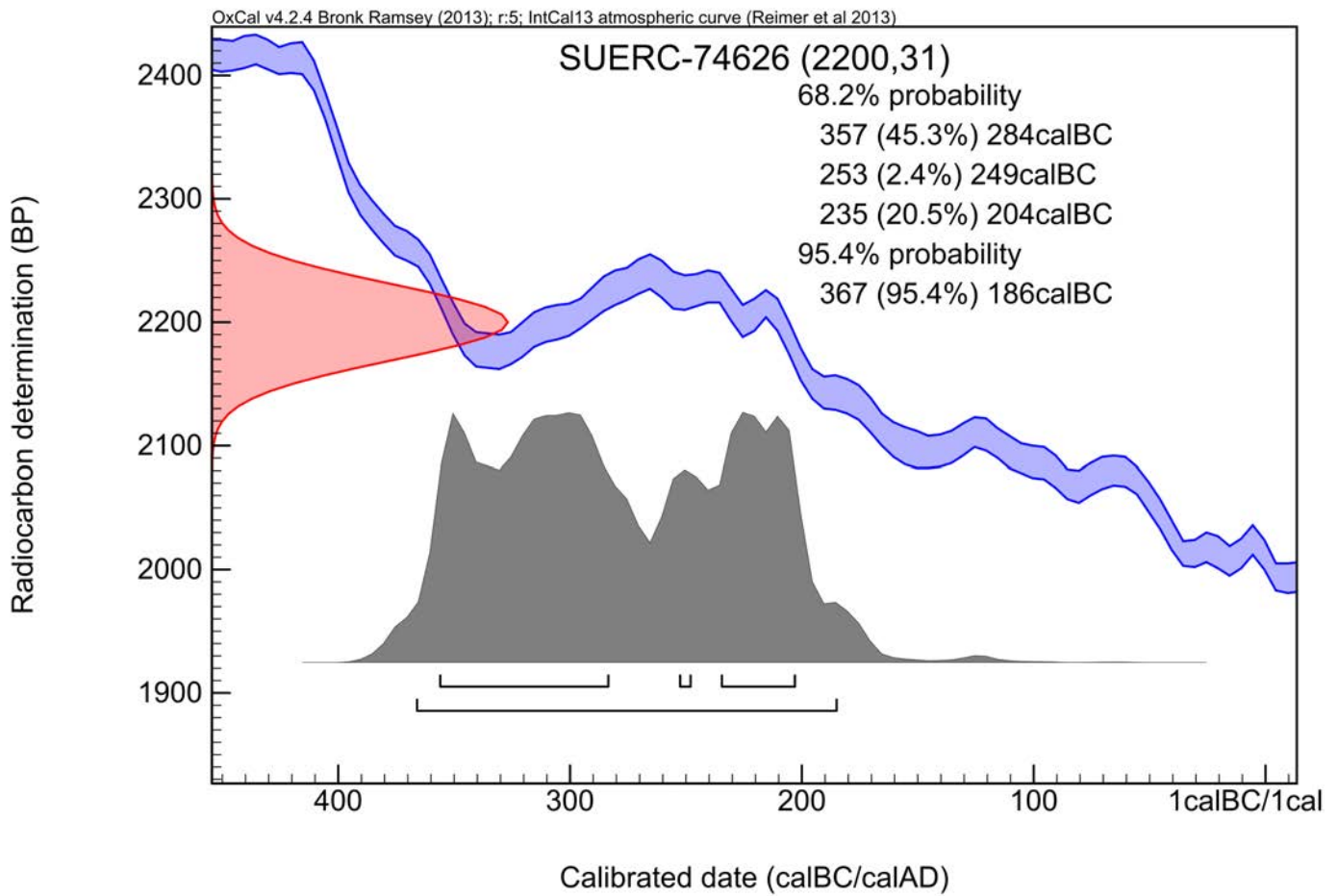
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Conventional age and calibration age ranges calculated by :

E. Dunbar

Checked and signed off by :

P. Naynab



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

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

Appendix 2 Technical information

The archive

The archive consists of:

122	Context records AS1
1	Photographic records AS3
159	Digital photographs
1	Drawing number catalogues AS4
57	Scale drawings
1	Sample number catalogues AS18
1	Box of finds
1	Bag of sorted remains from residues and flots
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
