ARCHAEOLOGICAL EVALUATION AT PERSHORE LANE, TIBBERTON, WORCESTERSHIRE

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Part 1 Project summary

An archaeological evaluation was undertaken on land between the M5 and Pershore Lane (NGR SO 893562), Tibberton, Worcestershire, on behalf of Advantage West Midlands. The planning application, submitted by Barton Willmore, is for the development of new premises for Worcester Bosch; including production and distribution warehouses, offices, car parking and associated landscaping. This report describes and assesses the significance of the archaeology found during the evaluation, and assesses the potential impact of the proposed development (Phase 1) upon it.

An historic watercourse was found to have once flowed across the northern part of the site. The small stream that remains has now been diverted into a field boundary ditch, but the original channel depression it occupied was considerably broader and more substantial than would be expected. It is therefore suggested that the stream occupied a depression formed during the late glacial or early Holocene period. This hollow had infilled over time with a complex sequence of organic and alluvial deposits within which a wide range of well preserved palaeoenvironmental material survived. These were overlain in turn by fine alluvial deposits which sealed the entire depression and extended slightly beyond it sealing features of prehistoric date.

Tree throws across the site attest to woodland clearances known from the Neolithic and Bronze Age, with the only prehistoric pottery from the site found within such a feature. The broad late glacial/early Holocene depression was already filling at this time with a succession of peat-rich and alluvial deposits depending on the water regime and on the differing courses of the braided stream channels (and associated cut-off meanders) within the depression. The surrounding fields saw limited prehistoric activity, with occasional pits and postholes identified but no evidence of a domestic focus. Several ditches indicate an agricultural, probably pastoral, landscape. The higher ground immediately flanking the stream banks formed the focus of this activity. At least one burnt mound was discovered close to the stream to the south of site, with two further areas of fire cracked stone seeming to form more of a metalled pathway. These remain undated but are thought to date from the Late Bronze Age to Early Iron Age. At the beginning of the Middle Iron Age (radiocarbon dated to 520 – 380 Cal BC), timber structures were built along the west side of the channel depression, and these were preserved within waterlogged peat accumulations. Three evaluation trenches exposed what is thought to be a timber trackway, at least 150m long, through what would have been rough marsh and alder carr (reconstructed from the environmental samples). The full extent and form of this structure(/s) is however unknown and other interpretations are possible from the limited evidence currently available. A ditch running along the far side of the channel showed that prehistoric activity was not confined to the west, and this respected the line of Pershore Road, known to be an ancient routeway. Of later date, three ditch sections further south contained Roman pottery and were seen to respect the east-west line of Port Street; as yet only hypothesised as a Roman road. Evidence of medieval and post-medieval agriculture was found, as were the remains of the Pershore Road, crossing the northern part of the site.

The timber structures are an extremely rare survival both regionally and nationally, and showed very good preservation. Trackways such as this most commonly date from the Late Bronze Age, but are only very rarely encountered. This Iron Age example holds few national parallels, and given its non-fenland situation, is all the more significant. The well preserved palaeoenvironmental (organic) deposits associated with the palaeochannel and with the

putative trackway are also highly significant. The range and survival of these deposits, and their potentially long-lived sequence provide high potential for the examination of patterns of landscape use and change. Beyond these, the low density of prehistoric features scattered across the higher, drier ground of the site would, on their own, be of local or potentially regional significance given the wide area available for study of landscape use. Their importance is, however, increased by association with the waterlogged prehistoric structural and palaoenvironmental remains, and taken together these have a high potential for examining the relationship between a wetland landscape and adjacent drier areas during the prehistoric period. This is to date a unique opportunity in this region and a rare one nationally. The possible identification of an as yet unproven Roman road into Worcester is also important, but further evidence of the road itself would be beneficial. The possibility is also raised of roadside activity and potentially the remains of a river-crossing where this road meets the ancient Salt Way.

Part 2 Detailed report

1. Background

1.1 Reasons for the project

An archaeological evaluation was undertaken on land between the M5 and Pershore Lane, Tibberton, Worcestershire (NGR SO 893562; Figure 1), on behalf of Advantage West Midlands (the Client). The plans submitted by Barton Willmore on behalf of Advantage West Midlands propose the development of new premises for Worcester Bosch; including production and distribution warehouses, offices, car parking, landscaping and the creation of ecological habitats. The application has been submitted to Wychavon District Council under planning reference W/10/0769.

The proposed development site is considered to include a heritage asset with archaeological interest, the significance of which may be affected by the application (HER ref. WSM04209).

1.2 Project parameters

The project conforms to the *Standard and guidance for archaeological field evaluation* (IfA 2008). The project also conforms to a brief prepared by the Historic Environment Planning Officer, Mike Glyde (*Requirements for an archaeological evaluation at land southwest off Jct. 6 M5, Pershore Road, Tibberton, Bromsgrove, Worcestershire* WHEAS 2010a; the Curator) and the proposal (including detailed specification) produced for this project; Project 3295 (HEAS 2010a).

1.3 Aims

The aims of this archaeological evaluation are:

- to describe and assesses the significance of the heritage asset with archaeological interest;
- to establish the nature, importance and extent of the archaeological site;
- to assess the impact of the application on the archaeological site.

Further to the original proposal, , the following aims were identified:

- to define the course of the river channels and identify the area over which associated archaeologically significant deposits are likely to have been preserved.
- to assess the potential and significance of the environmental remains uncovered on site.

2. Methods

2.1 Documentary search

A desk based assessment was conducted by Halcrow on behalf of Advantage West Midland in 2008. This identified the archaeological and cultural heritage records within a 1 km radius of the site; data which was supplemented with information from historic maps and place name evidence to provide an assessment of archaeological potential. The brief for the archaeological evaluation was based on this report.

2.2 Fieldwork methodology

2.2.1 General fieldwork strategy

Fieldwork was undertaken between 1st June and 16th July 2010. The site reference number and site code is WSM 42137.

A detailed specification has been prepared by the Service (HEAS 2010a). The methods proposed in this specification were largely followed, however some alternative strategies were agreed with the Curator and Client to effectively mitigate for unforeseen archaeological deposits and ground conditions. The methods employed in these situations are covered below (Section 2.2.3).

The overall development site covers an area of *c*.68 hectares; between the M5, Pershore Lane and the B4636; divided into Phases 1 and 2 (Figure 1). This report covers the twelve fields under consideration during Phase 1; Fields 8 and 10 are currently removed from the predetermination stage, with Field 11 currently unavailable for investigation due to ecological constraints. This reduces the study area to around 33hectares (Figure 2). One hundred and twenty-five trenches were proposed across this area. At 50m x 2m, the trenches represent a c.4% sample.

Fields 1 and 6 are separated from the other fields by a stream which flows sinuously north to the Barbourne Brook. There were two crossing points for machine access; at the far southwest corner of Field 1, and half way along the western boundary of Field 6. All other fields were bordered my mature hedgerows, with Fields 4 and 5 actually forming one continuous parcel of land.

Deposits considered not to be significant were removed using a 360º tracked excavator, employing a toothless bucket and under archaeological supervision. Topsoil and subsoil were kept separately for backfilling, and in the case of trenches in ecologically sensitive areas (Trenches 126 and 127), turf was also removed carefully for later reinstatement.

Initially, land drains were avoided by re-angling trenches and raising the level of machining so as not to cause undue damage. This strategy was reassessed in agreement with the Curator and landowner so as not to compromise the trial trenching. It was agreed that trenches would be excavated to the appropriate level as agreed in the brief, and that any damaged land drains would be reinstated during backfilling.

Following the machine excavation, subsequent work 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 Service practice (CAS 1995). On completion of excavation, trenches and land drains were reinstated, with topsoil replaced on the surface to enable subsequent vegetation growth / cultivation.

High voltage over-head power lines crossed Field 1 from east to west. This necessitated the erection of barriers and goalposts, in accordance with HSE guidelines (HSE 1997) for machine access to the north part of Field 1.

2.2.2 Trench design

Given the agricultural nature of the site, and the dearth of HER references within the study area, the majority of the trenches were not specifically targeted but distributed systematically across the nine fields being evaluated. The Desk Based Assessment (Halcrow 2008) identified a single cultural heritage monument within the study area; a ring ditch bordering the slip lane to the M5 motorway in Field 1. As discussed in Section 3, however, this was not a precise location for the cropmark (which was always somewhat dubious) so targeted trenching was not seen as appropriate in this instance.

Fire-cracked stone was found on site during a site visit undertaken prior to the evaluation. It was thought that this might indicate the presence of prehistoric burnt mounds; often found in association with watercourses. The strip of land bounding the stream was identified as an ecologically sensitive area to not be unduly affected by archaeological trenching. It was therefore proposed in the brief (HEAS 2010a) that a geophysical survey be conducted 20m either side of the current watercourse, to locate potential burnt mounds (and other sites) and enable targeted trenching; reducing the impact on this zone. The gradiometry survey (Stratascan 2010) identified a number of anomalies of possible archaeological interest, although it did not provide strong evidence of burnt mounds. Nevertheless, Trenches 126 and 127 in Field 6 were targeted to investigate a possible thermoremnant anomaly and a linear feature.

2.2.3 **Deep deposits and reassessment of strategy**

Deep alluvial deposits were initially encountered in Fields 1 and 6; of a depth that the trenches needed to be stepped for reasons of safety to enable excavation to the surface of the natural and allow safe access for staff to record deposits revealed.

The project design did not mitigate for this scale of excavation. Discussions were therefore held with the Curator, and the following revised strategy was agreed and implemented. The surface of the alluvium was exposed to determine its extent and identify any truncating features. Isolated sections of each such trench would be machine excavated to the natural, stepping the sections and allowing access for the successful recording of the lower deposits and to find levels on the natural.

Archaeologically significant deposits, including waterlogged wood, were encountered below the alluvial material in Trenches 13, 15, and 21. The nature of these deposits needed to be determined, so in Trench 21, the area was widened and battered to provide a better window for isolated excavation. In keeping with recently issued guidelines from English Heritage (2010), this was the minimum intervention thought necessary to prove whether the timbers were intentionally worked and deposited and to gain an appreciation of their character. Having focused attention on this area, and exposed similar archaeology in two further trenches, it was decided that no such further interventions would be undertaken. This would preclude unnecessary damage and desiccation to other areas of waterlogged organics (EH 2010, p.6) as well as ensuring the agreed project resources could effectively cover the remainder of the proposed development area.

2.2.4 **Auger survey**

The aim had shifted to defining the course of the (presumed) watercourse, and gathering information with which to predict the extent of any significant waterlogged remains whilst minimising any impact upon them. It was considered that an auger survey arranged in transects across the channel in Field 1 would provide a profile which could inform later interpretation. With the edges of the channel as yet undefined, trenches were machined from either side of the predicted course of the channel to the level of the natural. On locating these edges, auger samples were spaced across the gap to provide a profile. Whilst implementing this strategy, it was found more efficient to machine to a metre depth, record the section as seen, and then auger from the machined level. This upheld the advantages of the auger sampling; that deep stepped trenches and disturbance to waterlogged remains were precluded, whilst still gaining information on the alluvial sequence. A topographic survey provided by the Client proved useful in predicting the course of the watercourse and positioning the trenches for the auger transects.

2.2.5 **Structural analysis**

All drawn and written records from the fieldwork were checked and cross-referenced. These were analysed in conjunction with artefactual and environmental evidence from the site, and informed via the study of related archaeological and historical research.

All structural information was compiled into a database to facilitate analysis (and produce the summary tables included as Appendix 1).

The survey data was also correlated with the drawn site record to produce accurate plans of all archaeological features. The reconstruction of the palaeochannel profiles was undertaken via objective and subjective analysis of the deposits seen in the auger samples combined with survey data and information from the structural analysis.

All site plans, sections and finds drawings are presented in Figures 3 – 18, below.

2.3 Artefact methodology, by Dennis Williams

2.3.1 **Artefact recovery policy**

The artefact recovery policy conformed to standard Service practice (CAS 1995, Appendix 4).

2.3.2 Method of analysis

All hand-retrieved finds were examined and a primary record made on a Microsoft Access 2000 database. They were identified, quantified and dated to period, and a *terminus post quem* date produced for each stratified context. These dates were used as a means of determining the broad chronology of the site. The results were all tabulated to aid further analysis, and these presented in Tables 1 – 3.

The pottery and ceramic building materials were examined under ×20 magnification and recorded by fabric type according to the reference series maintained by the service (Hurst and Rees 1992; WHEAS 2009).

2.4 Environmental sampling policy

The environmental sampling strategy conformed to standard Service practice (CAS 1995, appendix 4). In addition, the sampling and environmental analysis conforms to relevant sections of *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage 2002) and *Environmental archaeology and archaeological evaluations* (AEA 1995).

Large animal bone was hand-collected during excavation. Samples of up to 40 litres were taken from over 16 contexts (Table 4), from various water lain deposits and burnt mound deposits. In addition, a single sample of wood was selected for radiocarbon dating.

2.5 Method of environmental analysis

2.5.1 Geoarchaeology methodology, by Keith Wilkinson

The monolith samples were first cleaned by removing c. 1mm of weathered material from the surface of the sampled sediment. The stratigraphy was photographed and then described (Figures 19 - 21). Descriptions were made according to standard geological criteria and onto proforma 'log sheets' (Tucker 1982, Jones *et al*. 1999, Munsell Color 2000). The monolith samples have been retained at the University of Winchester pending decisions on the post-excavation phase of works.

2.5.2 Macrofossil analysis, by Alan Clapham

For each of the samples a sub-sample of 1 litre was processed by the wash-over technique as follows. The sub-sample was broken up in a bowl of water to separate the light organic remains from the mineral fraction and heavier reside. The water, with the light organic faction was decanted onto a 300mμ sieve and the residue washed through a 1mm sieve. The remainder of the bulk sample was retained for further analysis.

A selection of samples from the burnt mound deposits were processed by flotation using a Siraf tank. The flot was 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 fully sorted by eye and the abundance of each category of environmental remains estimated. The flots were scanned using a low power MEIJI stereo light microscope and plant remains identified using modern reference collections maintained by the Service, and seed identification manual (Cappers *et al* 2006). Nomenclature for the plant remains follows Stace (1997). A magnet was also used to test for the presence of hammerscale.

2.5.3 Wood analysis, by Alan Clapham

The waterlogged wood samples were kept wet and wrapped in plastic to prevent desiccation. Each was given a unique sample number and was washed and photographed, with sketches drawn and a written record produced on pro-forma recording sheets. Three worked pieces were selected for illustration.

The cell structure of all the non-oak waterlogged wood samples was examined in three planes under a high power microscope and identifications were carried out using reference texts

(Hather 2000) and reference slides housed at the Worcestershire Historic Environment and Archaeology Service.

2.5.4 **Palynological remains, by Nick Daffern**

Fourteen pollen samples were selected from various palaeochannel fill sequences as shown in Table 4. The samples were submitted to the laboratories of the Department of Geography and Environment at the University of Aberdeen for chemical preparation following standard procedures as described by Barber (1976) and Moore *et al* (1991). The full methodology is described in Appendix 3.

Where preservation allowed, pollen grains were counted to a total of 150 land pollen grains (TLP) for assessment purposes using a GS binocular polarising microscope at x400 magnification. Identification was aided by using the pollen reference slide collection maintained by the Service, and the pollen reference manuals by Moore *et al* (1991) and Grant-Smith (2000). Nomenclature for pollen follows Stace (2010) and Bennett (1994).

Fungal spores and parasite ova were noted with rapid identification being undertaken to genus level. Identifications were aided through reference material maintained by the Service and reference manuals by Kirk *et al* (2008) and Grant-Smith (2000).

2.5.5 **Mollusc analysis, by Andrew Mann**

Two samples were taken for the assessment of molluscan remains. Each was processed by the wash-over technique as follows. The sample was broken up in a bowl of water to separate the light organic remains from the mineral fraction and heavier reside. The water, with the light organic faction was decanted onto a 500mμ sieve and the residue washed through a sieve stack ranging in size form 1mm-500mμ.

The flots and residues were scanned using a low power EMT light microscope and remains identified using modern reference specimens housed at the Service.

2.5.6 **Animal bone, by Emily Beales**

All bone fragments were analysed and, where possible, identified to element and species with any butchery marks, pathological alterations and morphological abnormalities being recorded. Identification was aided by using the reference collection maintained by the Service and standard identification keys by Schmid (1972) and Hillson (1992). Sex was not factored into this analysis as most of the bone elements were too incomplete to gain adequate measurements needed for sex determination. Teeth were identified to species using Hillson (1992).

The collected data was analysed and interpreted to assessment level, although no statistical analysis was undertaken due to the small sample size of identifiable remains.

2.6 The methods in retrospect

2.6.1 **Fieldwork**

As covered in the fieldwork methodology above, the methods were subject to ongoing reassessment as the conditions and deposits presented different challenges. The methods can be viewed in two main categories:

- the standard evaluation of shallow trenches on the relatively dry ground across the majority of the proposed development area; and
- the evaluation of waterlogged former channel courses (palaeochannels) through the limited use of deep excavation trenches supported by the auger survey.

In the first instance, for the dry areas of the site, the methods adopted allow a high degree of confidence that the range, character, extents and significance of archaeological assets (deposits) likely to be present within Phase 1 of the proposed development area have been established and that the impact of the application on these archaeological deposits can be determined.

In the second instance, for the areas of the waterlogged former channels within Phase 1 of the proposed development area, a high degree of confidence has been achieved in assessing the potential, character, significance and extents of the palaeoenvironmental remains present. A high degree of confidence also exists that the course of the palaeochannels has been defined and therefore that the areas within which such deposits and waterlogged wooden structures may be preserved have been identified. This has enabled the potential impact of the proposed application on these deposits to be determined; however, due to the need to restrict disturbance and potential damage and desiccation to any wooden structures present (as advised in recent guidance; English Heritage 2010), only a limited number of trenches were excavated within these areas. Additionally, due to ecological constraints, trenching was further limited in a 20m corridor to either side of the stream crossing the southern part of the area. These factors have placed necessary limitations on the understanding achieved for the extents and character of waterlogged wooden structures which might be present and the potential complexity of palaeochannel incisions and infill deposits.

3. Topographical and archaeological context

The aspect and topography of the area have been very much affected by the M5. It carves a wide swathe through the landscape to the west, isolating the site from Warndon; the parish within which it lay prior to the construction of the motorway. Its focus has therefore shifted entirely. The striking ridge of Arden sandstone behind Coneybury Farm (to the east of site) creates a natural boundary between this area and the rest of Tibberton, but this would only have been one side of a wider basin within which the site functioned. The area would also have felt bordered by the high ground of Warndon to the west, with an outlook to the north-west where now there is an impenetrable barrier.

The underlying geology is recorded as being mudstone from the Sidmouth formation; part of the Mercian Mudstones (BGS Sheet 199; 1:50,000). The upper reaches of this are known to have decomposed to a structureless material although with more lithological areas known as skerries crossing the site. An isolated drift deposit of alluvium is also recorded for this area. This evidently originates from a stream that rises close to the roundabout of the B4636 and the A4440, flowing northeast into the study area as the Gleden Brook (Hooke, 1990), then north-west into the Barbourne Brook. The tithe maps of Warndon show how the course of the stream was altered between 1843 and 1885. From its natural course north-west across Field 1, the stream was diverted into field boundary ditches to join the course of a tributary that once skirted the western boundary of site (Figure 1).

The clay-rich marls of the Mercian Mudstone formation develop heavy, poorly drained soils. This is not ideal for cultivation, nevertheless the land has recently seen cereal cultivation, and historical field names indicate cereals on the higher fields, and meadow (for pasturing pigs) in the lower fields by the stream.

The Desk Based Assessment produced by Halcrow (2008) gives a précis of the archaeological and historical background of the site. This noted two HER records within the bounds of the study area; both of them cropmarks of ring-ditches. The first of these is located in Field 8, beyond the current scope of the evaluation. The other (WSM09124) is indicated in Field 1, by the southbound slip lane of the M5. This latter entry gives only an approximate location, and it is thought that a photograph reproduced by Hopper (2007, 1) showing a ring-ditch in the field to the north of Warndon church indicates its true location. Several further HER references were identified close to the study area; covered briefly below.

3.1 Prehistoric

The prehistoric period is generally represented by cropmarks. The ring-ditches mentioned above suggest prehistoric activity, indeed further cropmarks to the north of Warndon church (Woodiwiss 1990) were found to be from an Iron Age field system, and the sandstone ridge by Pershore Lane is the suggested site of an Iron Age hillfort (WSM30228). A single worked flint found during an evaluation in Trotshill (HEAS 2006) was thought to be residual, but with heat affected stone found on a brief site visit (to the proposed Bosch development), there would appear to be prehistoric activity in the area. As mentioned in the desk-based

assessment, the riverine location would have been attractive to prehistoric settlement, with the potential for burnt mounds in association with the stream (Halcrow 2008).

3.2 Romano-British

Evidence for low-level agricultural activity during the Romano-British period has been found to the west of the study site. This may be illustrated by an evaluation only 400m southwest of this site, where rectilinear enclosures with a small number of pits from an early Roman farmstead were uncovered (HEAS 2006).

3.3 Medieval

There is widespread evidence of medieval settlement in the vicinity. Warndon church and court still stand within sight of the study area, and evidence of ridge and furrow is extensive; from aerial photographs, historical maps and archaeological excavation.

4. Results

Several trenches were found to contain nothing of archaeological significance, save for proving areas of 'negative evidence' and providing information on the natural topography. These might be included in the text for discussions of levels AOD, but otherwise it may be accepted that the natural deposits record in these trenches did not vary from a standard soil profile of natural, subsoil and topsoil. These trenches can be identified in the table below. Furthermore, Trenches 5, 8, 19, 20, 23, 24, 25, 26, 27, 28, 31, 32, 33, 34, 35 in Field 1 were not excavated due to the change in strategy, discussed above (Section 2.2.3).

Field	Trenches exhibiting a standard soil profile only*
1	-
2	-
3	45
4	48, 51, 53, 58, 59, 62, 63, 64, 65, 67
5	69, 70, 72
6	84
7	88, 89, 80, 91
9	97, 102, 103, 104, 106, 107, 108, 109, 110, 111, 117
12	-

Trenches containing no archaeological deposits or features.

*Trenches which contain a sequence of natural overlain by subsoil and then topsoil, with no horizontal truncation, layers of alluvium, archaeological features or modern overburden

4.1 Structural analysis

The trenches and features recorded are shown in Figures 3 - 14. The results of the structural analysis are presented in Appendix 1.

4.1.1 Phase 1: Natural deposits

The natural varied slightly across site; being more or less decayed variants of Mercian Mudstone. The natural deposits described here are those observed beyond the identified palaeochannels. Beneath the palaeochannels, the natural was saturated, generally more soft and weathered than on higher ground, and often had reduced bluish grey streaks and areas. Rounded pebbles and sand were also found towards the surface. It is thought that these were a constituent of the natural rather than separately deposited coarser layers within the channel

sequences. It would appear that the smaller particled silts and clays were washed away during (?glacial) erosional periods, leaving the heavier grained material behind. Any levels on such natural will be recorded in discussion of the channels, below.

It must be noted that, particularly on the higher ground to the south of the site, the natural was often very shallow beneath the ground surface. The upper reaches had often decayed to a blocky texture, and it was necessary to machine c.0.15m into the natural before a consolidated surface was exposed and features could be identified. The levels provided in the following text endeavour to present the true, rather than the truncated, levels on the natural.

Field 1

The north-eastern part of Field 1 had been subject to horizontal truncation related to the construction of Junction 6 of the M5. The natural here was a compact, mid orangey red silty clay, with veins of gypsum up to 25mm thick. This was seen in Trenches 1 – 4; highest at 44.01m AOD, at the intersection of Trenches 1 and 2. At this point, the natural was 0.50m below ground level. Trench 6 also revealed a truncated level on the natural at 38.50m AOD; more than 2m below the current ground level. This presumably represented the cutting for the motorway slip-lane, while the other trenches saw broader landscaping from the realignment of Pershore Lane to Junction 6 of the M5.

The observable ground levels clearly did not reflect the original topography in this part of Field 1. The middle of Trench 7 marked a significant boundary south and west of which had been sealed by redeposited material, whereas to the north and east the natural horizons had been horizontally truncated. It was only in these truncated areas that the veins of gypsum were evident. Elsewhere, the natural was similar in description but slightly blockier in character. The natural rise of the decomposed mudstone from 37.40m to at least 41.54m AOD across Trenches 10 and 7 was more marked than the current topography suggested. This had the effect of making the relief in this area seem gradual and south-south-west facing, whereas originally it would have sloped more steeply up to Coneybury Wood, with a marked west-south-west attitude.

To either side of the alluvium in Field 1, Trenches 9, 10, 14, 16, 18 and 30 and the Transect Trenches (A, B and C) revealed this decomposed mudstone; a compact mid orangey red silty clay, at its natural surface level. Predictably, its lowest level was observed furthest downstream and closest to the watercourse; in Trench 14 at 37.25m AOD. The equivalent point in Transect A agreed with the known direction of drainage, being at 38.00m AOD. At these points, close to the known watercourse (Figure 3), the natural had streaks or areas that were pale to mid greyish blue in colouration, indicating areas of reduction. A slightly higher spur of land appeared to reach into Field 1 from the south, as seen by the comparatively high level in Trench 30 (38.95m AOD).

Fields 2 - 12

Across the rest of the site (shown in Figures 10 – 14), a compact mid reddish brown silty clay with grey mottling was generally seen, with more or less reduced areas depending on the proximity of the trench to a watercourse. The topography varied, from the shallow undulations of Field 5 to the rolling hills of Fields 4, 5, and 9 which dropped sharply to the stream, as illustrated in Plate 1 (Trench 87). Field 7 in particular showed a thin build-up of subsoil and topsoil, with the natural only 0.32m below the ground surface.

	Highest level		Lowest level (on 'dry ground')	
Field	Trench	Value (mAOD)	Trench	Value (mAOD)
1	1	44.01(truncated)	14	37.25
2	43	42.20	37	38.40
3	47	41.18	44	39.01
4	66	46.57	49	40.85
5	69	42.60	75	39.62

6	84	42.65	81	40.21
7	91	45.66	87	41.00
9	102	48.79	113	42.42
12	125	44.38	124	43.52

Highest and lowest levels on the surface of the natural across site.

4.1.2 **Phase 2: Palaeochannels**

Waterlain deposits including alluvium and rich organic horizons were encountered in many trenches, indicating the presence of one large, and several subsidiary former watercourses or palaeochannels. Figure 16 shows the hypothetical courses of these palaeochannels; based on the presence of alluvial layers and associated channel fill sequences recorded either in plan or section. In all instances (notwithstanding any archaeological features, discussed below) the alluvium and channel fill sequences were seen to seal the natural and underlie subsoil.

Palaeochannel 1:

Trenches 114, 115, 116, 118, 119, 123 and 124.

The current boundary between Fields 9 and 12 largely respects the line of a palaeochannel running through the southern part of the Phase 1 area (Figures 13 and 14). In the trenches at the south of Field 9, the alluvium gradually thickened from a negligible lens into this former channel course, making the edge hard to discern.

To the south of Trench 116 the channel was more than 0.60m deep; the base was not reached (Plate 2). All of the trenches in Field 12 showed alluvially lain deposits, but the channel itself was only identified to the north of the field; in Trenches 123, and 124. Natural that was not overlain by alluvium was seen in Trench 124, at 43.59m AOD (only 0.35m below ground level). From here, the alluvium deepened to north and west. The lowest point was seen at the north of Trench 123, at 42.24m AOD (nearly 2m below ground level). This appears to be close to the centre of the channel and at 1.35m deep may be nearing the full depth of the channel at this point. It was seen, in Trench 123, to cut through earlier alluvial deposits which formed a broader swathe across the western part of Field 12, thus showing differing periods of transgression of these streams, beyond the scope of this evaluation.

The course of Palaeochannel 1 is reflected by the current stream bordering Fields 9, 7 and 5. It appears to continue in Field 6, as Palaeochannel 2, but since the continuity of this watercourse was not proven, the two are discussed separately.

Palaeochannel 2:

The following trenches revealed alluvial deposits from this palaeochannel:

Trenches 9, 10, 12, 13, 14, 15, 16, 17, 18, 21, 29, 75, 79, 80, 81 and 83.
Transects A, B and C and Targeted Trenches 126 and 127.

This was the largest palaeochannel, observed from Trench 82 in Field 6 to Trench 9 in Field 1. Its south-east to north-west alignment crossed the northern half of the Phase 1 area; identifiable as a dip in the current topography, following the line of the stream seen on the tithe map of 1843. The channel occupied by the stream was seen to be between 90m and 127m wide, shallow and with a broad, relatively level base (Figures 3, 8 and 9). Recorded from the current ground surface, it was on average 2.0m deep; slightly deeper in Transect A at c.2.10m than in Transect C at c.1.90m. The channel was more narrow and deep in Transect B at 2.60m deep and 90m wide.

The edge of the palaeochannel could be approximately traced via the evaluation trenches in Fields 6 and 1. In Trench 82, the eastern bank was seen at 40.60m AOD, showing a drop of 3m from the equivalent point in Trench 124 (Field 12). Evidence for water lain deposits (both organic rich horizons and inorganic silt deposits) was seen in all trenches of Field 6 (apart from Trench 84), but it was difficult to determine the true course of the stream (or streams). There was clearly a channel edge to the north of Trench 83, 0.80m below the

ground surface, at 40.17m AOD. It is not certain, however, if this indicates a swell of the stream as it curves into Field 1, or if a further tributary (or indeed channel) joins here from the south-east. It was in Field 6 (Trench 127) that the deepest part of the channel was revealed, with natural 2.74m below ground level. Trench 75 (Field 5) shows the west bank of the stream at this point, at 39.35m AOD, approximately 1.10mm below the ground surface.

Into Field 1, both edges of the channel were identified in Transects A and B, with the level of the river bank dropping from c.38.60 to 37.90m AOD. The channel narrowed and deepened, then widened again; as evidenced by the alluvial deposits in Trenches 18 and 16 which allow the extrapolation of the edge just beyond their northern limits. The north-eastern bank of the stream was seen to the south of Trench 10, where the alluvium (1005) started at 37.55m AOD, and again to the far east of Trench 9 as (904) at 37.50m AOD. The south-western bank of the stream was seen in Trench 14, in close association with prehistoric archaeological features from Phase 3, cutting the natural at about 37.30m AOD. These features were sealed by the alluvial sequence that also filled the channel. For this reason the discussion of the channel fills are covered in a later Phase (Phase 5).

The suggested course of this palaeochannel through Field 1 is depicted in Figure 3, with Figure 9 showing its reconstructed profile as defined by the base of the alluvial clays. Often, a lens of pebbles was seen at the interface between alluvial fill and natural. The auger sample, however, recorded deposits below these layers. Occasionally these were described as having a sandy component, but often just as reworked natural. Since the upper reaches of the natural were consistently seen as 'reworked' (including on higher ground), it was hard to give a secure distinction between what had, and what had not, been physically reworked or redeposited by the channel. It is suggested that these deposits may relate to the presumed glacial formation of the river course.

Tributaries

Various tributaries and/or braided sections of palaeochannel were observed across the evaluation, principally towards the south; all eventually feeding into Palaeochannel 2 in Field 1. Working downstream, the first tributary observed was in Trench 121, Field 12. The alluvial material deposited here showed a channel 4.5m wide but of unknown depth, running eastwards to join Palaoechannel 1. Into Field 9, a further feeding channel is seen passing through Trench 113, no wider than 6m, its depth again unknown. Field 7 shows evidence for two tributaries; in Trenches 92 and 95. It is thought that they combine to form the stream seen in Trench 96; 7m wide and evidently feeding into the course of the current stream. The ground level in Fields 5, 7 and 9 drops significantly to the southeast towards the stream. The few tributaries along this slope appear to indicate a spring line.

Crossing Field 5, a further channel was seen in Trenches 78, 77, 76 and 74. This appears to be a braided channel (15m wide) rather than a tributary. It is possibly identifiable in Transect A, west of a shallow bar (Figure 9, Transect A, auger 3). It is not possible to say whether these two channels would have been contemporary or if one migrated to the course of the other.

A further tributary of Palaeochannel 2 was seen in Trenches 14 and Transect C, Trench 1. The edges of the channel were seen at around 37.20m AOD, although alluvial deposits accumulated above this level and it is hard to pick a point on this sliding scale.

4.1.3 Phases 3 and 4: Prehistoric deposits beyond the palaeochannels

Summary

Only one feature on the entire site was found to contain prehistoric pottery. Otherwise, features have been assigned to this phase on the grounds of stratigraphy, or because they contained other prehistoric indicators such as fire cracked stone. A few features have been determined as prehistoric by association and occasionally by fill type. These are understood to both pre-date and be broadly contemporary with Phase 4 deposits discussed below, although in only a few instances were there stratigraphic relationships to support this hypothesis.

These features are described in detail below but in brief comprised widely dispersed ditches, postholes, pits, tree-throws and three areas where heat shattered stone was concentrated. The

ditches clearly represent former boundaries and drainage features, although in one instance (in Field 2) the possibility that they defined a palisaded enclosure is raised. Of the pits, postholes and tree-throws, few produced material culture of any kind although charcoal flecking was often present while fire cracked stone characterised a small proportion. The three areas where heat shattered stone was concentrated (Fields 1, 2 and 12) are of greater interest. In one case (Field 12), the deposit represents the remains of a burnt mound, however, the other two were less distinct, appearing in form to be more consistent with paths consolidated with fire cracked stone. Nonetheless, the latter are almost certainly indicative of the use of hot stone technology in the near vicinity, even if the fire-cracked stones have been re-deposited to form paths rather than mounds.

The greatest concentrations of these features were located in areas adjacent to the palaeochannels. This was especially the case for those deposits associated with burnt stone. The most notable concentrations lay in Fields 1, 2 and 12.

Detailed descriptions (by field)

Field 1

Between the two converging palaeochannels seen in Trench 14 was an area of compact bluish grey clay with occasional small to medium heat shattered stones (1410). It rested at 37.32m AOD, was 0.11m thick and 5m wide with a clear north-south linearity. Stones were not seen elsewhere in the vicinity, and it was clear that these had been intentionally deposited. Further east within Trench 14, ditch [1416] was seen to also run north-south. It was 0.46m deep, 0.75m wide, and appeared to follow the sloping contour off the surface of the burnt stone deposit, as visible in section (Figure 5). This was filled with waterlogged alluvial clay that had an unusual concentration of sand to its western edge. Stratigraphically, ditch [1409] was seen to truncate both layer (1410) and ditch [1416]. It was 1.10m wide and 0.48m deep, with sides cutting at about 60° to a flat base. The fill contained charcoal flecks and was humic in nature, indicating it to have had an organic component whilst it was infilling with alluvial clays. This ditch was also seen to angle north-south. A small feature [1413] was seen to the west of these features. It was 0.95m by 0.46m, and 0.18m deep. The fill was sterile and alluvial in nature, with manganese flecks. The sides and base were not very regular and it was thought likely to be a tree throw, however it may be a small pit.

A ditch was seen on the east bank of Palaeochannel 2 in Transects A and B. Two rather different profiles were revealed; the ditch in Transect A being deeper and narrower than that in B, but they were thought to be the same feature. Both were filled and sealed by alluvium, and were situated within 2m of the identified channel edge. The same was not seen in Transect C.

Field 2

One of only two pieces of prehistoric pot retrieved from the evaluation was found in Field 2. Unfortunately this sherd of Iron Age pottery was residual within the topsoil of Trench 36 rather than being found within a cut feature.

Field 2 was seen to contain the highest density of features on site, most of which appear to be prehistoric in origin (Figure 10). The most significant were in Trench 37. A strip of heat affected stones (3703), very similar to (1410) in Trench 14, was revealed c.0.45m below the current ground surface level. This was c.3.70m wide and was also aligned approximately north-south, in a cut 0.25m deep. The density of heat shattered stones was slightly higher than in Trench 14, and the silty clay matrix was also seen to include occasional charcoal flecks. Fifteen meters to the west of this was a very clearly defined feature [3705], sub-rectangular in plan, with relatively straight sides cutting at c.45°. It was 1.75m long and 0.73m wide, cutting 0.33m to a pointed base (Plate 3). Although in close proximity to the burnt stone feature, it was not seen to contain any burnt stone fragments itself. The dark grey clay-rich fill (3704) was seen to contain charcoal flecks but no further cultural material. Three tree throws were also observed, as indicated in the table below.

To the north of Trench 36 ran an east-west ditch [3609], possibly with two re-cuts seen in section. They were sealed by the subsoil and are therefore suggested as being prehistoric. No datable finds were recovered, although the middle fill of the sequence was seen to contain frequent charcoal flecks. Apart from in Trench 37, further ditches were seen in all Trenches

of Field 2 (Figure 10). In Trench 38, the standard concave profile of ditch [3804] was interrupted by a central circular cut against one section (Plate 4). The possibility of it representing the terminus of a recut in a longer ditch seemed unlikely given a shared, rather than truncated, fill sequence. A similar feature was seen in Trench 41. The surprising break of slope in the base of this north - south linear feature led to its interpretation on site as a tree throw. These features may, however, be related and their profiles may very tentatively suggested to indicate the presence of a palisaded enclosure. Alternatively, ditch [3804] may be seen to arc round to the west as [4004] and [3906] where a standard ditch profile was recorded.

Trench	Quantity of tree throws
36	3
37	3
38	0
39	1
40	6
41	1
42	0
43	0

Tree throws in Field 2

All further prehistoric linear features in Field 2 were seen to have a roughly concave curved profile. Trench 40 showed a complicated array of cut features, tree throws and natural staining. Of five possible linear features in this trench, two were investigated; of which one, [4004] was thought to be prehistoric. Two thin linears were seen in plan in the northern half of the trench, in close proximity to a thin curvilinear which was recorded as being very shallow. Only a segment of a circle was seen, but it is possible that truncation (by ploughing, erosion or machining) removed the northern extent of a wider curve. The extrapolated diameter of c. 7m would not preclude it being a ring ditch, however no cultural evidence was seen in this or the two associated linear features.

Continuing with the ditches, Trench 41 was seen to contain a further two, at least one of which was probably prehistoric in date, and Trench 42 contained a prehistoric ditch more than a metre wide running roughly east west. Ditch [4304] in Trench 43 was 1.95m wide with a concave curved profile cutting 0.70m deep. Its fill was seen to be quite dark and with fire cracked pebbles, supporting a prehistoric date. Two further ditches were possibly also present in this trench, but remained unexcavated.

Further to the ditches, several isolated features were identified. Many of these were seen to be tree throws, indicated in the table below. A minority of these were investigated, and most have been classified due to their irregular shape in plan.

Few of the cut features were seen to be clearly defined. Many areas of localised discolouration were seen in the natural, some of which were confirmed via excavation to be cut features. Others remained un-investigated and it is likely that there are archaeological features as yet unidentified in some of the busier trenches, most particularly Trench 40. Although ditches from later phases were found, it is thought that the pits and postholes dated from the prehistoric period. Further to the rectangular pit in Trench 37, pits were also seen in Trenches 38, 39 and 40. Pit [3909] was oval in plan and recorded as having a concave curved profile 0.15m deep, (although this would have been deeper since the upper extent of the natural was lost to machining). It was seen to lie next to a similar unexcavated feature that may also be a pit. In Trench 40, three pits were investigated, with the possibility of a further three. Two of the excavated pits were shallow and with a flat base, containing reddish brown silty clay with no datable material. Pit [4008] had a striking section (Figure 15a), with straight sides at 45° to a pointed base. It was 0.63m deep and the fill was seen to contain

charcoal flecks towards the base. Feature [3808] may be a linear terminus rather than a pit, but this sterile-filled feature is altogether questionable. A further feature towards the centre of Trench 38 may also prove to be a sub-rectangular pit, 2 x 1.2 m extending beyond the limit of excavation.

A posthole [4006] was identified in Trench 40; 0.43m in diameter and originally more than 0.22m deep. It was within an area of patchily discoloured natural where other postholes were initially suggested but discounted on excavation. Similarly, of eight circular patches in Trench 42, one was investigated to confirm whether it was a posthole. It was considered natural and the rest were therefore discounted, but it may be that further postholes existed here and in the other trenches.

Field 3

Of the four trenches in Field 3, only Trench 44 exposed any archaeological features (Figure 10). An east-west ditch [4404] (Plate 5), phased as prehistoric, was seen to be aligned with [3804]; the possible enclosure ditch in Field 2. The ditch in Trench 44 was only seen to have a concave curved profile. The clay-rich fill with manganese flecking evidently accumulated within a waterlogged environment. Just to the south of this was a single posthole [4406] with a diameter of 0.29m. It was clearly defined with vertical sides cutting 0.10m to a flat base. The fill was seen to contain a large quantity of charcoal, possibly suggesting burning *in situ*.

Field 4

Many of the 21 trenches in Field 4 contained no archaeology. It was noted in some instances that there was a lack of subsoil, so it would appear that there has been horizontal truncation which might, in part, be responsible for the dearth of features. Only ditches were seen in this field, and these tended towards the north (Figure 10). In Trench 49, ditch [4904] was filled with a siltier deposit than the alluvially lain fills seen on lower ground. It was 0.55m wide and only 0.11m deep. It was, however, thought to have been horizontally truncated. With no relationship to subsoil to suggest phasing, the ditch has been phased with [4304] in Field 2 with which it aligns, and the larger scale of which it may once have reflected.

The shallow remains of two linear features were seen in Trench 50, which by their slightly different alignment to the nearby post-medieval ditch, were phased separately and thought to associate more with prehistoric ditch [4904]. The ditch terminus [6004] was also seen to respect this slightly different alignment. It was 0.72m wide, asymmetrical in its 0.21m deep profile, and at least 2.20m long. It cut from beneath the subsoil so was suggested as prehistoric. Again, no datable material was recovered from the silty fill of this ditch.

Field 5

Of only three archaeological features in Field 5, two were shown to be prehistoric (Figure 11). One of these [7507] contained the only *in situ* prehistoric pottery from the entire site. The irregular form of this feature suggested it to be a tree throw 1.75m by 0.85m, aligned approximately north-south. It was only 0.16m deep, although the top of the natural may have been around 0.15m higher prior to machining. The light reddish grey fill (7506) was a moderately compact silty clay with frequent charcoal flecks and fire-cracked stones. A flint bladelet of probable Late Mesolithic or early Neolithic date was also found within this fill, and it would appear that even if the cut did form naturally, material was intentionally dumped in the hollow (Plate 6). To the south-east of this feature, but the other side of a 10m wide stream (7403), was a shallow pit [7405]. It was partially beyond the limit of excavation, but could be seen in section as overlain by alluvial clay. Oval in plan, and with a flat base, this pit was seen to contain charcoal flecks but no further datable material.

Field 6

Trench 83 in Field 6 revealed a ditch terminus, a posthole and a tree throw in close proximity; all thought to be prehistoric in date. The ditch [8308] was seen to align west-north-west, parallel to the more easily identifiable (post-medieval) ditch [8305] on Figure 11. It was also suggested that there was a posthole located within the end of the ditch terminus. The tree throw was filled with a reduced silty clay, similar to the natural, while the posthole and ditch terminus were filled with a slightly more sandy material with rare, fine, charcoal and daub

flecks. This was very similar to the material with which they were sealed (8306), a colluvial layer thought to date from the Romano-British period.

Field 7

A north-south linear feature [9304] was thought to be a prehistoric ditch, despite its variable fill and lack of cultural material (Figure 12). It was 0.48m wide, 0.20m deep, and was sealed by the subsoil. A tree throw was also seen in Trench 96.

Field 9

Ditch [9907] is thought to date from the prehistoric period. Its slightly amorphous shape in plan and the fact that it was sealed by the subsoil disassociate it from the Roman and post-medieval features seen in close proximity. It was also on a different alignment to the strong line of the Roman ditch which appears to have been respected since (Figure 13). This prehistoric ditch was 0.45m deep, with concave sides to a shallow concave base, and it was seen to curve slightly to the south. A similar ditch in Trench 101 [10104] was seen to be on the same alignment. No subsoil remained here to indicate stratigraphy, so the ditch was phased purely by association and shared alignment. Similarly, no relationship was given for the ditch in Trench 112, but the alignment fitted with the other suggested prehistoric ditches.

A large tree throw, 2.20m in diameter, was also seen in this latter trench with abundant fragments of charcoal in the fill. Only two further tree throws were seen in the entire field; both in Trench 98.

Field 12

A possible prehistoric pit was seen in Trench 122, sealed by the alluvium, but it was Trench 124 that contained the more significant prehistoric deposits (Figure 14). A burnt mound occupied a shallow cut made into the natural close to the edge of the channel. It extended beyond the limit of excavation so its shape and extent remain unknown, but it was at least 12m east-west and cut 0.29m into the natural clay. The deposit contained abundant fire-cracked stones and charcoal flecks making it much more distinct and striking than the other potentially 'burnt mound' related features in Trenches 14 and 37. In close association with these features, in Trench 121, was a large quantity of animal bone, thought to be prehistoric in date, but this was found within the fills of a tributary so is incorporated with the discussions of the palaeochannel fills, below.

4.1.4 **Phase 4: Later prehistoric waterlogged remains**

The waterlogged nature of the channel fills led to very good organic preservation. This mostly comprised naturally accumulated material where peat and humic muds had formed over long periods of time preserving a wide array of environmental evidence. Further to this however, was the preservation of fragmentary prehistoric wooden structures, in Trenches 13, 15 and 21.

Wooden structures

The structures were each seen to post-date at least one channel fill and be sealed by at least another, confirming that the channel was active when they were built. It is not possible to say with any certainty whether the three exposed sections of wooden structure were contemporary with each other. It is of note that the 'dry-land' prehistoric deposits in Trench 14 were sealed initially by a layer of peat; seemingly the same layer within which the structures of Trench 13 were preserved. This indicates that, in at least this instance, the waterlogged structures were stratigraphically later than the area of burnt stones and ditches. This has enabled a separation of prehistoric deposits into two identified phases even though in the majority of cases attribution to one phase or the other has not been determined. It is thought that the separation covers the period from the Late Bronze Age to the Early- to Mid- Iron Age. Finer phasing of the structures and possibly the transgression of different braided channels can only be resolved through further work.

Trench 13

A layer of woody peat (1310) was found towards the bottom of the sequence in Trench 13. It was up to 0.45m thick and had a slight clay component, but unlike other 'peaty' layers on site

(generally humic clays with organic inclusions), this was fully organic peat, containing perfectly preserved hazelnuts, a high proportion of burnt stone and occasional charcoal fragments. The majority of this cultural material was found within the lower 0.20m of the deposit, in association with several upright stakes (Figure 4), including one that had clearly been worked and was rectangular in section, at 36.60m AOD. The layer was also found to contain several residual pieces of worked timber, including the two chisel point stakes illustrated in Figure 18. The peat had preserved every fragment of naturally fallen wood, and it was necessary to evaluate each piece to assess whether it was archaeologically significant before discarding it and evaluating the one below. It was therefore considered the best course of action to leave the bottom of this trench unexcavated. This would ensure either preservation *in situ*, or the facility to excavate the area properly if this were to be considered the favourable option. The few upright timbers seen were enough to prove that there were structural elements within the preserved organics, especially given their proximity to the proven wooden structures seen in Trenches 15 and 21, discussed below. Alluvial clay was evident below the peat, and from its relatively high pebble content, it is thought that this layer was close to the streambed (elsewhere, pebbles were often seen slightly above the interface between the natural and the primary fill). The natural was not exposed in order to avoid potential desiccation and preserve the waterlogged organic remains *in situ*.

Trench 15

Structural woodwork (1508) was preserved towards the south of Trench 15, c.1.30m below the current ground level. There were two main elements to the woodwork (Figure 6). To the north, longer pieces of brushwood were seen to be laid east-west, with their surface between 36.67m and 36.73m AOD. As can be seen in Plate 7, this seemed to mark a divide between humic material (1507) to the south, and the bright blue of the alluvial clay (1506) to the north. Within this part of the structure was the worked piece (1516); wood sample 1, Figure 18, an alder plank with clear marks at one end showing the signature of a metal axe, curved in section, and with small chips out of the end of the blade. Animal bone, charcoal, larger charred wood fragments, bark and burnt stone were also recovered from within this collection of material. Immediately to the south, the elements of the structure seemed to angle slightly more to the south-west. It was here that four upright stakes were revealed. One of these (1514) appeared to have been slabbed i.e. of rectangular cross section cut from across the centre of the timber. It was 0.11m x 0.03m in section, with 0.18m length exposed. Of the other uprights, (1513) was a half-split stake and (1515) was a full roundwood piece, both 0.03m in diameter and presumably with worked tips. Pieces (1512) and (1516) were also identified as having been slab cut, and there was further evidence of woodworking in the form of waste chips from axe working. Although these clusters of material can be viewed separately, it is thought that they are part of the same structure; most likely a riverside trackway. In total, the worked wood of (1508) covered an area 2m across that extended beyond the limits of excavation to the east and west. Its thickness and the depth of the underlying natural remain unknown as the timbers were left *in situ*. It is thought, however, that the timberwork was not much thicker than around 0.10m as it was rather piecemeal and only appeared to be the thickness of two or three overlying timbers in any one place. The relatively humic layer (1507) that had accumulated over the structure contained occasional burnt stone and hazelnut shells and had a sulphurous odour. The extent of this layer was limited to the extent of the preserved timbers. This was sealed by further alluvial material; to the north by (1505) and (1510), the latter strikingly blue in colour and filling a large proportion of the river channel; to the south, by the light grey alluvium (1504), which stratigraphically gave the foundation for the later waterlogged timber (1509).

A wide, thin plank (1509) (Plate 8) was found lying flat at 36.90m AOD at the south end of Trench 15. It was aligned directly towards an upright tree trunk, evident in Figure 6. The top of the tree trunk sat proud by 0.11m. Its base was not revealed, but it was seen to retain its bark and was at least 0.45m deep. It is uncertain whether the upright was intentionally placed or whether it had grown *in situ*, but it is thought that the plank was purposefully directed towards it and may have formed part of a northwest-southeast walkway structure. The plank was 1.05m long but extended beyond the limit of excavation to the north-west. It was up to 0.33m wide and a minimum of 0.03m thick. The plank appears to have been cleft; not radially but tangentially across the grain (at least on the exposed surface), leaving areas of uneven tear-out. It illustrates well the remarkable state of organic preservation on site, even

where little humic content to the surrounding layers was otherwise observed. It was stratigraphically later than the aforementioned structure (1508), resting c.0.20m higher and within clean alluvial layers that sealed the suggested walkway.

Trench 21

Trench 21 saw the excavation of a comparatively wide area of structural prehistoric timbers (2106) (Plate 9). Having initially identified worked timbers, it was considered imperative to gain an understanding of their nature, and more specifically to determine whether or not they were structural (in accordance with recent English Heritage guidance; EH 2010). The southern part of the trench was therefore widened to an area c.4m x 7m to allow proper investigation of this waterlogged woodwork. The natural was not reached below the timbers (to ensure successful preservation *in situ* should this be required or ensure the integrity of the structure in the event that detailed excavation ensues), however, from close association they are thought to have been only c.0.30m above the channel bed, resting on (and driven into) an alluvial clay (2111).

As can be seen in Figure 7 many timbers were revealed, ranging in size and conversion. Principally, a north-east to south-west alignment was identified, but it is thought that two further arms were evident; one running perpendicular at the north of the excavation area (where a line of uprights seems apparent) and another running south-south-east, supported, in part, by upright (2107); the top of this stake was removed as a sample for radiocarbon dating. This latter arm was seen to align to an isolated upright to the southwest.

It is quite a subjective exercise determining the dimensions of this structure, but it is thought that the 'arms' were approximately 0.50m wide and up to 6.20m long. They may represent distinct structures, but it is unclear whether they were contemporary or whether one predates another. No less than 35 upright timbers were identified; all of which must have been intentionally placed. These ranged from small roundwood stakes and halved branches to squared timbers. The horizontal timbers were also quite various; from brushwood to well-cut planks. There were eight plank fragments (up to 0.18m x 0.03m x 0.58m), indicating a proficient woodworking tradition. Also, axe chips were found and a large quantity of bark. It was noted that the bark tended to be of a shallow radius (from mature trees) and that it very often rested upright. Animal bone was also found within the structure, but no pottery retrieved.

The highest level recorded on any of the timbers was an upright post at 37.26m AOD, although most rested at between 37.01m and 37.10m AOD. The full thickness of the structure is uncertain. The majority seems to be only one timber thick but there are areas, particularly along the two main axes, that showed several layers of built-up timbers. A good example is by upright (2107) which supported two parallel branches lying north-east to south-west. Beneath these it was possible to see the right-angled corner of a well-cut plank also aligned and held in place by the upright (2107). It must also be noted that a wide thin plank, akin to that seen in Trench 15, was observed to align with this arrangement at an estimated depth of 36.85m AOD. The decayed fragments of this plank ran outside of the limit of excavation (between the aforementioned collection of timbers and the isolated post, Figure 7). This was observed during initial machining, and was partly responsible for the further investigation of the area. Unfortunately, it fell victim to the flowing slurry (Plate 10) that was cleared off the higher timbers to the north, and it splintered and washed away; emphasising the fragility of these deposits. Nevertheless, it suggests that the structures may be up to 0.25m high, or with different phases of construction at overlying levels.

The timbers rested towards the base of a thick humic layer (2109). The organic content of this layer increased with depth from a soft, mid brownish silty clay to a dark brown organic clayey silt with frequent preserved organics. It could not, however, be described as a woody peat; all the timber pieces were within a soft mineral based matrix.

4.1.5 Phases 3-5: Palaeochannel fills

Palaeochannel fills were identified which potentially pre-date or are contemporary with Phase 3 deposits, which pre-date and/or are contemporary with the Phase 4 waterlogged structures and which post-dated the latter, providing a long sequence of accumulation for these deposits.

Palaeochannel 1

A concentration of animal bones was found within the alluvial fills of the channel tributary identified in Trench 121. They were seen 1.65m below ground surface level in a wide, thin spread, with only a small proportion of the assemblage retrieved for identification. Otherwise, the channel fills within this palaeochannel were generally alluvial clays and little organic material was in evidence. Trench 123 showed the complex nature of the palaeochannels, where alluvium was seen to have been cut by a later channel, indicating the migration and recutting of stream courses.

Palaeochannel 2

The base of the channel was often difficult to discern within the auger samples, as the distinction between river-lain clay and natural clay was not always clear. The deepest alluvial sequence was revealed in Trench 127, where the streambed was seen to be 2.74m below ground level. The lowest deposit here was rich in organics and formed an almost peaty layer on top of the pebbles of the streambed. A similar deposit was seen at the base of the sequence in Trench 15 and was sampled for pollen analysis (Monolith <9>). Elsewhere, the auger sample tended to reveal blue and grey reduced alluvial clays as the deepest deposit, occasionally with a sandy component or with rounded pebbles. It was this lowest alluvium that provided the bed for the aforementioned wooden structures, which themselves tended to rest within a peaty layer. At least two phases of peat accumulation were in evidence. Wood rich peat (905) was recorded as the lowest deposit in Trench 9 (as in Trench 14). It was 0.25m thick and contained frequent charcoal and fire cracked stones. Also low in the sequence but more towards the centre of the channel was a white calcareous deposit thought to be rich in tufa. This was seen in Trench 12 as (1208) at 36.72m AOD (1.46m below the ground level), and also towards the base of the sequence to the north of Trench 15, from which a concentration of molluscs was sampled.

These organic and tufa-rich deposits, and the preserved prehistoric structures, were sealed by silty clays ranging from pale brownish grey to strikingly bright blue. High within this sequence of channel fills, a piece of wood (1212) was preserved within the alluvial layers of Trench 12. Found at 37.70m AOD, it had been worked to a tip and was resting semi-upright rather than lying flat within the deposit. At this level in the sequence, it must substantially post-date the other worked wood encountered on site. It was found within a pale, brownish grey silty clay, at the level where leaching and fluctuations in the watertable had resulted in a dark band of staining that was seen across all of the alluvially filled trenches. Not far below the subsoil, this was the approximate level to which Trenches 9, 12, 13, 15, 16, 18 and 21 were machined, proving the presence of a palaeochannel, with sondages to ascertain the true depth of the sediments.

Monolith samples were taken from Trenches 12, 13 and 15, as samples <12>, <3> and <11> repectively. A more detailed description and analysis of the nature of the deposit sequence present in Palaeochannel 2 was based on these, and further spot samples. This analysis is provided in the assessment of the palaeoenvironmental remains below.

4.1.6 **Phase 6: Romano-British**

Field 1

Romano-British pottery was found in the colluvial layers (1602) and (1802), but was considered to be residual as it was in association with medieval pottery. This layer was seen to seal earlier alluvial layers.

Field 6

Trench 81 in Field 6 (Figure 11) revealed two features cutting into, and also sealed by, alluvial deposits. A steep sided ditch [8108] was seen to run south-west to north-east. It was 0.45m wide with straight sides cutting to a flat base. It is of debatable phasing; a small fragment of pottery was observed on site and noted as of possible Bronze Age date, but this did not survive excavation and the feature's regular form is more suggestive of a Romano-British date. This phasing is also supported by its stratigraphic position between alluvial deposits, and the pottery if indeed of Bronze Age date would have been residual. A shallow posthole [8110], just to the north-west of ditch [8108], was also undated and was in the same

stratigraphic position. For this reason it has also been phased as Romano-British, but this is open to interpretation.

Field 7

A posthole [8704] was seen to the west of Trench 87 (Figure 12), 0.35m across and approximately 0.15m deep (although a further 0.15m was lost to machining). It contained a single piece of Roman pottery. By association, the posthole [8506] in Trench 85 was taken to be Roman in date. It remained undated, with a fill of light to mid reddish grey silty clay with occasional small rounded pebbles. It was 0.45m across, with a concave base similar to [8704].

Field 9

Three aligning sections of ditch crossed Trenches 98, 99 and 100 in Field 9 (Figure 13, Plate 11). The base and sides were concave, although ditch [10004] did have a slightly more 'V' section, 1.40m wide and 0.48m deep, cutting only the natural. The fill was a very compact light red or bluish grey silty clay, and in ditches [9909] and [10004] it was found to contain fragments of Roman pottery. Ditch [9804] is dated by association.

Field 12

Roman pottery, including parts of a tankard, was found within alluvial layers (12204) and (12503) in Field 12 (Figure14). Both of these layers were found to seal earlier prehistoric deposits.

4.1.7 **Phase 7: Medieval**

Colluvial deposits were observed in several trenches, generally overlying the alluvial fills of Palaeochannel 2, where the high land of Coneybury had resulted in hillwash across the low-lying ground. Such deposits were recorded in Trenches 9, 10, 16 and 18 (Figure 3)and in Trench 16 this light orangey grey material contained a mixture of redeposited pottery including medieval fabrics.

Trench 81 was seen to preserve what is thought to be a medieval furrow [8106] (Figure 11). The shallow concave cut into the alluvium was a mid reddish clay that was sealed by subsoil, so although no datable material was recovered, the stratigraphy certainly supported this interpretation.

4.1.8 **Phase 8: Post-medieval**

Field systems

The majority of post-medieval archaeology took the form of field boundary ditches. Trench 39 in Field 2 showed the course of a ditch [3904] which was seen to cut through the subsoil (3901). It is clear looking at Figure 10 how this aligns with the current boundary ditch between Fields 2 and 4. Similarly, the boundary between Fields 4 and 7 was evident in the ground. At present the fields stand open with no ditch or hedge separating them. Trenches 61, 85 and 68 however, revealed ditch sections that clearly marked the old field boundary, aligned south-west to north-east. Of these three, ditch [6104] contained a mid orangey grey clayey silt fill with no datable material, but it cut through the subsoil suggesting it to be post-medieval. Ditch [6804] was not insubstantial at 1.80m wide and 0.74m deep and contained a fragment of post-medieval ceramic building material, and ditch [8504] remained unexcavated but is datable by association. The line of this field boundary may be further traced to the south-west, in Field 9, where ditches were seen in Trench 99 and 100, also shown stratigraphically to be post-medieval in date. Further such features were observed across the site and can be seen in the phased figures, while more notable features are covered below.

Field 1

The remains of the old Pershore Lane were found in Trenches 7 and 11; rising from south to north; from 40.36m to 41.40m AOD (Figure 3). It is thought that the modern construction, surviving here as dumps of clinker and crushed ceramic building material, must have truncated any earlier evidence of the road. In Trench 7 a roadside ditch [706] was also

observed; 1.40m wide and 0.60m deep. The fill of this was seen to include similar fragments of clinker and ceramic building material as the modern road build-up.

Trench 18 contained two parallel ditches dating from the post-medieval period; [1805] and [1807]. These were 1.10m and 1.60m wide respectively, and 0.17 to 0.36m deep, aligning north-west to south-east. Both had a shallow concave curved base, and [1807] was seen to have relatively steep sides. These were also seen in neighbouring trenches, for instance in Trench 16 as [1610] (Plate 12), reaching Trench 9 and evident in section in Trench 10. Post-medieval pottery and tile fragments were retrieved from these ditches which respected the north-eastern edge of the palaeochannel.

Trenches 7 and 10 were interesting as they preserved a former topsoil, relict from the last cultivation prior to the construction of the motorway and buried beneath dumped deposits. The organics were relatively well decayed, and the gradual change through the subsoil to the natural could be seen. The surface of the topsoil was found up to 1.30m below the current ground level.

Trench 9 showed evidence of east-west aligned furrows (for example [909]) that appear to be nineteenth or twentieth century in date. These cut through the underlying alluvial layers and were themselves filled with an alluvial-type blue grey silty clay, but this had evidently been reworked. The relict ground surface, which had been sealed by dumped material from the construction of the motorway, was seen to follow these furrowed contours; approximately 0.50m above their undulating cut.

Field 4

In Trench 52, an east-west aligned spread of cobbles with occasional post-medieval tile was recorded (5203 and 5204). This appears to metalling, but it was not seen in any of the surrounding trenches (Figure 10) so is suggested as isolated hard-standing rather than a road. Just to the south of this was a ditch [5206]. This was seen to align with a feature in Trench 50 which had not been excavated due to its negligible depth. At only 0.03m deep, this demonstrates the ephemeral nature of some of the archaeological deposits. Ditch [5206] was also only 0.03m deep, but contained post-medieval roof tile, securing its positive identification. To the south of Field 4, a further ditch was seen running north-east to south-west, and from its alignment it is suggested as of post-medieval date, principally by association with ditch [5206].

Field 6

Two relatively substantial post-medieval ditches were recorded in Field 6; [8205] and [8305], both running south-east to north-west (Figure 11). Neither contained datable material, but they were seen to truncate the subsoil, dating them stratigraphically. The ditch in Trench 83 was 3.10m wide and 1.10m deep with straight sides and a curved base giving an approximate 'V-shaped' profile. It was filled with a non-reduced clay-rich material, whereas the ditch [8205] was seen to be filled with a more typically alluvial reduced clay deposit. Given their scale, these are thought to have been drainage ditches rather than field boundary ditches as seen elsewhere.

Field 12

Ditch [12206] (Figure 14) may just have been a field boundary ditch, but it was found to contain a large finds assemblage. In amongst the many fragments of post-medieval ceramic building material and pottery were oyster shells, animal bone, glass and a large piece of red sandstone with a central recess that may have formed a post pad.

4.1.9 **Phase 9: Modern deposits**

The natural to the north of Field 1 was identified as having been horizontally truncated, principally because the overlying material was redeposited natural mixed in with Type-1 roadstone. It is thought that this originated at the time that the course of the B4538, Pershore Lane, was redirected to the current Motorway Junction 6. Also dating from this time, was the modern dumped material (603) in Trench 6. This was quite remarkable in the scale of its inclusions. Whole mature trees had been up-rooted and dumped, along with large blocks of mortared brick masonry up to 1m across. Unfortunately, the matrix that these were in was

clearly redeposited alluvium, and it was noted that in amongst this material were soft fragments of waterlogged wood; very much akin to the prehistoric material that had been discovered in Trenches 15 and 21. These were not studied in detail as there were strong hydrocarbon fumes emanating from the deposits which had been dumped at least 1.40m deep above the truncated natural at 38.50m AOD. This redeposited alluvium was also seen in Trenches 7, 9, 10, and 11, but without the scale of inclusions seen in Trench 6. In Trenches 6 and 9 this was further sealed by a cleaner subsoil-like material; a compact pale brownish red silty clay. It is thought that the more clay-rich deposit in Trench 3 (303), that appeared as a possible channel was redeposited clay, probably dating from the time of the motorway construction.

Topsoil was seen in all trenches. This was of varying thickness and description, but was generally a compact and blocky, mid to dark reddish brown silty clay. There did not tend to be a large quantity of inclusions, but a range of residual material was retrieved including a single sherd of pottery of probable Iron Age date from Trench 36.

4.2 Artefact analysis, by Dennis Williams

4.2.1 The artefact assemblage

The assemblage excavated during the evaluation is summarised in Table 1. Ceramic building materials constituted much of the assemblage, with pottery, stone, metal and bone making up most of the remainder. The bone finds were recorded by count and weight, but were not analysed further at this stage. The state of preservation of the finds was generally good, with the pottery sherds showing only moderate abrasion.

4.2.2 Pottery

Pottery sherds were grouped and quantified according to fabric type, as shown in Table 2. There were only two sets of diagnostic form sherds (both Roman) that could provide precise dating evidence, but most sherds were datable by their fabric types to general production spans.

Prehistoric

Five fragmentary body sherds of handmade, prehistoric pottery were recovered from the fill of a tree throw, 7506. All these sherds had a soft, black fabric, containing moderate, ill-sorted, angular quartz inclusions, plus some grog (fabric 5.3). Some were orange-brown in colour on the surface, with a 'soapy' texture, on one side. Although dating of this type of pottery is difficult, particularly when very fragmentary, the fabric suggested it was late Neolithic or Bronze Age in origin.

A single fragment of Iron Age pottery with Malvernian inclusions was also found residually within the topsoil of Trench 36.

Roman

Roman pottery, all Severn Valley ware (fabric 12), was found in layers 1602, 1802, 12204 and 12503, and ditch fills 9906, 9908 and 10003. A rim sherd of a storage jar was recovered from layer 1802. This was a Webster 5 form, dating from the 2nd to 3rd centuries (Webster 1976). A similar date range could be assigned to sherds from a Webster 42 or 43 tankard, which included a complete handle, found in layer 12204. The remaining Severn Valley ware sherds were all small and undiagnostic.

A sherd with a Malvernian fabric, retrieved from 1602, was flat in section, and 18mm thick. This was typical of handmade, slab-built Malvernian ware (fabric 3.1), usually 3rd-4th century in date.

Medieval

Small sherds of Worcester-type, sandy, unglazed ware (fabric 55) were found in layer 1602. These could have dated from the late 11th to mid 14th centuries. An inverted rim sherd with an oxidized fabric (99) was also found in this context. This material had a very fine matrix, with quartz, iron-rich and sandstone inclusions, suggestive of Herefordshire manufacture. Two fragments of abraded medieval pottery were also found within ditch fill (9908).

Post-medieval
The post-medieval pottery mainly comprised sherds from functional, coarseware vessels. These included bases from red ware (fabric 78) bowls or pancheons, black-glazed internally, found in ditch fill 12205. Smaller sherds of fabric 78 were recovered from the topsoil (contexts 1700 and 1800) and from layer 5203. These red wares could have a wide 17th-18th century range. A very small sherd of a brown-glazed stoneware (fabric 81), found in context 1700, may have been of a similar date range. Body sherds of 18th century buff ware (fabric 91), with white slip-trailed decoration, were also recovered from the topsoil (contexts 1700, 1600 and 10700).

Post-medieval/modern
Finds of more recent pottery were confined to small sherds of white and blue-glazed china (fabric 85) from topsoils 1600 and 1700, and of pale blue and cream-glazed earthenwares (fabric 101) from 903, the fill of a furrow. All these were mass-produced items, 19th or early 20th century in date.

Associated with late post-medieval or modern pottery production, was part of a tapered ceramic ring found in context 1600. This ring was of the type used to maintain the rim shape of porcelain or bone china cups during firing. In the same context, part of a flanged ring, with a similar fabric, had probably also been used as a support during firing.

4.2.3 Other artefacts

Ceramic building materials
Fragments of flat roof tile, with orange, sandy fabrics, were widespread across the site, being found in topsoil (contexts 1200, 1700), subsoil (contexts 1801, 4301, 4701, 5001, 9001, 10001), a layer (5203), and ditch fills (5205 and 12205). The tile thicknesses were mostly in the range 14-20mm, which is typical of various late medieval and early post-medieval roof tiles, so a wide 15th-18th century date range may apply to these finds.

Fragments of handmade brick were found in topsoils 1800 and 2200, layer 1806, and ditch fill 12205. Three of these fragments, from 12205, were measured as having thicknesses of 2" (50mm), 2¼" (55mm) and 7/8 -2⅛" (47-53mm). Although these dimensions were close to those of stock bricks from the early 18th century (Davey and Roseff 2007), they could also have been of 17th century manufacture. However, without length or width measurements it was not possible to offer more precise dating for these. Small and undiagnostic brick/tile fragments were also found in contexts 1200, 1600, 1700, 1800, 1806, 2200, 4700, 5203, 9903, 9904 and 12205, with fabrics that were also consistent with post-medieval manufacture.

Coal
Small amounts of coal were recovered from subsoil 4201, and ditch fills 9903 and 12205.

Glass
A section of the shoulder of a dark green bottle was found in ditch fill 12205. This was free-blown, with the general shape being indicative of manufacture during the latter half of the 18th century. A single undiagnostic sherd of green vessel glass, found in layer 1806, was also post-medieval.

Metal
Metal finds were confined to a flat brass button, probably post-medieval, from subsoil 2101, and an iron object, possibly a tine from an agricultural implement, found in ditch fill 3903.

Shell
A oyster shell was recovered from ditch fill 12205. Finds of this type are usually associated with either Roman or post-medieval sites.

Slag
A small quantity of slag was found in 4201, a subsoil layer. This waste material, from iron processing, was low in density and therefore typical of post-medieval material (rather than Roman slag, which is usually denser, owing to its high residual iron content).

Stone
A flint bladelet, probably of Mesolithic or Early Neolithic date (R Jackson *pers. comm*.) was found in the tree throw fill 7506.

Heat-cracked fragments of pebbles were recovered from layers 905, 1310 and 1507. Such fragments have usually proved to be related to prehistoric or early Roman activity,

A substantial piece of red sandstone, of unknown date and function, was found in ditch fill 12205. This took the form of an ovoid lump with a recess, approximately 90mm diameter and 35mm deep, carved or ground into its top surface.

4.3 Overview of artefactual evidence

The artefactual assemblage from this evaluation was significant in that it indicated the presence of prehistoric, Roman and medieval activity and landuse, in the vicinity of the site. Particularly significant was the presence of prehistoric pottery and a single piece of worked flint in the fill of a tree throw (context 7506), but the heat-cracked stone found at three other locations was also notable, in indicating wider prehistoric to early Roman activity.

The Roman pottery finds were typical of those expected of rural occupation, e.g, at farmstead sites. These finds were thinly spread but only appeared to be residual in one context (layer 1602, which also contained the medieval pottery). The most useful material for providing dating derived from several ditch sections recorded in Field 9 which are believed to have flanked a Roman road. The incorporation of domestic waste within manuring scatters, associated with arable cultivation, is the most likely explanation for the spread of Roman pottery elsewhere, and may similarly account for the distribution of post-medieval and modern pottery and ceramic building materials, which were mainly confined to topsoil and subsoil layers.

The *terminus post quem* dates deduced for the contexts are shown in Table 3.

Lastly, it is noted that although the artefactual assemblage from the evaluation was relatively poor, this should not pre-suppose the same of any future investigations on site. It is known from other comparable excavations, for example, that votive deposits were often made into rivers and streams during the prehistoric period, and the evaluation conducted here did not reach the levels at which such finds might generally be encountered. It could also prove valuable to plot the distribution of domestic cultural material found from any further work on site. No focus for settlement or domestic activity was identified during the evaluation, and it may be that with this information, a focus of activity may be inferred beyond the site limits.

4.4 Radiocarbon dating, by Beta Analytic and Nick Daffern

4.4.1 Results

One sample of *Corylus avellana* (hazel) wood, identified by Dr Alan Clapham during wood and charcoal analysis, was submitted to Beta Analytic Inc for AMS (Accelerator Mass Spectrometry) radiocarbon dating. The sample of worked wood was taken from a roundwood post driven into the floor of Palaeochannel 2 and forming part of structure (2106), a putative prehistoric trackway, at approximately 1.70m below ground surface during excavation in Trench 21.

The OxCal calibrated age (95.4% probability or 2 sigma) produced by the AMS dating was Cal BC 520 to 380 (Cal BP 2470 to 2330). Some caution must be exercised in placing too heavy reliance on this single radiocarbon determination especially given the potential for this to be 'old wood'; however, the date can be taken as broadly indicative of construction in the

later prehistoric period. Further detail is contained within Table 6 and the full radiocarbon report is appended as Appendix 2.

4.4.2 Discussion and statement of potential

The use of scientific dating techniques has a particularly high potential at this site due to the likely ready availability of suitable material. In the apparent absence of many datable artefacts from the site, such a dating programme has particular importance.

A broader scheme of radiocarbon dating of timbers from the trackway(s) has the potential to not only refine the dating of the structure but also to confirm whether multiple phases of construction and/or repair can be identified, as would seem likely. This could also potentially be supported by dendrochronological dating in the event that timbers of sufficient size are recovered.

In addition to the dating of the trackway, a scheme of radiocarbon dating upon material retrieved from the burnt mound features has the potential to confirm their dating. Secondly there is a possibility that a temporal pattern may emerge from a programme of dating as it is currently unclear whether they were active at the same time and whether the function they served was short-term and their usage overlaps or whether the deposition of the burnt mounds were individual, discrete events.

Finally, a programme of AMS radiocarbon dating upon material retrieved from different phases of channel activity has a high potential to provide a chronological framework for the site, as the majority of the deposits and features of significance have a relationship with the palaeochannel i.e. the trackway, burnt mounds. Further, this has a high potential to provide dating which would underpin the environmental analysis as it is clear from the geoarchaeological assessment that a complex alluvial sequence is present and any evidence that may refine the deposition of these deposits would be of great benefit in the interpretation of the site and the wider landscape as it is clear that the migration and development of the alluvial system are not solely anthropogenic and may reflect wider regional or national fluctuations in climate.

4.5 Geoarchaeology, by Keith Wilkinson

4.5.1 Results

Monolith <3> sampled alluvial stratigraphy from a variety of facies through Palaeochannel 2 in Trench 13 (Figures 3 and 19). The basal stratum (i.e. below 0.74m) is a moderately humified peat containing well preserved waterlogged plant macro-remains (Unit 7), the latter comprise both fibrous and woody specimens suggesting the presence of both grasses and trees. The peat is conformably overlain by grey brown silts and clays (Unit 6), which in turn is capped by organic silts between 0.50 and 0.67m (Unit 5).

The stratigraphy above 0.50m is of grey and greyish brown laminated silts and clays (Units 2-4). These have been moderately bioturbated as evidenced by the presence of fine roots and root holes. The alluvial stratigraphy in Monolith <3> is not iron-stained and it would therefore appear that the deposits have not been exposed to redox processes. The peat formed in a shallow water environment, probably within a depression in the floodplain.

The laminations in the overlying silts and clays suggest that Units 6, 4-2 formed incrementally, while the fact that they survive in the stratigraphic record suggests that they have not been subject to pedogenesis and therefore that they most likely formed within a palaeochannel. The organic mud (Unit 5) is likely to have formed within or at the edge of the palaeochannel during an episode of reduced water flow.

Monolith <11> was taken from a section revealed in Trench 15, Palaeochannel 2. The base of this monolith, below 0.81m comprised dark brown (Munsell 7.5 YR 3/3) sands and silts (Unit 13) that appear to be the weathered surface of the Sidmouth Mudstone Formation (Figure 20). The latter geological unit underlies most of the modern city of Worcester.

The alluvial deposits overlying the Sidmouth Mudstone Formation in Monolith <11> (Units 9-12) comprise moderately and well sorted greenish grey (Gley 1 5/10Y and Gley 1 4/5G)

silts and clays. The lowermost alluvial deposits include laminations of brown (7.5 YR 4/4) silt and clays and occasional quartzite pebbles (Unit 12), both of which are probably derived from the underlying Sidmouth Mudstone Formation. Waterlogged plant macro-remains and mollusc shell are found as rare inclusions throughout the alluvial stratigraphy and the entire alluvial sequence is likely to have formed in slow moving and deep water.

Monolith <12> was taken through alluvial silt/clays, organic muds and the weathered surface of the Sidmouth Mudstone Formation in Trench 12, Field 1. The basal deposits below 1.32m comprise compact brown silt/clays containing pebble and cobble-sized rounded and sub-rounded quartzite and sandstone clasts of the latter Formation (Unit 26). This stratum is unconformably overlain by greenish grey (5 Y 6/2 light olive grey and Gley 1 6/10Y greenish grey) bedded silts and clays between 1.32 and 1.14m, which also have moderately high concentrations of mollusc shell and waterlogged plant macro-remains (Units 24 and 25).These are conformably overlain between 1.14 and 1.03m by a calcareous fine sand/silt that also contains mollusc shell (Unit 23).

Two further greenish grey silt/clay units (22 and 21) containing moderate waterlogged plant macro-remains cap the calcareous layer at 1.03 to 0.70m. Organic mud strata containing pebble-sized waterlogged plant macro-remains (Units 20 and 19) conformably overlie the silt/clay units at 0.70-0.35m, and are in turn capped by initially olive grey (5 Y 5/2) (Unit 18) and then brown (10 YR 4/3) silts and clays.

The sequence in Monolith <12> appears to comprise channel fills of sediments accumulating in slow moving, but relatively deep water (Units 25-21). Of particular interest given the rarity of calcareous rocks in the immediate catchment, is the presence of calcareous sediments in Unit 23. Water depths at the sample location appear to have reduced subsequent to the deposition of Unit 21 allowing organic mud strata to form in very shallow and still waters (Units 20-19). The upper part of the sequence appears to comprise floodplain sediments that have been modified by both redox processes (watertable fluctuations) and pedogenesis.

4.5.2 Discussion and statement of potential

The account provided above (Section 4.5.1) has described how the sediments sampled in the monoliths taken from Palaeochannel 2 (Monolithis <3>, <11> and <12>; Figure 3; Trenches 13, 15 and 12 respectively) were likely to have formed. No absolute time scale can presently be attached to the reconstructed depositional events. Monoliths <3> and <12> both contain fossiliferous (plant macrofossil remains and mollusc shell) channel sequences and organic strata of significant palaeoenvironmental potential. Moreover the relationship of the channel deposits and the organic sediments is different in the two monoliths suggesting that the two monoliths have sampled a (or series of) complex channel sequence(s) during which flow velocities and water depth seem to have varied.

The organic strata sampled in the two monoliths must have accumulated during at least two discrete temporal episodes of low water depths, suggesting that bioarchaeological examination might enable the reconstruction of environments during multiple temporal phases. For these reasons, the possibility of obtaining a high resolution chronology by ^{14}C dating macrofossils in the organic strata, and the demonstrable stratigraphic relationship of the Middle Iron Age trackway with the channel strata, the deposits in Monoliths 3 and 12 are classified as being of high palaeoenvironmental potential.

Monolith <11> has sampled minerogenic channel fills, which nevertheless contain well preserved plant macrofossil and molluscan remains. These latter could be derived from anywhere within the channel catchment. For this latter reason and the possibility of macrofossil reworking, direct dating by ^{14}C of these deposits is problematic. For these reasons strata in Monolith <11> are assessed as having only a moderate palaeoenvironmental potential.

4.6 Plant macrofossils, by Alan Clapham

The plant macrofossil environmental evidence recovered is summarised in Table 7.

Waterlogged plant remains were examined from the spit samples that correspond to west facing Monolith <3> taken from Trench 13; thus providing a typical and deep (although not

complete) sequence through deposits within the main palaeochannel (Palaeochannel 2). Eight of the 13 spit samples were processed and analysed from this section. These corresponded to the top and bottom of the major strata within the exposed section.

Three samples from possible burnt mounds were also processed for charred plant remains.

4.6.1 **Waterlogged remains from west facing section of Palaeochannel 2, Trench 13**

Overall the waterlogged plant remains were well preserved and diverse and included whole hazel nuts (*Corylus avellana*).

0-5cm

This upper sample is the least diverse of the samples analysed, it was dominated by seeds of rushes (*Juncus* spp). Other dominant species included sedges (*Carex* spp) and watermint (*Mentha aquatica*). Other species recorded include buttercup (*Ranunculus acris/repens/bulbosus*), knotgrass (*Polygonum aviculare*), bramble (*Rubus* sect Glandulosus), marsh pennywort (*Hydrocotyle vulgaris*) and prickly sow-thistle (*Sonchus asper*).

5-13cm

This sample was also dominated by rushes and sedges but a further species, spike-rush (*Eleocharis* sp) another sedge type was also very common. Other species present in this assemblage were buttercup, water crowfoot (*Ranunculus* subgenus *Batrachium*), greater chickweed (*Stellaria neglecta*), cinquefoils (*Potentilla* sp), and water-plantain (*Alisma* sp). Marsh pennywort was also present but in greater numbers than in the uppermost sample.

18-22cm

Again, the sample was dominated by rushes and sedges but now both buttercup and cinquefoil have increased in numbers. Other species present include celery-leaved buttercup (*Ranunculus sceleratus*), lesser spearwort (*Ranunculus flammula*), nettle (*Urtica dioica*), chickweed (*Stellaria media*), bramble, and spike-rush. The quantity of marsh pennywort fruits is reduced in this assemblage.

27-32cm

Rushes, sedges and spike-rush are dominant in this sample. Buttercups, celery-leaved buttercup, water-crowfoot, knotgrass, cinquefoil, gypsywort (*Lycopus europaeus*), water mint and bristle club-rush are also present.

37-42cm

In this sample there is a change in the species makeup with rushes and sedges falling in numbers with the introduction of alder in the form of fruits and cones. Docks (*Rumex* sp) were the most numerous find. Other species present included buttercups, celery-leaved buttercup, nettle, greater chickweed, bramble, bittersweet (*Solanum dulcamara*), marsh woundwort (*Stachys palustris*), and water mint.

42-47cm

The dominant species in this sample were finds of nettle and alder fruits and cone scales. Ragged-robin (*Lychnis flos-cuculi*) is recorded in some number along with celery-leaved buttercup, and hazel nutshell fragments. Other species such as buttercups, greater chickweed, dock, marsh violet (*Viola palustris*), marsh woundwort, water mint and the various types of sedges are recorded in low numbers.

52-57cm

This samples produced few species and in low numbers. These include hazel nutshell fragments, marsh woundwort, elderberry (*Sambucus nigra*), rushes and sedges.

62-67cm

This sample was rich and quite species diverse. It was dominated by alder remains, especially the cones. Other species present included ragged-robin, buttercup, nettle, hazel, greater chickweed, marsh violet, marsh woundwort, and water mint. No rushes or sedges were recorded from this sample.

The overall pattern of vegetation change appears to be from alder carr which may have had a period of drying out at 52-57cm which is then replaced by a more open marsh environment.

4.6.2 Charred plant remains

The three contexts (3703, 1410, 12407) from the burnt mounds produced very few charred plant remains. Only small fragments of charcoal, too small to be identified with confidence were recorded from these contexts.

4.6.3 Wood/charcoal analysis, by Alan Clapham

A total of 44 fragments of wood were assigned wood numbers which included roundwood, and possible wattle fragments, wood chips, and stakes or posts etc, potentially dating to the Iron Age. The wood descriptions and wood technology was recorded, following which small samples of the wood from a selection of pieces were then identified to species (oak and non-oak identifications are included in the results here). These were stored in bags in plastic sample buckets.

The waterlogged wood was well preserved although in some cases mineral impregnation of the wood had occurred. The majority of samples could be readily sectioned with the exception of the mineral impregnated samples which were able to be thin-sectioned sufficiently well to permit identification.

Some of the samples could be identified to species level, either anatomically or because only one species of a genus was likely to have been present on the site at the time of deposition. Identification has been taken only to genus level in cases where there is more than one native species of a genus and the cell structure of these is very similar (eg *Salix* sp). Other identifications included more than one species of a genus because similarities in the wood structure make it difficult to separate them to species level (eg Maloideae). Nomenclature follows that of Stace (1997).

The wood identifications can be found in Table 8, with photographs of some of the worked pieces shown in Plates 14 – 16).

In order to determine the potential for wood identification and the interpretation of the wood remains with regards to archaeological use and environmental reconstruction, 19 pieces of worked and un-worked wood were identified. The most common wood present was alder with 9 pieces, followed by four fragments of unidentified bark which is most likely of alder. Other species identified include hazel, oak (*Quercus* sp) and ash (*Fraxinus excelsior*). Of the three worked pieces of wood analysed (Illustrated in Figure 18) the fragment of plank in 1516 was of alder as was one of the chisel point stakes from 1309. The other chisel point stake identified from 1309 was of hazel. In three of the contexts (1309, 2109 and 1507) waterlogged whole hazel nutshells were found, indicating excellent preservation of plant material.

During the basic recording of the wood fragments recovered from the excavation it was noted that there were a number of small twigs and that some of the pieces of wood were partially charred indicating that fire had occurred locally. Whether this was intentional, accidental or natural is difficult to determine at this stage but with the presence of burnt mounds in the area it could be suggested that it was intentional.

4.6.4 Discussion and statement of potential

From the rapid assessment of the plant macrofossils from the spit samples taken from Trench 13 it can be seen that the material represents an alder carr habitat which over time develops into a more open marshy landscape dominated by rushes and water mint. It is not possible at this stage to determine if this change is natural or artificially induced or how long this process took. The presence of a trackway(s) and burnt mound deposits in the vicinity suggests that the landscape was potentially widely managed and exploited.

The wood remains of alder, hazel, ash and oak suggest that the local landscape was utilised, especially in the formation of the trackway. The dominance of alder in the remains suggests that the trees in the immediate vicinity were used but drier land where the hazel, oak and ash

would have been growing would not have been too far away. Due to the lack of charred plant remains from the site it is not possible to determine past agricultural practices. The presence of whole hazel nuts within the deposits does suggest that wild food resources were available but it is not known if these were exploited by the local population.

The plant macrofossils examined for this assessment therefore indicate that there is a high potential for the site to provide material which will allow the reconstruction of the past landscape and help determine how former communities exploited this landscape. Examination of the small quantities of worked wood recovered from the trackway(s) have indicated that these have a high potential for examining woodworking techniques and identifying the wood species being exploited and used in their construction. Although suitable charcoal was not recovered from the samples from the burnt mounds recorded, charcoal associated with such features has the potential to allow identification of woodland management practices, and to see if there is any selection of specific taxa for use at the burnt mounds.

4.7 Palynological remains, by Nick Daffern

4.7.1 Pollen analysis

The results of the analysis are presented in Table 9 and a pollen diagram for the sequence from Monolith <3> (Palaeochannel 2; Trench 13) is presented in Figure 22.

Assessment counts of 150 grains were completed on all samples unless stated.

Monolith <3>: Palaeochannel 2, Trench 13

0.14m

Herbaceous species represented 84% TLP within this sample with Poaceae indet (grasses) (42% TLP) the dominant contributor with Cyperaceae undiff (sedges) the second highest contributor (9% TLP). Diversity of herbaceous species was high with additional contributions of equal to or less than 5% TLP being made by, amongst others, *Urtica dioica* (stinging nettle), Apiaceae (carrot family), *Aster*-type (daisy/aster), Chenopodioideae (goosefoot subfamily), *Filipendula sp* (meadowsweet), *Plantago lanceolata* (ribwort plantain), *Ranunculus acris*-type (meadow buttercup), Rosaceae (rose family), *Polygonum aviculare* (knotgrass) and *Valeriana dioica* (marsh valerian).

Tree and shrub species (15% TLP) were represented by *Alnus glutinosa* (alder) and *Betula* (birch) at 5% TLP respectively with lesser contributions being made by *Salix* (willow), *Corylus avellana*-type (hazel) and *Quercus* (oak).

A solitary grain of *Calluna vulgaris* (heather/ling) was the sole heath species identified. Aquatics were represented by *Nymphaea alba* (white water-lily) and *Potamogeton natans*-type (broad-leaved pondweed) and the spores of *Pteridium aquilinum* (bracken) and *Pteropsida* (mono) indet (ferns) were also present.

0.26m

Herbaceous species dominated the sample representing (93% TLP) with Poaceae indet (44% TLP) the primary contributor with *Aster*-type (10% TLP), Cyperaceae undiff, *Ranunculus acris*-type and *Urtica dioica* (5% TLP respectively) also making significant contributions. Contributions of less than 5% TLP were made by Apiaceae, *Cichorium intybus*-type (chicory/dandelion), *Plantago lanceolata*, *Succisa pratensis* (devils-bit scabious), *Rumex acetosa* (common sorrel), *Sagina* sp (pearlwort) and *Iris* sp (irises).

Tree and shrub species contributed 7 % TLP with grains of *Alnus glutinosa*, *Betula*, *Corylus avellana*-type, *Pinus sylvestris* (Scot's pine), *Quercus* and *Salix* being identified.

Lemnaceae (duckweed family) and *Potamogeton natans*-type were the aquatics present and spores identified were *Ophioglossum* sp (adder's tongue), *Polypodium* sp (polypody) and *Pteridium aquilinum*.

0.42m

The main contributors were again herbaceous species representing 81% TLP with Poaceae indet (38% TLP) contributing the majority. Lesser herbaceous contributors were also

identified including *Aster*-type (9% TLP), *Ranunculus acris*-type (6% TLP), *Cichorium intybus*-type, Lactuceae undiff (chicory/dandelion/sow thistle), *Plantago lanceolata*, *Urtica dioica*, *Valeriana dioica*, *Centaurea nigra* (common knapweed) and *Polygonum aviculare* (≤ 5 % TLP respectively).

Alnus glutinosa (11% TLP) was the main contributor of tree and shrub pollen (19% TLP) with lesser contributions by *Quercus*, *Salix*, *Corylus avellana*-type, and *Betula*.

Aquatics were again represented by Lemnaceae with the addition of *Sparganium erectum* (branched bur-reed). The spores of *Polypodium* sp and *Pteridium aquilinum* were also identified.

0.54m

Tree and shrub species (51% TLP) were slightly more abundant than herbaceous species (49% TLP), with *Alnus glutinosa* being the main contributor (38% TLP). Additional species included *Salix*, *Tilia cordata* (small-leaved lime), *Quercus*, *Ilex aquifolium* (holly) and *Betula*.

Poaceae indet (28% TLP) was again the dominant contributor of herbaceous pollen with lesser contributions (≤ 5 % TLP) made by *Ranunculus acris*-type, *Urtica dioica*, *Plantago lanceolata*, *Aster*-type, *Rumex acetosella* (sheep's sorrel), Cyperaceae undiff, *Filipendula* sp, and *Artemisia*-type (mugwort/wormwood).

No aquatics were identified within the sample although spores were represented by identifications of *Polypodium* sp, *Pteridium aquilinum* and *Pteropsida* (mono) indet.

0.74m

Herbaceous species (66% TLP) returned to being more abundant with Poaceae indet (45% TLP) being the dominant species with *Ranunculus acris*-type, *Urtica dioica*, *Rumex acetosella*, *Cyperaceae* undiff, *Potentilla*-type (cinquefoil) and *Filipendula* sp present at equal to or less than 5% TLP.

Tree and shrub pollen represented 34% TLP with *Alnus glutinosa* (30% TLP) contributing the majority with lesser contributions by *Betula*, *Quercus* and *Salix.*

Aquatics were represented by a solitary grain of *Nymphaea alba* pollen and spores by *Polypodium* sp and *Pteridium aquilinum*.

Sample <9>: Hiatus layer in Trench 15 (context 1511)

This sample taken from the "hiatus layer" in the base of Trench 15 was dominated by herbaceous species (85% TLP) with Poaceae indet contributing the majority of this figure (81% TLP) although grains of Cyperaceae undiff, *Aster*-type and *Filipendula sp* were also identified. Trees and shrubs contributed 15% TLP with *Betula* (13% TLP) being the dominant species with lesser contributions by *Salix* and cf *Juniperus communis* (common juniper).

Sample <10>: Spit samples from organic deposit in Trench 15 (context 1502)

Top

Pollen was in low-moderate concentrations with grains being poorly-moderately preserved with frequent grains being damaged, folded or broken, as a result of this, a complete 150 grain assessment count was not achieved.

Herbaceous species were the most frequently identified with Poaceae indet being the dominant contributor with additional species including *Cichorium intybus*-type, Lactuceae undiff, *Urtica dioica*, *Aster*-type, *Ranunculus acris*-type and *Valeriana dioica* also being identified.

Tree and shrub species were present in far lower quantities with grains of *Alnus glutinosa*, *Betula*, *Corylus avellana*-type, *Salix* and *Ulmus* (elm) being identified.

Spores of *Equisetum* sp (horsetails), *Polypodium* sp, *Pteridium aquilinum* and *Pteropsida* (mono) indet were also identified.

Bottom

Pollen grains within this sample were in a poorer state of preservation than in the upper sample with very low concentrations and exhibiting signs of extensive damage with grains frequently broken, folded or heavily pitted and therefore a complete assessment count was not completed.

Herbaceous species, in particular Poaceae indet, dominated the sample with Lactuceae undiff, *Cichorium intybus*-type and Cyperaceae undiff present in lower quantities. Only two tree species were present within the sample, *Pinus sylvestris* and *Tilia cordata*, and these identifications were of solitary grains.

Spores of *Polypodium* and *Pteropsida* (mono) indet were also present.

Monolith <12> - Palaeochannel 2, Trench 12

0.22m

Herbaceous species (90% TLP) dominated this sample with Poaceae indet (44% TLP) contributing the majority of this figure although Cyperaceae undiff (16% TLP) and *Aster*-type (10% TLP) also contributed significant percentages. Lesser quantities of herbaceous pollen (≤ 5 % TLP) were contributed by *Filipendula* sp, *Ranunculus acris*-type, *Urtica dioica*, *Succisa pratensis*, Caryophyllaceae (Pink family) and Fabaceae (pea family).

Tree and shrub species identified were *Alnus glutinosa*, *Salix, Quercus* and *Corylus avellana*-type which contributed 10% TLP in total.

Spores were represented by *Pteridium aquilinum* and *Pteropsida* (mono) indet

0.48m

Tree and shrub pollen (55% TLP) was slightly more abundant within this sample than herbaceous species (45% TLP). *Alnus glutinosa* (39% TLP) was the dominant contributor with *Tilia cordata* (6% TLP), *Corylus avellana*-type (5% TLP), *Carpinus betulus* (hornbeam), *Quercus*, *Salix* and *Pinus Sylvestris* (<4% TLP respectively).

The main herbaceous species identified was Poaceae indet (24% TLP) with lesser quantities contributions by *Urtica dioica*, Cyperaceae undiff, Caryophyllaceae, *Artemisia*-type, *Aster*-type, *Filipendula* sp and Lactuceae undiff.

Aquatics were represented by a solitary grain of Lemnaceae and the spores of *Polypodium* sp, *Pteridium aquilinum* and *Pteropsida* (mono) indet were also identified.

0.72m

The pollen within this sample exhibited signs of post-depositional deterioration with extensive damage to the exine of the pollen grains suggesting that there is an element of preferential preservation within the sample. Also multiple grains were broken and/or folded resulting in several grains being unidentifiable. Due to the poor preservation and low concentrations, a full assessment count was not achieved.

Tree and shrub species were represented by *Alnus glutinosa*, *Tilia cordata*, *Corylus avellana*-type and *Pinus sylvestris* and the herbaceous species identified were Poaceae indet, *Ranunculus acris*-type, *Urtica dioica* and Cyperaceae undiff.

As has been previously seen, *Alnus glutinosa* and Poaceae indet were the dominant species identified within the assessment despite the limited quantity of identifiable remains

Spores of *Pteridium aquilinum* and *Polypodium* sp were also identified.

1.00m

Similarly to the previous sample, this sample exhibited signs of post-depositional damage to the pollen grains and preferential preservation.

Grains of *Alnus glutinosa*, *Pinus sylvestris*, *Quercus* and *Salix* were identified representing tree and shrub species which were in low quantise in comparison to herbaceous species which were represented by *Ranunculus acris*-type, *Urtica dioica* and Poaceae indet, the latter being the dominant species within the sample.

The sole spore identification from the sample was of *Pteridium aquilinum*.

1.24m

The basal sample from the sequence, unlike the previous two samples contained a greater quantity of polliniferous material allowing a complete count to be achieved.

Herbaceous species heavily dominated this sample representing 96% of the total land pollen identified with Poaceae indet (81% TLP) contributing the majority of this. Additional herbaceous species identified during the assessment included *Filipendula* sp, Lactuceae indet, *Aster*-type, *Plantago lanceolata*, *Ranunculus acris*-type, *Lysimachia vulgaris*-type (yellow loosestrife), Apiaceae, Saxifragaceae (saxifrage) and *Urtica dioica* although these were all in low concentrations (<5% TLP)

Tree and shrub pollen represented just 4% TLP with identifications of *Betula*, *Corylus avellana*-type, *Salix* and *Sorbus*-type (whitebeam/rowan).

A solitary grain of *Sparganium erectum* was the sole aquatic present during assessment with spores of *Pteropsida* (mono) indet, *Polypodium* sp and *Pteridium aquilinum* also being identified.

Sample <21>: - Grab sample from primary channel fill, Trench 127 (context 12707)

Herbaceous species represented 81% TLP from this sample with Poaceae indet the dominant contributor (58% TLP) with Cyperaceae undiff (10% TLP) the second highest contributor. Herbaceous species identified in lower concentrations (≤ 5 % TLP) included *Urtica dioica*, *Filipendula sp*, *Ranunculus acris*-type, *Plantago lanceolata*, Chenopodioideae, Caryophyllaceae and Lactuceae undiff.

Tree and shrub species contributed 19% TLP with *Betula* and *Salix* contributing 6% TLP respectively with grains of *Alnus glutinosa*, *Corylus avellana*-type, *Quercus* and *Ulmus* also being identified.

The sole aquatic species identified was a single grain of *Sparganium erectum* whilst spores were represented by *Polypodium*, *Pteridium aquilinum* and *Pteropsida* (mono) indet

4.7.2 Fungal spores and parasite ova

Fungal spores were present in the majority of the samples with the exception of Samples <9> and <21>. *Torula* sp and *Cladosporium* sp the two most commonly identified. Both genera are ubiquitous and cosmopolitan in their distribution although both are typically associated with plant litter and decaying plant matter with *Torula* sp particularly associated with herbaceous stems, both living and dead.

No parasite ova were identified during the assessment.

4.7.3 Discussion and statement of potential

With the exception of the top and bottom samples from Sample <10> and 0.72m and 1.00m from Sample <12>, pollen concentrations and preservation within the samples was good and complete, 150 grain assessment counts were achieved.

The lack of dating from the assessed sequences inhibit the comparison of the sequences with each other and to those in the wider landscape yet basic inferences can be made. The palynological remains indicate that the environment surrounding the palaeochannel (Palaeochannel 2) was marsh and/or wet grassland as indicated by the abundance of grasses and wetland species such as sedges, marsh valerian, iris and branched bur-reed. It is also likely that the grassland or floodplain margins were relatively "rough" and unmanaged due to the presence of stinging nettles, common and greater knapweed, devil's bit scabious, cinquefoil and mugwort/wormwood.

The low percentage of tree and shrub species is surprising given the wet nature of the site and a carr environment was initially suspected from the propensity of wood fragments witnessed during sampling yet this appears not to have been the case. It is hypothesized that wet ground tree and shrub species such as alder and willow were flanking the channel or occupying the

wettest locations of the marsh environment with drier ground species such as oak and, in particular, lime on the drier raised margins to the east of the site.

The possible reason for the low percentage of tree and shrub species may have an anthropogenic solution in that wet woodland may have been deliberately cleared to enable easy access to the marsh landscape to utilise resources as well as providing seasonal grazing for livestock. This idea is supported by the presence of burnt mounds and, in particular, the Iron Age trackway which are clear indicators that movement within the wetter areas and utilisation of landscape resources was occurring.

The evidence from the pollen assessment indicates that there is a high potential for use of detailed sub-sampling to provide one or more high resolution sequences from the site and thus detect important short-term vegetational variations and landscape changes which may be coupled with human occupation and land-use within the environment. Coupled with this, an increase in the number of grains counted (to between 300 and 500 total land pollen grains) has a high potential to ensure that a complete picture of the vegetation could be constructed. This would also potentially enable the identification of rarer species or those that could be informative as regards the dating of the deposits or identifying man-made impacts/activities such as woodland clearance or agriculture.

4.8 Mollusc analysis, by Andrew Mann

4.8.1 Results

Two samples were specifically selected from Trenches 12 and 15 for molluscan analysis; Samples 7 and 8 having been taken respectively from contexts (1208) and (1505) in these trenches since snail shells were clearly visible within these layers during excavation. Sample 7 was 20 litres in size, although only 5 litres were sub-sampled for the molluscan analysis. Sample 8 was only 1.5 litres in size, all of which was processed during the analysis.

Both samples contained significant mollusc and ostracod remains. Although many of the shells were significantly fragmented and damaged there was still a large quantity of well preserved readily identifiable examples available to undertake a rapid assessment of their potential.

Both samples were dominated by *Lymnaea truncatula* (dwarf pond snail) and examples of *Catinella arenaria/Succinea oblonga* (sand amber snail and small amber snail). The latter two were not separated for the purposes of this report as this is a difficult process due to the similarity of their shells. It must also be noted that both also resemble *Lymnaea truncatula* and juveniles of the latter may have been classified as *Catinella arenaria/Succinea oblonga*. With time, however, these can readily be separated due to the differences in morphology, specifically around the protoconch.

Occasional examples of *Vallonia pulchella* (smooth grass snail), *Succinea putris* (Large amber snail), *Pisidium* cf *personatum*, *Pisidium casertanum* and *Anisus leucostoma* (Button ram's horn snail) were also seen.

Ostracod shells were also seen in large numbers throughout both samples and as with the molluscan remains the shells were significantly fragmented and damaged, however there were still a large quantity of well preserved examples. These have not been formally assessed within this report but their presence and potential are noted.

4.8.2 Discussion and statement of potential

The molluscan remains are indicative of a poorly vegetated, bare muddy bank side habitat on the margins of a poor aquatic habitat that is likely to be shallow and prone to fluctuations in depth. A number of the species are often found on or around the base of sedges on the margins of water.

Both molluscs and ostracods as identified have the potential for reconstruction of the fluvial condition at the time of deposition and also therefore to establish how the fluvial conditions changed over time.

4.9 Insects by Nick Daffern

Elytra (the hardened forewings) of insects were occasionally identified during excavation and although the formal assessment of these remains was not undertaken during this assessment due to budgetary and time constraints, these clearly indicate their potential survival.

It is, however, noted that the study of insect remains has the potential to contribute greatly to the environmental history of the site and compliment the techniques already utilised in this assessment as aquatic species can be indicative of water depth, flow velocity and water quality whilst terrestrial species can indicate specific plant species and habitats as well as possibly confirming the presence of herbivores and/or human through symbiotic or parasitic species.

4.10 Animal bone, by Emily Beales

4.10.1 Assessment

The faunal assemblage consists of two identifiable species, *Bos taurus* and *Equus.* This does not rule out the possibility that other species may also be represented in the assemblage however the fragmentary nature of the remains leads to difficulty in identification.

The state of preservation was poor with the majority of the faunal remains recovered in a highly fragmented state; completeness of bones was generally less than 20%.

Of the 42 fragments, 6 were identified as *Bos taurus* (Cow). The skeletal elements present included metapodials, tibia, and one unworn mandibular 3rd molar. *Bos taurus* fragments were found in contexts (905), (1507), (2109) and (12105).

Two fragments were identified to the genus *Equus* (horse); these consisted of one fragment of distal metatarsal and one very worn maxillary incisor. *Equus* fragments were found in contexts (2109) and (12105). The remaining fragments retrieved during excavation and sampling were unidentifiable.

4.10.2 Butchery marks and pathological alterations

There are no butchery marks or pathological alterations present on the bone; this could be due to perthotaxic agents such as rodents, roots and weathering aiding in the post depositional degradation of the bone.

The percentage of unidentifiable fragments is extremely high for this site (80.95%); a common feature due to the acidic soils of Worcestershire resulting in poor preservation. A mortality profile was not constructed due to the limited quantity of diagnostic remains.

4.10.3 Discussion and statement of potential

The aim of any faunal analysis is to investigate the interactions between animals and people in a cultural setting although unfortunately, due to the state of preservation and fragmentation of the assemblage, an analysis of the cultural setting of the site cannot, as yet, be constructed.

Despite this, it is interesting to note that despite the small quantity of the assemblage; the most common elements are metapodials and teeth. Generally the skulls of animals are deposited separate to other elements due to the lack of useful materials they provide and this may be what is occurring in this case although due to the acidic nature of the soil conditions, preferential preservation of more robust elements of skeletal remains is more likely to be the cause of this pattern.

the assessment has shown that there is potential for preservation of faunal remains, sometimes in locations directly associated with human activity i.e. the trackway, therefore any additional faunal remains retrieved during further phases of excavation should still be considered for assessment as a larger dataset may provide greater detail of human exploitation of animal resources and allow some statements to be made regarding diet, animal management, and technology/butchery techniques.

4.10.4 **Environmental synthesis, by Nick Daffern and Alan Clapham**

Palaeoenvironmental summery tables for Trenches 12 and 13 are presented as Table 10 and Table 11.

Prehistoric

Palaeochannel(s)

Due to the lack of detailed dating evidence, it is difficult to correlate the individual results of the completed environmental assessments with other strands of evidence into a cohesive sequence, although general inferences regarding the vegetation and landscape can be made.

The environmental and geoarchaeological data retrieved from the palaeochannel infill deposits indicate that the environment was essentially sedge and/or reed marsh flanked by wet, "rough" grassland and occasional alder/willow carr. The grassland was composed of a wide variety of wetland and marginal herbaceous species and is likely to have been seasonally inundated as the molluscan and geoarchaeological assessments both suggest that water depth and velocity fluctuated with deep, slow moving water present at least during certain times of the year.

The palynological assessment suggests that oak and lime woodland was present on drier ground which must have been relatively close to the palaeochannel due to the limited transportation of lime pollen. Lime pollen was only sporadically present and in low percentages suggesting that these deposits post-date the anthropogenic lime decline (Turner, 1962) which usually occurs in the Late Neolithic/ Early Bronze Age within this region; occurring at *c.* 2000-2250 cal BC at Wellington, Herefordshire (Greig 2007) and Clifton, Worcestershire (Head and Daffern, forthcoming) and at *c.* 2300-2850 cal BC at Cookley, Worcestershire (Greig forthcoming). It is therefore proposed that the majority of the deposits that were assessed lie between the early Bronze Age and Mid-Iron Age based upon the low percentage of lime pollen and the AMS dating of the trackway which was driven into in the upper organic sediments of the palaeochannel.

Burnt mounds

No evidence for the function of the burnt mounds was evident from the assessment with unidentifiable charcoal fragments being the sole environmental remains retrieved, although the possibility of burning having occurred away from these features was noted with the presence of partially charred twigs and wood fragments identified during the wood and charcoal analysis.

Whether this burning is associated directly with the burnt mounds or whether these charred fragments were burnt intentionally, accidentally or naturally elsewhere is uncertain, yet the presence of features strongly associated with fire cracked stone (and thereby through association with man-made fire) makes this connection probable.

Trackway

The trackway, dated to the Middle-Iron Age (Cal BC 520 to 380), was constructed from at least two species of wood with alder being utilised for planks and chisel point stakes and hazel also being used for chisel point stakes. Whether the different wood resources utilised within the trackway indicate different phases of construction and/or repair is unclear, however, it is evident that local resources were being utilised for the construction as alder and hazel were both identified in the plant macrofossil and palynological assessments.

5. Synthesis

5.1 Natural deposits and site topography

The present topography of the site shows a contrast between the gently rolling hills of Fields 4, 7 and 9 against the low lying and comparatively level Fields 1, 6 and 12. Field 1 however was seen to have been subject to severe landscaping at the time of the M5 construction. It would originally have had a far more marked relief, with the northern part of the site rising steeply towards Coneybury Farm, and the outlook of this field opening to the northwest.

Similarly, the now largely infilled depressions occupied by the former channels crossing the site would have formed distinct landscape features in the past and these are discussed in more detail below (Section 5.2).

The upper reaches of the natural were truncated towards the north of Field 1, exposing the gypsum veins that are not usually seen at ground level as they weather away. Elsewhere, the more decomposed mudstone formed a compact mid orangey red silty clay natural, often with reduced streaks and areas where waterlogged. It was also seen occasionally to be more clay-rich and to have formed a blocky habit, awkward for machining and identifying archaeological features.

5.2 Palaeochannels

The other, more significant effect on the topography has been from the one broad, and several lesser, palaeochannels that coursed across the site. Given the natural contours of the surrounding land and the subsequent formation of subsoil and topsoil, the capacity of the palaeochannel could have been no more than 1.40m deep at maximum. It therefore seems unlikely that this small stream, which rises as a spring a short distance south of the site could have given rise to this substantial channel feature. It is suggested that this local stream has found a course within a broad scar created by glacial activity; either ice flow or more probably glacial meltwaters. The subsequent meandering of the stream within the base of the broad glacial depression has further eroded and then later largely infilled this area.

It was clear in at least one instance (in Trench 123) that different phases of channel incision were in evidence, where one palaeochannel clearly cut earlier alluvial deposits. This supports the suggestion that the stream course was a dynamic system and probably saw meandering braided channels. This also then calls into question the wide cross-sections seen in the Transects across Palaeochannel 2 (Figure 9). The area represented by Transect A is greater than that in Transect C, possibly indicating that there was greater channel migration creating a broader overall cross-section towards the south. This sequential movement of the channel would have a strong bearing on the location and dating of associated archaeological features.

Braided channels were seen in plan, for instance the palaeochannel that runs through Field 5 (Figure 11), but it is not possible to say whether they were contemporary with the main stream or if they are an earlier or later manifestation of the same. This is of particular significance regarding Field 5 since the only securely datable prehistoric feature on site would appear to be on an island, or at least a very thin spur of land between two channels. These parallel streams, present today in Field 11, appear to have stretched further across site; reflected by the southern boundary of Field 9 and traceable across Field 5.

The alluvial sediments appear to have been deposited within the main palaeochannel (Palaeochannel 2) from the Early Bronze Age onwards, giving a long hiatus between the early Holocene formation of the depression and alluvial deposition. It may be that the substantial deposit of redeposited natural recorded at the base of the auger samples holds evidence for this early phase of channel formation. Further, it may also be suggested that the lens of pebbles often seen at the interface between the natural and the primary fills results from the gradual erosion of the palaeochannel floor by the meandering stream. The spot pollen sample taken from the base of the sequence in Trench 15 is also of considerable potential interest in developing an understanding of early patterns of landscape and site formation. Located close to the centre of the channel, and taken from its base, the pollen indicated species of open, drier habit, namely grasses with some birch, willow and *cf* juniper. This was also evident (although to a lesser extent) in the peat-like deposit from the base of Trench 127. Clearly this is stratigraphically early, but the pollen remains do not resemble the later assemblages of marsh/wetland and thermophilous species such as oak, lime and holly. This may reflect a significantly earlier phase of deposition, tentatively of a late Devensian/early Holocene landscape, that would be of great value for further research, particularly in association with secure dating.

The complex sequence of channel incisions and cut-off meanders infilled with organic deposits, humic muds, alluvium and other forms of sediment which subsequently developed within this broad palaeochannel is further discussed below (Section 5.3.2).

5.3 Prehistoric

5.3.1 Dry land prehistory

Tree throws

The earliest identifiable prehistory activity on site was associated with a tree throw [7507] in Field 5. Several small pieces of pottery were retrieved, thought to date from the Bronze Age, while a flint bladelet found within the same feature is probably of Mesolithic or Early Neolithic date. This clearly shows that there was early prehistoric activity in the area, but no direct evidence was seen for settlement at this time. Further tree throws were seen across site, generally concentrated in Field 2. It is likely that these are evidence of the tree clearance known to have taken place in this region during the Late Neolithic / Early Bronze Age. It may also be that this loss of tree cover resulted in the surface run-off which was the source of the sediment starting to accumulate in the palaeochannel at this time.

Burnt mounds

Fire cracked stone was also found in tree throw [7507], and was a key feature elsewhere on site. Three 'burnt mound' deposits were identified; two towards the north of the site, and a further in Field 12, all on lower ground and in close proximity to a palaeochannel. Although no firm dating evidence was recovered, these are liable to be of Bronze Age or Iron Age date since such features most commonly date to these periods.

The burnt mound (12408) in Field 12 was not sealed by alluvium despite resting 1m below flood deposits in Trench 125. It is supposed that perhaps a levee formed between these trenches to have prevented such deposits forming over the burnt mound (which did not appear to have been horizontally truncated). This goes to demonstrate the complexity of the landscape and the extent to which braided channels must have been migrating and reforming across the area. More locally, the burnt mound was seen to rest on a slight spur of lane, suggesting its location to have been logically positioned on dry land close to the stream. It was cut into the natural clay and was seen to contain a large quantity of fire cracked stones and charcoal; unfortunately the only environmental evidence preserved within the sample of this feature.

The other 'burnt mound' features showed a high concentration of burnt stone, but not the associated charcoal. Also, both features were seen to be linear in plan, aligned roughly north – south, rather than the more amorphous shape in plan of the burnt mound (12408). It is suggested that (3704) and (1410) may form a metalled path from Field 2 to the water's edge in Field 1, although this would certainly need further investigation to determine. Whatever the case, the heat shattered stone recovered from these two areas was clearly re-deposited and is strongly indicative of further prehistoric 'burnt-mounds' or other uses of hot stone technology in the vicinity. The area of burnt stones in Trench 14 was bounded on its eastern flank by a ditch, with a recut, that had filled with alluvial material and appeared to be contemporary with the burnt stone deposit. This too would support the suggestion of a walk-way with a drainage ditch to keep it dry and allow access to the channel. A prehistoric ditch also ran along the opposite river bank, as seen in Transects A and B. No equivalent ditch was seen in Trench 10 or towards the north of Field 1 so it is uncertain how far this ditch may extend.

Ditches

Several ditches thought to be later prehistoric in date were seen across site. Too few were identified to reconstruct a field system, although this might be suggested in Field 4. In Field 2, the ditches seem to be less co-axially aligned, arcing across the area. It is suggested that perhaps here the ditches define drove-ways rather than field boundaries. This inference on land-use is only tentative, but with further investigation of the area it would be possible to prove or disprove this theory.

Settlement

The burnt mounds and ditches serve to demonstrate that prehistoric activity was not confined to the river channels as discussed below, and that the surrounding landscape was utilised for farming (more probably pastoral since no cereal pollen or grains were recovered from the environmental samples). There is, however, little direct evidence of settlement. Postholes

were fairly elusive, only having been identified in Trenches 40, 44 and 83, but the nature of the natural was occasionally patchy, and it may be that several such patches that were not investigated would transpire to be postholes. Few prehistoric pits were seen, with the majority again concentrated in Field 2. Pits [3705] and [4008] were both seen to be surprisingly straight-sided with a pointed base, but not containing any cultural material. The only other confirmed pit was seen in Field 5, but this was relatively undiagnostic.

Ditch [4304] is of interest since it was significantly bigger than the other prehistoric ditches. It was also seen to contain a large quantity of fire cracked stone, suggesting it to have been intentionally backfilled rather than left to naturally silt-up as one might expect for a field boundary or drove-way ditch. It is thought that this ditch, which follows the contour of the land, may define an enclosure bounding the prehistoric archaeology in Field 2. The pits and post holes in this area, combined with the tentative remains of a ring- ditch in Trench 40, may suggest prehistoric settlement, but the evidence is sparse and not supported by a domestic finds assemblage.

5.3.2 Wet land prehistory

Early channel sedimentation

The environmental and geoarchaeological analysis of the sediments from Palaeochannel 2 suggest that the earliest alluvial sediments accumulated from around the Early Bronze Age, perhaps as a result of increased surface run-off brought about by anthropogenic tree clearance. From this time, the stream would have regularly broken its banks in times of flood leading to the deposition of overbank alluvium across the full width of the late glacial depression. From current evidence it is not possible to estimate rates of accumulation or to identify episodes of more rapid accumulation interspersed with periods of stasis (as must have occurred). The stream course is also liable to have periodically altered with changing patterns of waterflow, sediment deposition and erosion leading to successive cycles of channel incision, channel infill and abandonment and channel re-incision. Assessment of the various sources of evidence available from the site indicates that detailed investigation should enable these complex processes to be understood. For example, the molluscan remains from low in the sedimentary sequence of Trench 15 suggested a poorly vegetated, muddy bank side with some sedge on the margins of a poor aquatic habitat. The water was indicated by the preserved molluscs to have been shallow and prone to fluctuations in depth. Meanwhile, the geoarchaeological analysis of the lowest alluvial deposit in Trench 12 (monolith <11>) suggested that the sequence had formed in slow moving deep water. The locations of these samples were not very far removed and the difference in suggested depositional environment highlights the complexity of the system, with changing water levels and almost certainly migrating channels. It is also evident that, by the time the Iron Age structures discussed below were constructed, a period of alluvial accumulation had occurred. Lastly, to the south of the site, alluvial sediments had accumulated in the base of a channel in Trench 121. This alluvium was seen to have a wide, thin spread of animal bone towards its base, resting on top of a layer of rounded pebbles thought to approach the base of the channel. These bones were not as well preserved as those found in association with the trackways, but horse and cow bones were identified from this probably Bronze Age to Iron Age deposit within the channel.

The environmental setting of the Iron Age timber structures

The timber structures were seen to rest on, or be driven into, alluvial clays which reached the extremities of the channel as marked in Figure 3. The worked timbers were seen towards the south-western edge of the channel in close association with a layer of peat, or at least a layer of more humic mud. This signifies a period of reduced water flow, possibly reflected by the monolith <12> from Trench 15 which indicated shallow still waters towards the centre of the channel. The contemporary phasing of these separate observations cannot however be substantiated, and at least two discrete temporal episodes of low water levels were inferred from the geoarchaeological analysis. The plant macrofossil evidence from the peat layer in Trench 13 (1310), <3>, would suggest that the surrounding area was vegetated with alder carr. Alder cones were numerous, as were hazelnuts, but combined with marsh species, and the pollen record found the incidence of trees lower than perhaps expected. The alder carr was perhaps localised, with other sections of the riverbank open and with marshland

vegetation. The pollen analysis also identified grasses and tree species such as oak and lime that are thought to have been growing nearby on drier ground.

Iron Age timber structures

Three trenches revealed the remarkably well-preserved remains of prehistoric wooden structures, thought to show a trackway along the south bank of the stream. An upright timber from structure (2106) was radiocarbon dated to 520 – 380 Cal BC placing it (at least in part) in the Middle Iron Age.

The form of any structure in Trench 13 was uncertain as the scope of the evaluation did not permit excavation here, but it was clear that worked timber survived, including several intentionally placed upright stakes. It was in Trenches 15 and 21 that identifiable structures were revealed. At least two phases of trackway were seen in Trench 15, of differing character. The later section, to the south, has the more tentative interpretation as only a single plank and upright were seen. The stratigraphically earlier section, further north, was of laid brushwood with small cleft and roundwood uprights which if viewed as one structure would suggest a trackway *c*.2m wide and aligned north-west to south-east (although one could suggest two separate elements). Its form cannot be satisfactorily analysed without investigation of a wider area. A wider area was exposed in Trench 21 where more than a 6m length of trackway was exposed. Again, two elements could be discerned, of uncertain stratigraphic relationship, but forming 'arms', each c.0.50m wide. They seemed to follow a construction method whereby horizontal planks were held in place by upright timbers, then covered by brushwood and finally a layer of bark chips that were often wedged vertically in between the other timbers. The bark fragments were from mature trees, with site observation suggesting them to have been oak, perhaps remotely sourced from drier areas before being brought to consolidate the upper reaches of the platforms to form a crudely formed but serviceable upper surface. The majority of the 15 timbers sampled for species identification were alder, followed by hazel; easily sourced from the local alder carr. Ash and oak were also present and may have similarly been brought from trees on the nearby drier ground. It is unconfirmed whether any of the upright timbers had worked tips since all were left *in situ*, but other pieces were definitely worked; the planks quite proficiently so. Wood chips from axe working were recovered from the humic clays that surrounded the structure, showing that woodworking had taken place in the vicinity. This might be the *ad hoc* working of timbers whilst building the structure, for example cutting points onto stakes. Alternatively, it may be that the trackways gave access to an area of alder carr, possibly with coppiced hazels, and that these chips are remnant from the general utilisation of this resource. It would be extremely valuable to ascertain whether woodland was being managed in this Iron Age environment, and assessment indicates that there is a high potential for this to be determined through further investigation and analysis.

Alternative interpretations for these structures may also be presented, such as that the planks seen towards the north of (2106) originally stood on their sides (supported by the uprights from which they are now slightly disassociated) and formed a low revetment; perhaps for a causeway. Similarly, one cannot presume that the structural members seen in Trench 13 are from a trackway. It is not beyond the bounds of possibility that these are remnant from river-side settlement, indeed any of the recorded structures could show platforms or walkways that are part of a more complicated settled landscape rather than a single or multi phase trackway along the riverside.

Cultural evidence

The majority of the cultural evidence found in association with the Middle Iron Age timber structures was found in Trench 13, in the peat layer (1310). A fairly large quantity of burnt stone was recovered here, quite probably originating from the 'burnt mound' in Trench 14. A high incidence of fire cracked stone was also seen in the peat layer of Trench 9, perhaps indicating the presence of further structural remains or a burnt mound in the direct vicinity.

Animal bone was found in association with all of the structural timber-work, and in the peat of Trench 9. The analysis found most of the animal bone assemblage to be in poor condition, but all of the identifiable pieces were recovered from these prehistoric waterlogged contexts. Cow and horse teeth and metapodials were preserved, but not of a frequency to enable further

significant analysis. As a result it is unclear whether these represent food waste or waste products from other activities such as processing of hides or bone working.

No pottery was recovered from the contexts surrounding the prehistoric trackways despite the local pottery from this period being fairly ubiquitous in a domestic setting and well fired (so likely to be well preserved). This dearth of pottery (and also of daub fragments) suggests that settlement was some way removed from the activity seen in this area. Only a single piece of Iron Age pottery was found on the site, unfortunately residual in the topsoil of Trench 36. Numerous hazelnuts were found in the contexts surrounding the trackways, particularly in the woody peat of Trench 13. The hazelnuts, naturally present from the hazel trees that evidently grew here, cannot be taken as a cultural indicator in themselves, but given their clear association with Iron Age activity, their harvest must surely be expected.

Disuse of the trackways

The northern trackway in Trench 15 was sealed by a localised lens of humic mud (1507). The structure probably stood as an island within surrounding wetlands, slowing the water flow of later inundations in this specific location, causing the deposition of fine grained materials, and creating more favourable conditions for further vegetation growth. This would naturally exaggerate the island effect and leave the deposits here with a higher organic component. The trackway in Trench 21 is also thought to have been subject to such a process; it was noted on machining that alluvium with a high organic content often reflected the outline of the structures immediately below.

More widely the evidence from Palaeochannel 2 indicated a period of flooding and resultant alluvial deposition in the period following use of the trackways. The plant macrofossil and pollen analysis show that the landscape was replaced by a more open marsh environment, with rushes, sedges, water mint and iris amongst the indicative species.

5.4 Romano-British

Three ditch sections, in Trenches 98, 99 and 100 were seen to align and to contain a small assemblage of Severn Valley ware Roman pottery. The line of the ditch has been respected up to the present day, as shown in Figure 1 where a modern path crosses Field 9 on this alignment. This extends west towards the ring road roundabout. Extrapolating this line further, it connects the straight sections of Tolladine Road, which according to Hooke (1990) marks the Saxon named Port Street running to the centre of Worcester. This name indicates a Roman road for which no archaeological evidence has yet been found. South of the aforementioned roundabout, in the field labelled 'Trotshill', an evaluation (HEAS 2006) uncovered Roman features in the northern part of the site. This supports the suggestion that a Roman road once ran through here, and it is thought that the ditches [9804], [9909], and [10004] may be a road-side ditch, with any metalled surface having been ploughed away (at least in the observed locations). Two postholes in Field 7 were dated as Roman; in Trenches 85 and 87. Roman pottery was recovered from one [8704], while the other was dated by association. No structural inference could be made, but it is noticeable that they roughly align with the predicted course of the Roman road.

The eastern boundary of the site, Pershore Lane, was once known as Salt Street; providing a link to the salt works of Droitwich. This routeway is thought to be of at least Roman date in origin, but may even have served the known Iron Age salt works at Droitwich. If these two roads prove to be more than speculation, one would presume them to connect, and to require a river-crossing. What evidence may remain is unknown, but a ditch and a posthole in Trench 82 (Field 6), thought to be Romano-British on the basis of stratigraphy alone, may bear some association.

Further Roman material was found in alluvial and colluvial layers. Fragments from two Severn Valley ware vessels dated from the 2nd to 3rd centuries, with a piece of Malvernian ware dating from the 3rd to 4th centuries (residual within medieval colluvium (1602)). The majority of residual Roman material was recovered from Field 12, close to the suggested road, and implying a greater concentration of Roman activity someway upstream to the west.

Lastly, some of the poorly dated ditches discussed previously (Section 5.3.1) may be of Roman date or have continued in use into the Roman period, whilst elements of later ditches could similarly be considered to have had potential Roman origins.

5.5 Medieval

The northern bank of Palaeochannel 2 in particular saw the deposition of colluvium during or after the medieval period, evidenced by the medieval pottery fragments found in layer (1602). This redeposited material, mixed with Roman pottery, presumably washed from the higher slopes to the north.

The aforementioned evaluation at Trotshill revealed clear medieval ridge and furrow. It is perhaps surprising that similar evidence was only seen in one trench here, in Field 6, despite the low lying and wet ground not being well suited to arable cultivation. It is, noted that more recent ploughing may have removed such evidence from elsewhere.

5.6 Post-medieval

The remains of Pershore Road, prior to its recent redirection, were seen crossing Field 1. Thick with clinker and broken ceramic building material, the road build up looked to be of 19th or 20th century in date, but it is possible that earlier phases of this road survived beneath. A cobbled surface in Trench 52 (Field 4) was also revealed, but it was not seen in surrounding trenches so was thought to be an isolated area of hard-standing mixed with post-medieval roof tile and pottery. The largest post-medieval finds assemblage originated from ditch [12506], with a large quantity of building and domestic waste, and a large sandstone block thought to have served as a postpad.

The relict ground surface from before the motorway's construction was preserved beneath modern deposits in Field 1. In Trench 9, deep furrows (recognisably not related to ridge and furrow systems) with post medieval pottery were clearly defined, suggesting that the form of cultivation for which they were intended was still in use into the twentieth century. Further south, the site was covered by the remnants of the more intricate field system, with field boundary ditches crossing the site.

The course of the stream was diverted into field boundary ditches between 1843 and 1885; when two separate tithe maps attest to its position. It would seem likely that the stream started to dry up with the construction of the Birmingham and Worcester canal at the turn of the nineteenth century.

5.7 Modern

It is evident that the north western part of Field 1 was sealed directly with dumped material from the construction of the motorway, while to the north east, a dumped layer of mixed redeposited natural and Type 1 roadstone was seen. Further north the natural soil sequence had been truncated and the topsoil rested directly on top of the natural.

6. Research frameworks

Prehistoric environment and landscape change

In defining priorities for research of the prehistoric environmental archaeology of the West Midlands, Grieg (2007) highlights a lack of complete sequences from which to inform our understanding of the environmental conditions and change during this period. The palaeochannel sequences on this site and the associated palaeoenvironmental and geoarchaeological record have a very high potential to undertake research on a detailed and closely dated sequence spanning much of this period and including potentially early Holocene material.

Later Prehistory

The highest research potential for the site lies in the well-preserved waterlogged structural remains that were found running along the margin of a palaeochannel crossing the area. Of probable Middle Iron Age date (520 – 380 Cal BC), current interpretation suggests that these

reflect the presence of one or more trackways extending at least 150m in length. From the limited areas investigated, this comprised upright posts with associated brushwood surfaces and possibly planked sections. It seems to have been of somewhat crude construction perhaps reflecting a utilitarian purpose rather than a 'ritual' function. Given the extent of the waterlogged area within which these were identified and the limited areas of investigation undertaken, there is a strong possibility that further structures may be present, while the recorded sections are by no means entirely representative and well constructed sections may exist.

Parallels are hard to find and certainly across much of the West Midlands wetland habitats where such remains might potentially survive, are rarely present and no comparable structures are known. Further afield, surviving trackways are relatively rare, with Iron Age examples being considerably less commonly identified than the well known Neolithic and Bronze Age examples such as the so called 'Sweet Tracks' of Somerset (Coles and Coles 1986). However, possible parallels exist, as at Beccles in Suffolk where an 800m length, Iron Age brushwood trackway has been recorded (Birmingham Archaeo-Environmental, no date)

Research frameworks have been developed for the later prehistoric period in the area (Grieg 2007; Hancocks 2007; Moore 2006; Hurst 2010), largely focusing on the wide landscapes that are represented by the archaeology as seen on the dry, higher areas of this site. The almost unprecedented range and quality of the environmental deposits and the nature of the Iron Age structural woodwork encountered on this site within Palaeochannel 2, however, go beyond the consideration of such documents. Preserved woodwork allows the research of past climates and woodland management, and of the development of construction, tool making and technology. Preserved woodwork is rare in archaeological contexts, and this Middle Iron Age date shows particularly few examples.

Of concern in Hurst's (2010) research frameworks for later prehistory in the West Midlands, is a lack of tight dating. This site may provide a rare opportunity for dendrochonological dating to enhance the dating of the associated environmental and artefactual sequences which for this period are supported by a shallow section of the carbon-dating calibration curve which does not allow very accurate dating.

Beyond the waterlogged remains, the deposits and activities identified across drier areas of the site do not appear to relate to areas of occupation or extensive and intense activities, however, a wide range of localised activities are represented. These include division and maintenance of the landscape (boundary and drainage ditches) and apparently short lived and intermittent periods of occupation and subsistence and craft activities undertaken by small numbers of people; including use of burnt stone technology and construction of burnt mounds, pit digging, construction and use of small posthole structures, and material deposition in tree-throws. None of these are associated with substantial artefactual or ecofactual assemblages, and none present anything more than a limited research value in their own right; however, taken overall the site provides a very rare opportunity for research into the use and exploitation of a particularly large tract of landscape during the prehistoric period. Further, this potential is greatly increased because the site offers an opportunity to examine the articulation and relationship of these 'dry land' activities with those undertaken in the wetland areas of the site. Further the latter areas of the site also contain well preserved palaeoenvironmental remains thus presenting an opportunity to undertake research into the impact these activities had on the local environment.

Lastly, this site also provides an opportunity to redress an imbalance seen in the archaeological record, where most prehistoric sites are found on aggregate producing areas (HEAS 2007). This bias is in part due to the higher level of intervention in these areas for aggregate extraction and low-land development, but the archaeology itself tends to be situated on these lower-lying well-drained sand and gravel sites. Hancocks (2007), in her assessment of the later prehistory of Worcestershire, observes that this bias may also be due to alluvium sealing Iron Age archaeology which is masked from crop marks, plough scatters and other means of remote identification. This is certainly the case for the Iron Age archaeology at Project Stirling, which has lain undamaged and unidentified since its formation.

7. Significance

7.1 Significance of a heritage asset with archaeological interest

The aim of an archaeological evaluation is to provide the client and the planning authority (and its advisors) with sufficient information to assess the significance of a heritage asset with archaeological interest, in line with *Planning Policy Statement 5: Planning for the Historic Environment* (DCLG 2010: Policy HE6). More detailed guidance on assessing the significance of site with archaeological interest is set out in the associated *Historic Environment Planning Practice Guide,* which advises that an on-site evaluation should establish the nature, importance and extent of the archaeological interest in order to provide sufficient evidence for confident prediction of the impact of the proposal (DCLG/DCMS/EH 2010: Section 5, Development Management).

7.2 Assessment of significance

The evaluation has provided new evidence on a site with substantial archaeological interest. As a result, an assessment of the significance of this site can be made in terms of the nature, importance and extent of the archaeological interest.

7.2.1 Nature of the archaeological interest in the site

From the information available in the Historic Environment Record, the desk-based assessment for this site (Halcrow 2008) identified the possibility of prehistoric archaeology in association with the palaeochannel and nearby defensive locations such as Coneybury Hill. Despite these observations, the potential for finding such archaeology was suggested to be low, perhaps due to their infrequency rather than the suitability of the site. The archaeological evaluation has shown this not to be the case with significant prehistoric deposits having a high research potential being identified.

The archaeology identified is heavily biased towards the prehistoric period. Within this phase, two distinct zones are present across which the nature of the archaeological evidence contrasts markedly.

Most significant are waterlogged, organic, structural remains found along the margins of a former channel (palaeochannel) crossing the site. Found to be of probable Middle Iron Age (520 – 380 Cal BC) construction by radiocarbon dating, the well-preserved structural woodwork encountered can be interpreted as the remains of one or more timber trackways present across at least a 150m stretch of the former channel. Organic remains from within the palaeochannel are exceedingly well-preserved and of particular note is the wide range of sources of evidence which survive at the site, including pollen, plant macrofossils, insects and molluscs. These provide a rare and important opportunity to undertake detailed analysis into the changing nature of the prehistoric environment in this area

Away from the palaeochannel, but to its margins at least one burnt mound was also discovered along with evidence indicative of at least two further examples in the area. On the adjacent higher ground, postholes, pits, ditches and tree throws presented a relatively 'standard' prehistoric landscape, lacking a significant finds assemblage, but providing evidence for landuse and activities undertaken surrounding the waterlogged areas and which the trackway/s potentially provide access to and links between.

Lastly, the first firm archaeological evidence was found for a putative Roman road, Port Street, running west to central Worcester. A single furrow and field boundary ditches from the medieval and post-medieval periods demonstrated the site's more recent agricultural use.

Further identification and investigation of these archaeological remains holds extremely high potential for gaining from research of these, and the interrelationships between them and the associated palaeoenvironmental evidence.

7.2.2 Relative importance of the archaeological interest in the site

As previously highlighted, the Iron Age waterlogged structures are not only extremely rare at a regional and national level, but they are also well-preserved. They have a high potential to

be linked to wide ranging evidence for activities undertaken across an extensive surrounding area of higher and drier ground.

The presence of an Iron Age trackway and the well preserved biological remains makes this a very significant site; no comparable material has been produced from elsewhere in the county and examples are rare at both a regional and national scale. Trackways are usually associated with larger expanses of wetland deposits such as those found in areas such as the Fens and the Somerset Levels (Coles and Lawson, 1987). Wetland sites provide a rare opportunity to explore how these areas were exploited in the past and the opportunity to study this site should not be missed.

Preservation of plant material (seeds, wood and pollen) on this site is excellent and should allow a complete reconstruction of past landscape exploitation over a long period of time. The wood from the trackway has well preserved tool marks that will permit the reconstruction of how the trackway was made. It may even be possible to determine if there were any repairs and how long the trackway was in use. Changes in technology in building and repairing the trackway through time should also be detectable.

7.2.3 Physical extent of the archaeological interest in the site

Figure 16 demonstrates the density of features thought to date from the prehistoric or Romano-British periods across the site. A concentration of cut features was recorded in Field 2, and it is thought likely that this may also be the case into Field 1. This area lies beneath proposed areas of car parking and expansion zones in the development. The Iron Age timber structures identified in Field 1 also lie beneath designated car parking.

Currently at the Outline Planning stage, details of the ground works associated with the proposed development are not yet available. Preliminary discussions, however, imply that the nature of the works would be to remove much, if not all, of the soft waterlogged material seen particularly in Field 1. It is important to consider that the full alluvial sequence is of relevance for environmental and geoarchaeological analysis; far more than just a protective layer over the more tangible archaeological features and structures beneath. Clearly these layers would not survive this scheme, and depending on the depth of the intrusive works, it would also have a severe impact upon the archaeological features in this location. Furthermore, it would most likely lead to desiccation of the waterlogged deposits further upstream. It is also proposed that the stream be redirected away from its current course, which is almost certain to interfere with the current water table and the preservation of vulnerable waterlogged archaeological deposits.

Across the higher ground of Fields 4, 7 and 9, the density of features was low. In several instances, no subsoil was observed and it is thought that features may have been horizontally truncated in some isolated locations. Generally the topsoil and subsoil across these fields were shown to be quite thin, often around 0.40m. With archaeology occasionally preserved, as in Trench 99 as the possible evidence for a Roman road-side ditch, this shallow archaeology would be vulnerable to any intrusive groundworks. This is especially true if ground levelling is to be conducted. It is important not to dismiss the areas of less dense archaeology. Moore (2006), for example was able to propose a clear division between lowland exploitation and upland use in the later Iron Age at Bredon, and these distinctions cannot be truly assessed without full consideration of the wider area.

The current course of the stream channel through the southern half of the site was ecologically sensitive so was not subject to the same level of archaeological investigation as the rest of the site. Given that the most significant archaeological remains were found within the section of the palaeochannel that was available for investigation, it is more than likely that significant archaeology remains unidentified along this stretch.

7.3 Assessment of the impact of the proposal

The on-site evaluation, and the information provided by the Client, allows an assessment to be made of the potential impact of Phase 1 of the proposed development on the archaeological interest in the site. It is evident that the wide-scale building and landscaping associated with the development of the new Worcester Bosch facility would have a major

impact on archaeological deposits that are currently preserved on site. The more straightforward construction of foundations for the factory and of car parking are likely to truncate or heavily disturb the existing archaeological asset, but the redirection of the watercourse, and any intrusive works into the waterlogged clays lead a very high risk of affecting the local water regime and leaving currently stable waterlogged deposits in danger of desiccation.

Working from the Illustrative Master Plan, Revision V by Barton Willmore, the southern part of Field 9 and the whole of Field 12 are currently designated as public open space (Figure 23). If this does not involve any landscaping, the archaeology in these areas would not be directly affected by the scheme. Nevertheless, waterlogged archaeology was encountered in this area, and it cannot be guaranteed that the redirection of the stream will not result in the desiccation of these deposits, and an indirect negative impact on the preserved archaeology.

The only area perhaps safe in terms of impact is to the very north of Field 1, in Trenches 1- 4, where the ground was horizontally truncated at the time of the motorway's construction.

8. Publication summary

The Service has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, the Service 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 evaluation was undertaken on behalf of Advantage West Midland on land between the M5 and Pershore Lane, Tibberton, Worcestershire (NGR SO 893562).

An historic watercourse was found to have once flowed across site. A small stream remains, diverted into a field boundary ditch, but the original channel depression it occupied was incongruously broad and probably formed during the late glacial or early Holocene. This hollow had infilled over time with a complex sequence of organic and alluvial deposits within which a wide range of palaeoenvironmental material was well preserved.

Tree throws across the site attest to woodland clearances known from the Neolithic and Bronze Age, with the only prehistoric pottery and worked flint from the site found within one such feature. The broad late glacial/early Holocene depression was already filling with a succession of peat-rich and alluvial deposits depending on the water regime and on the differing course of the braided stream channels within the depression. The surrounding fields saw limited prehistoric activity, with occasional pits and postholes identified but no evidence of a domestic focus. Several ditches indicate an agricultural, probably pastoral, landscape. The bank of the stream formed the focus of activity. Here, at least one burnt mound was discovered to the south of site, with two further areas of fire cracked stone seeming to form more of a metalled pathway. These remain undated but are thought to date from the Late Bronze Age to Early Iron Age. At the beginning of the Middle Iron Age (radiocarbon dated to 520 – 380 Cal BC), timber structures were built along the west bank of the stream, preserved since by waterlogged deposits. Three evaluation trenches exposed what is thought to be the remains of one or more timber trackways, at least 150m long, through what would have been rough marsh and alder carr (reconstructed from the environmental samples). The full extent and form of this structure(/s) is however unknown and other interpretations are possible from the limited evidence currently available. A ditch ran north – south along the eastern side of the channel respecting the line of Pershore Road, known to be an ancient routeway. Of later date, three ditch sections further south contained Roman pottery and were seen to respect the east-west line of Port Street; as yet only hypothesised as a Roman road. Evidence of medieval and post-medieval agriculture was found, as were the remains of the Pershore Road, crossing the northern part of the site.

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10. Personnel

The fieldwork and report preparation was led by Fiona Keith-Lucas. The project managers responsible for the quality of the project were Robin Jackson and Tom Rogers. Fieldwork was undertaken by Adam Lee, Tegan Cole and Tim Cornah with Emily Beales and Richard Axe conducting environmental sampling. Simon Sworn supervised the site to cover an unfortunately timed holiday, with thanks also to Pete and Dave for their steady and reliable machining. The finds analysis was undertaken by Dennis Williams, with environmental analysis by Nick Daffern, Alan Clapham, Keith Wilkinson, Andrew Mann and Emily Beales. Illustrations were by Carolyn Hunt.

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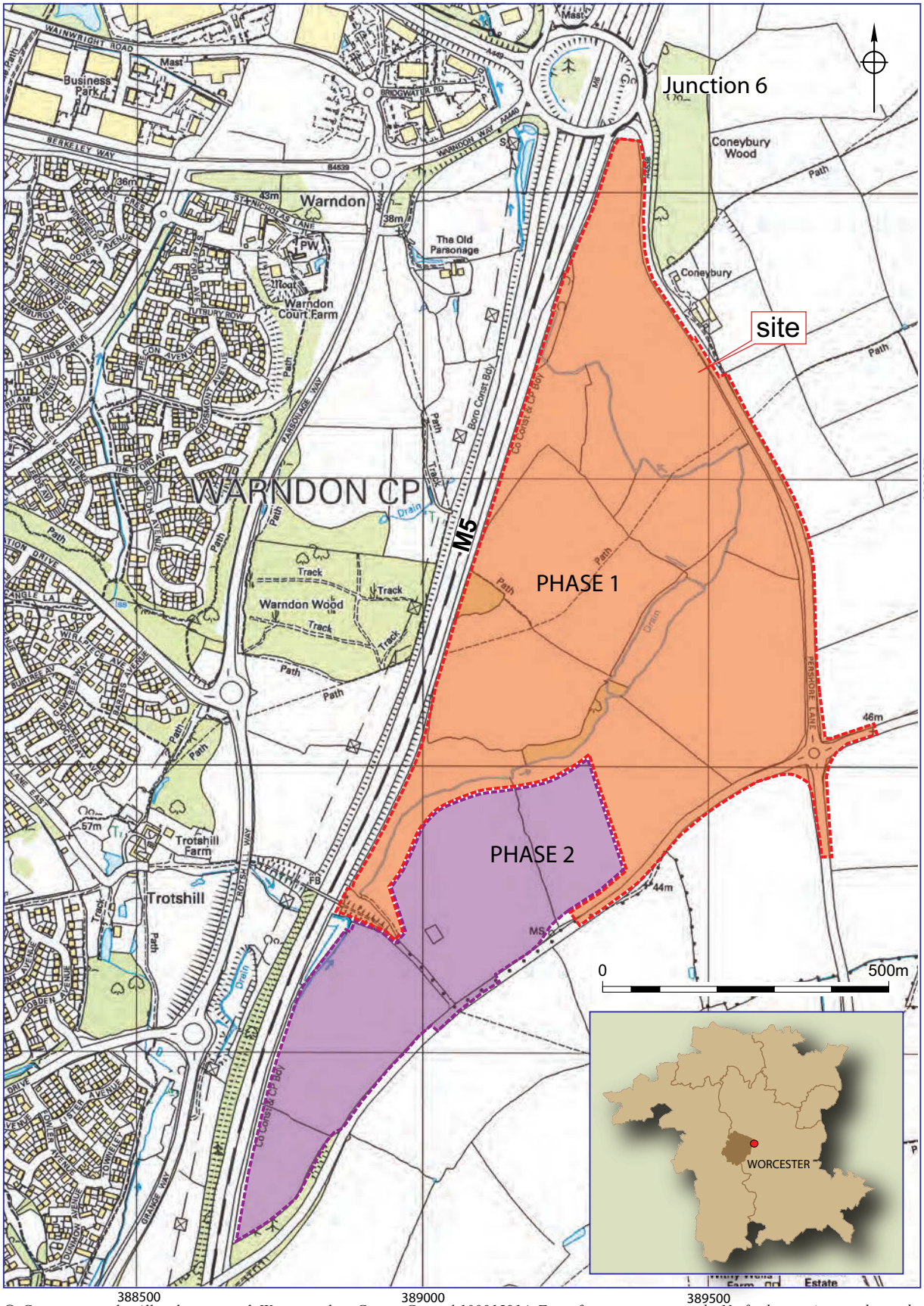
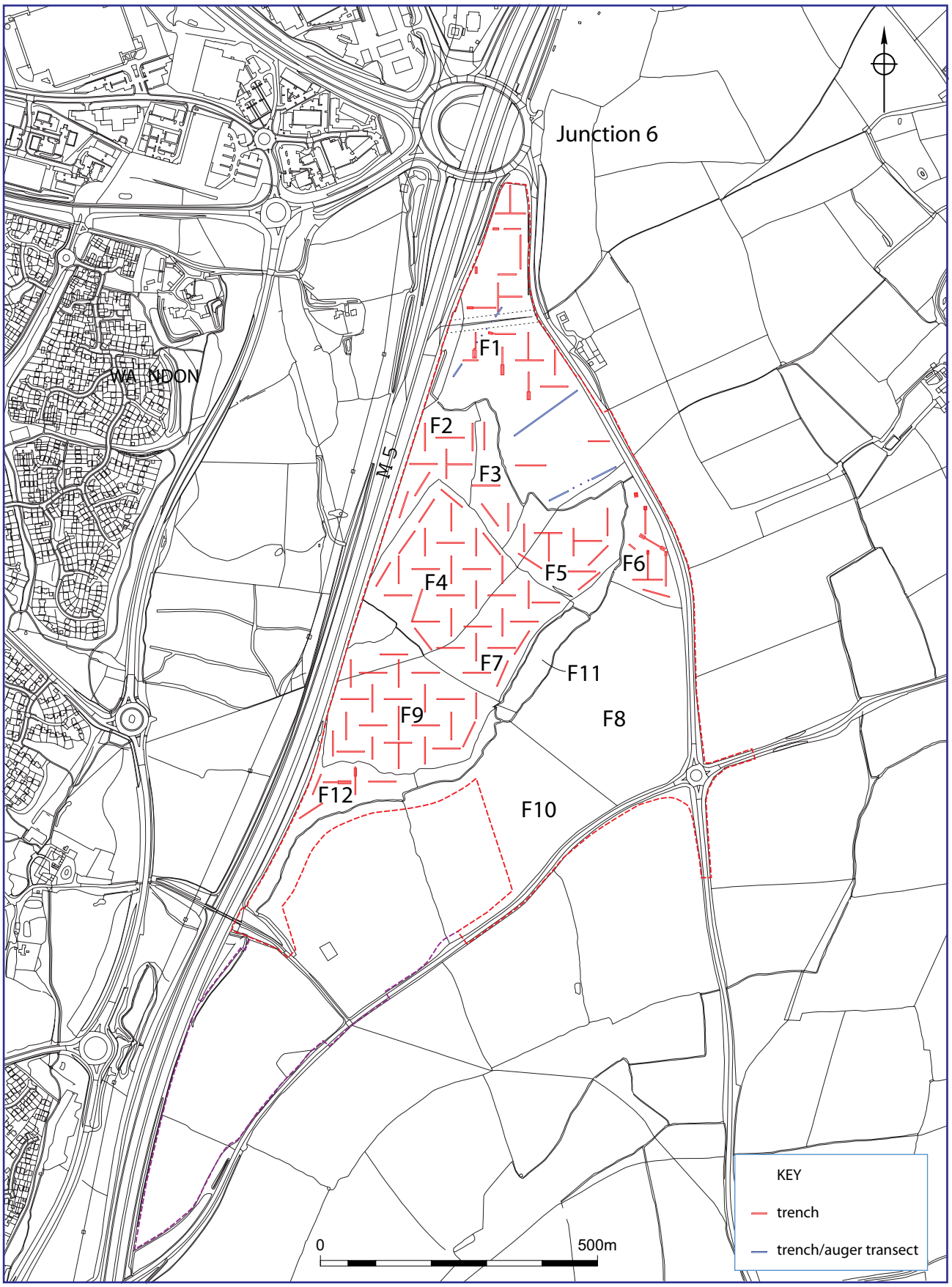


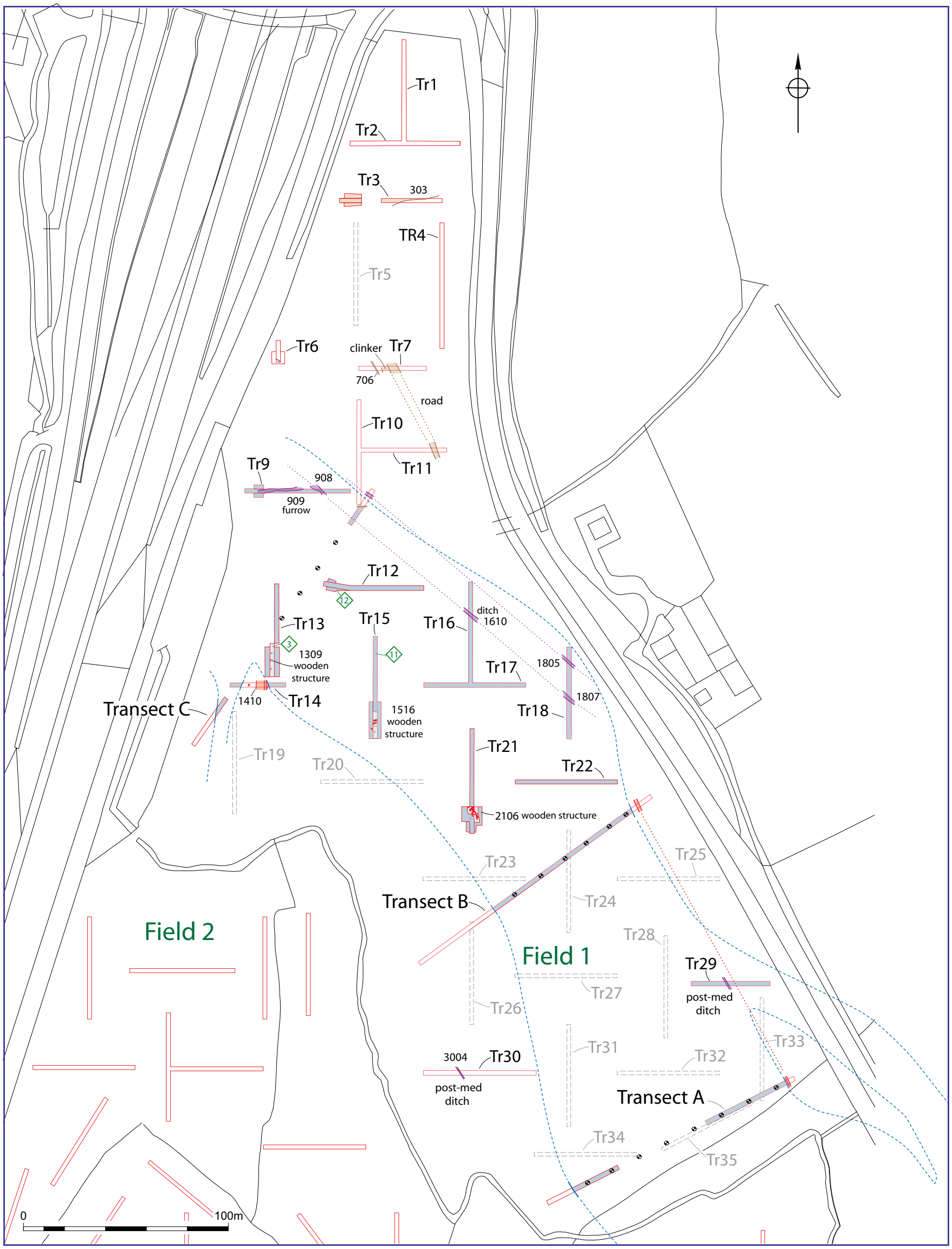
Location of the site

Figure 1



Trench layout

Figuer 2

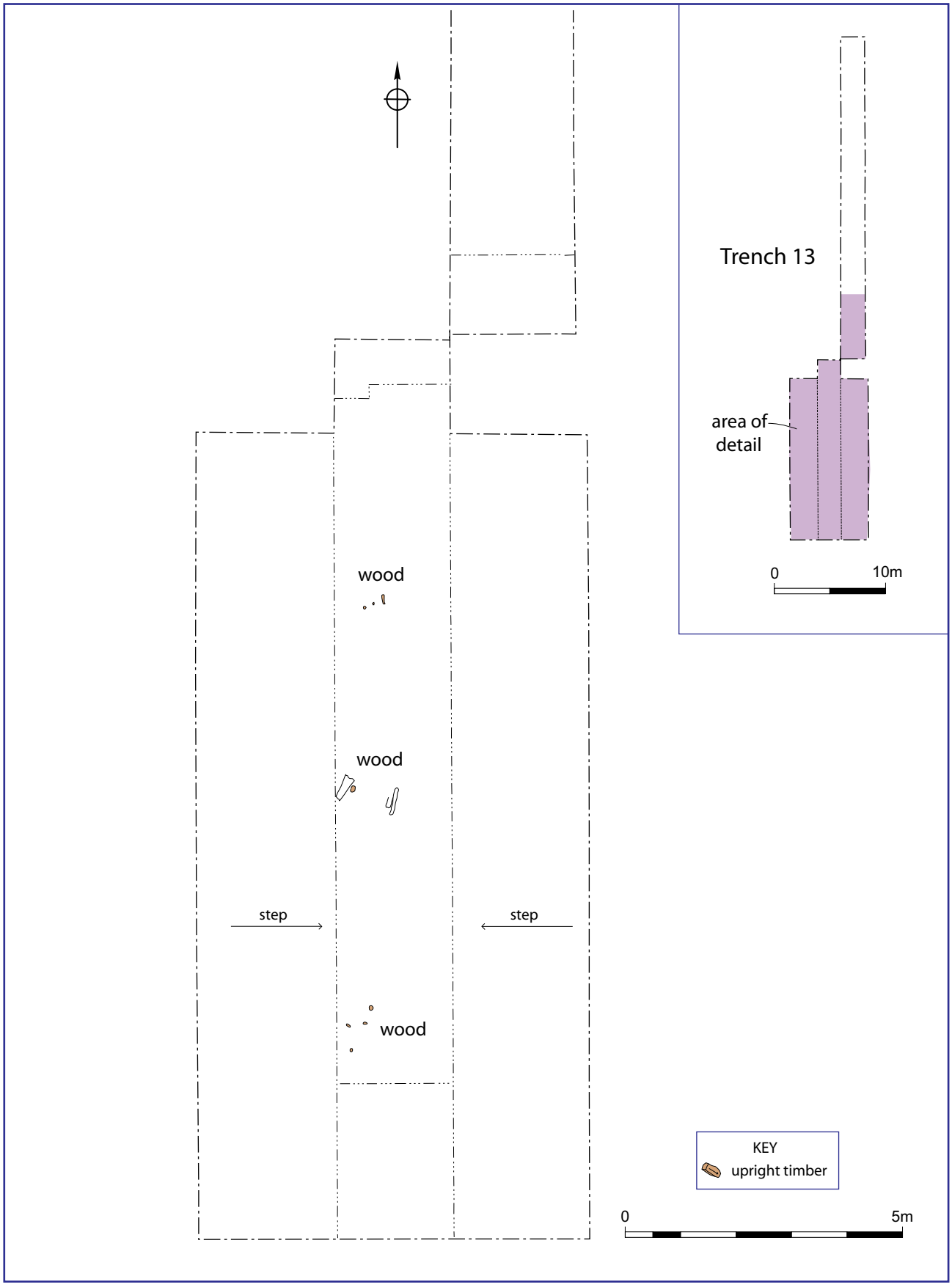


KEY

palaeochannel	suggested limits of palaeochannel deposits
prehistoric	trench excavated
post-medieval	proposed trench (not excavated)
modern	auger hole
	monolith sample

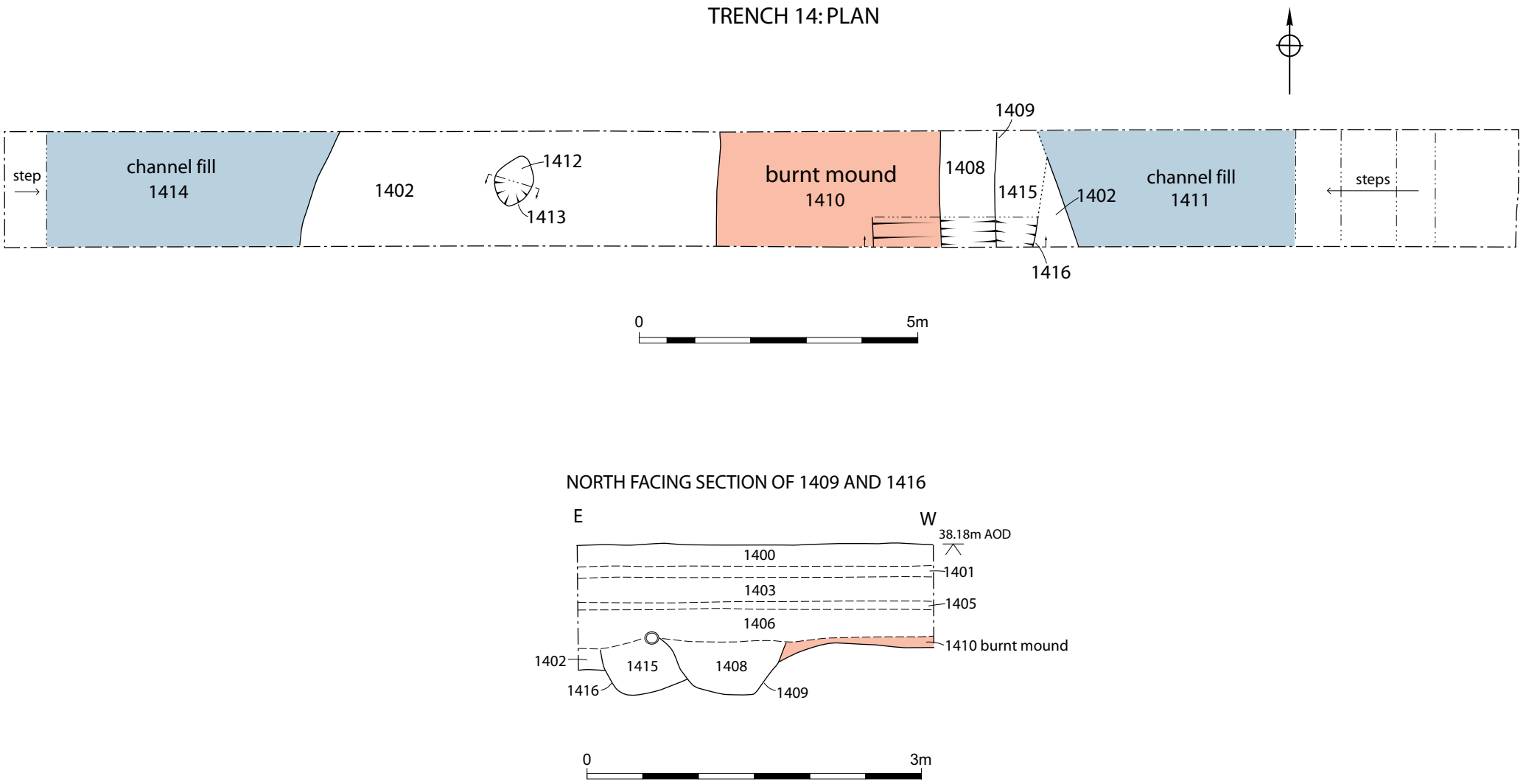
Field 1: Mitigation strategy reassessed; Evaluation trenches in this area superced by Transects and auger samples.

Figure 3



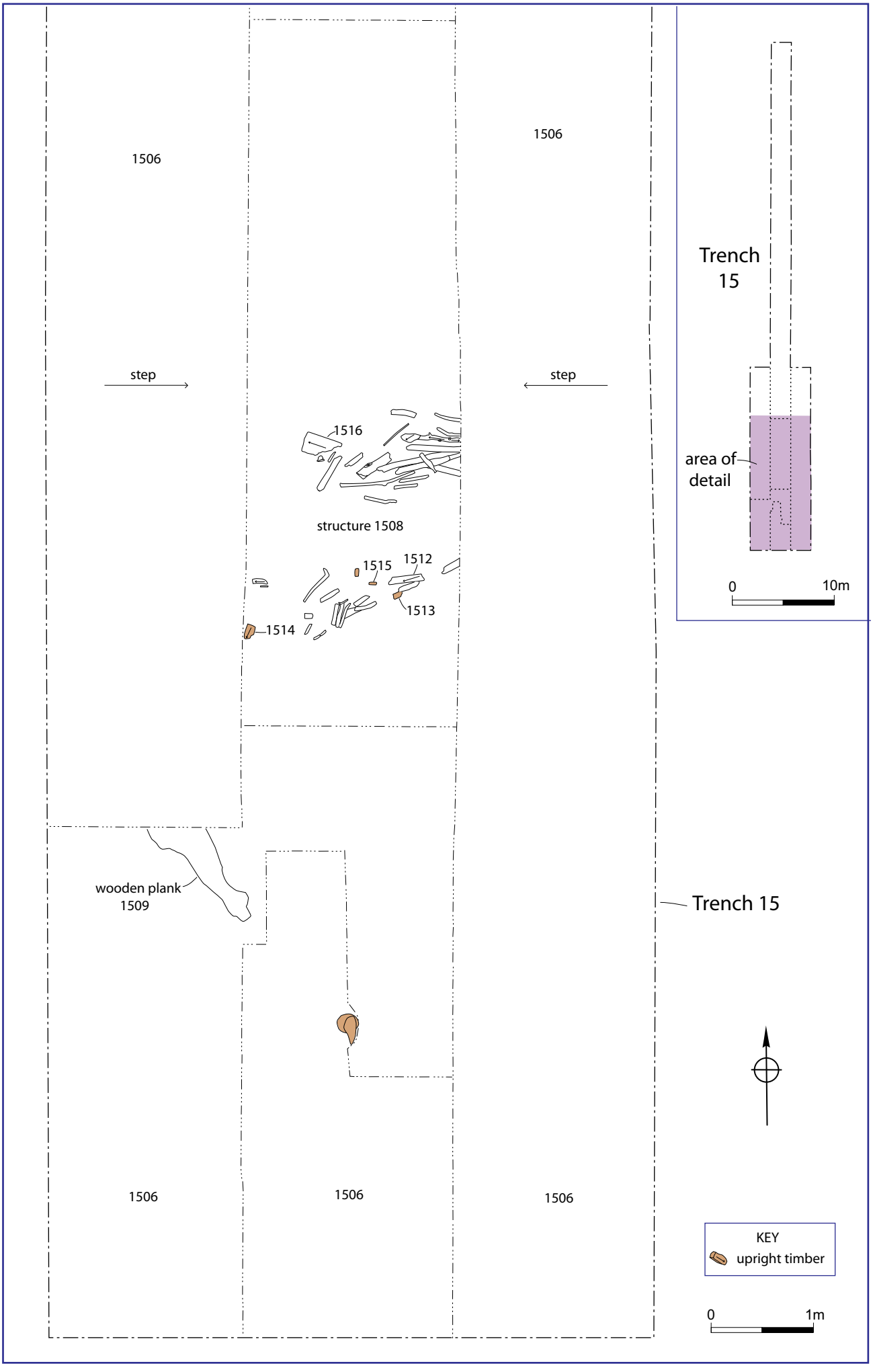
Plan of Trench 13

Figure 4



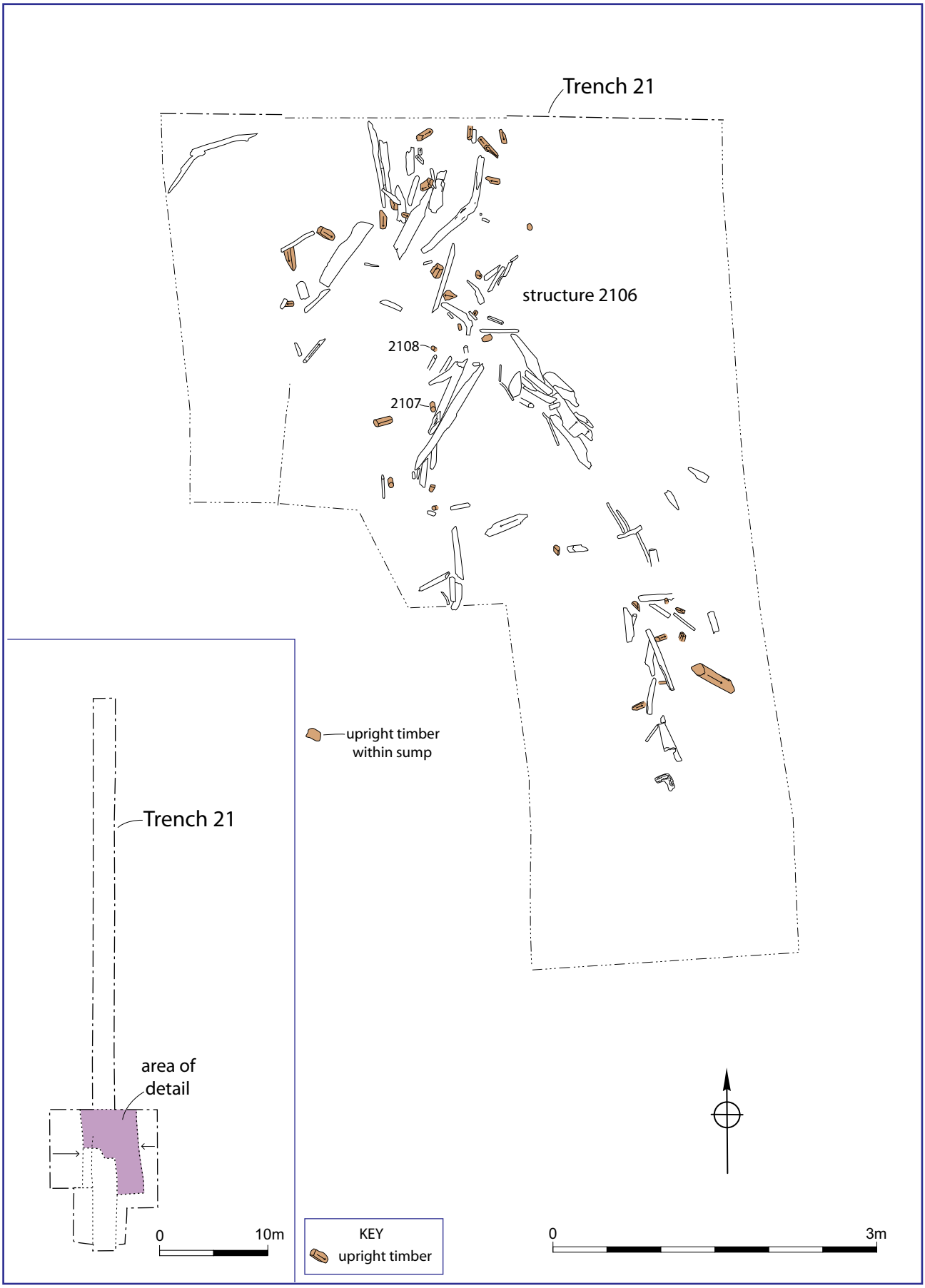
Trench 14 plan and section

Figure 5



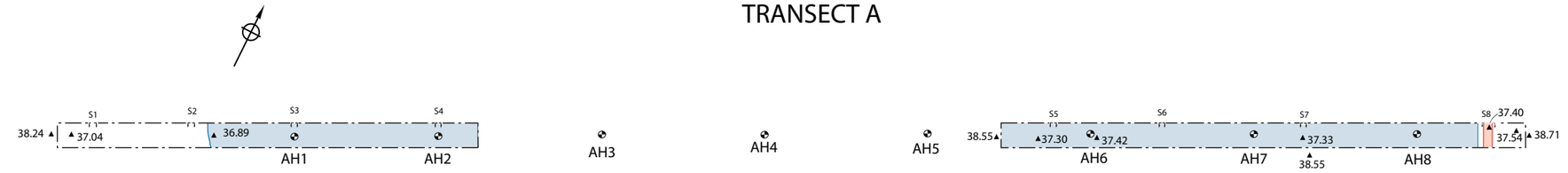
Plan of Trench 15

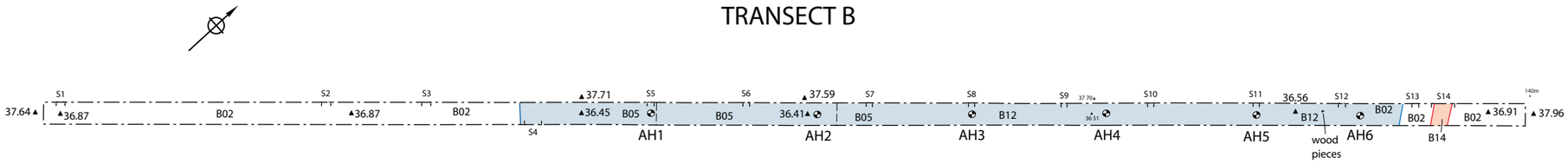
Figure 6

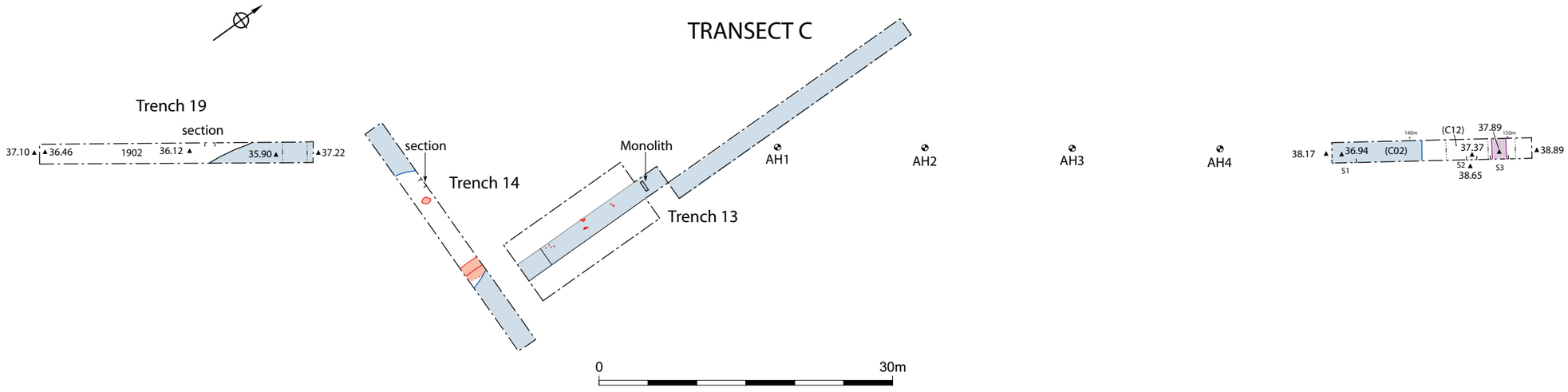


Trench 21: plan of timber structure 2106

Figure 7

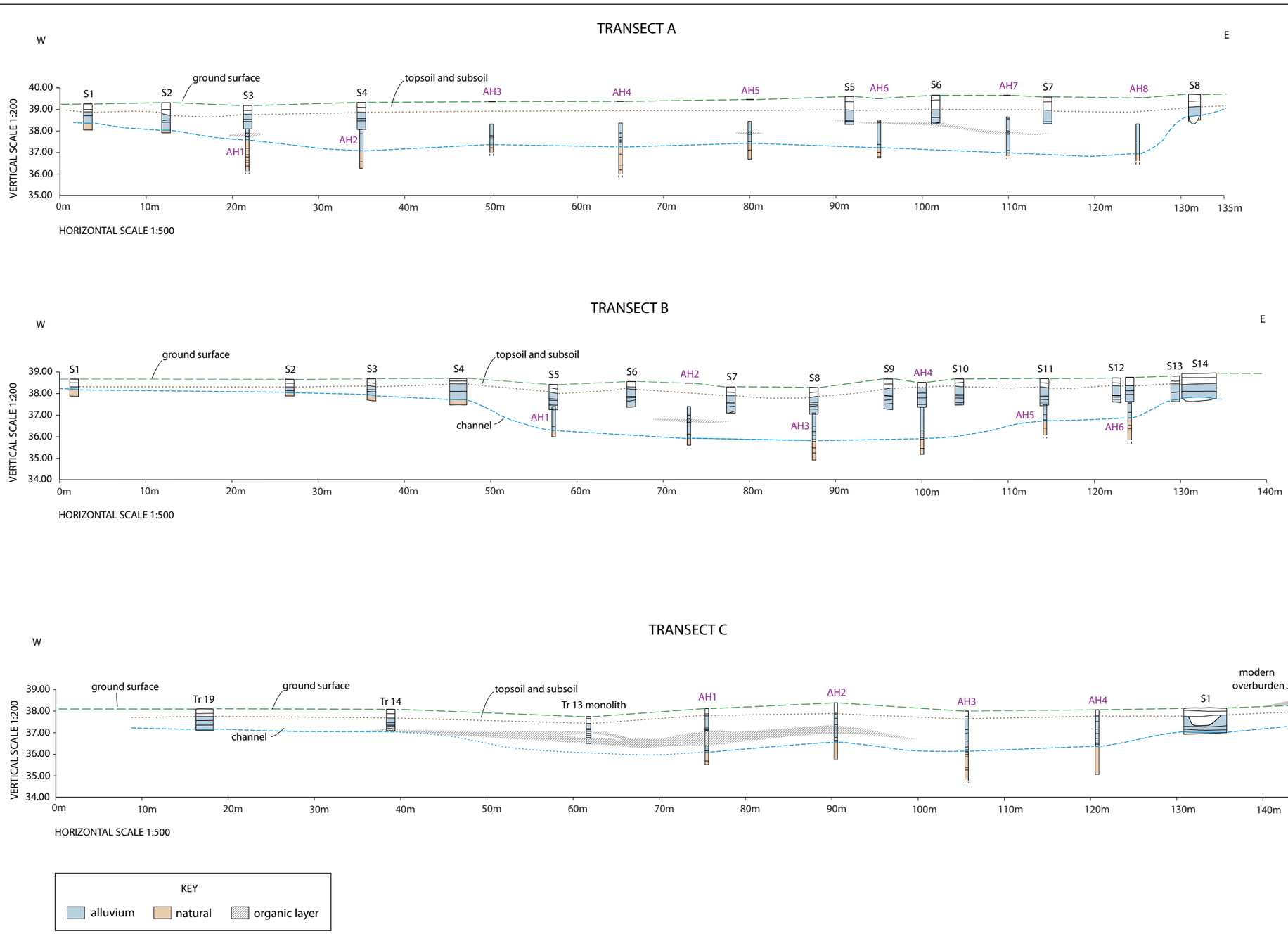






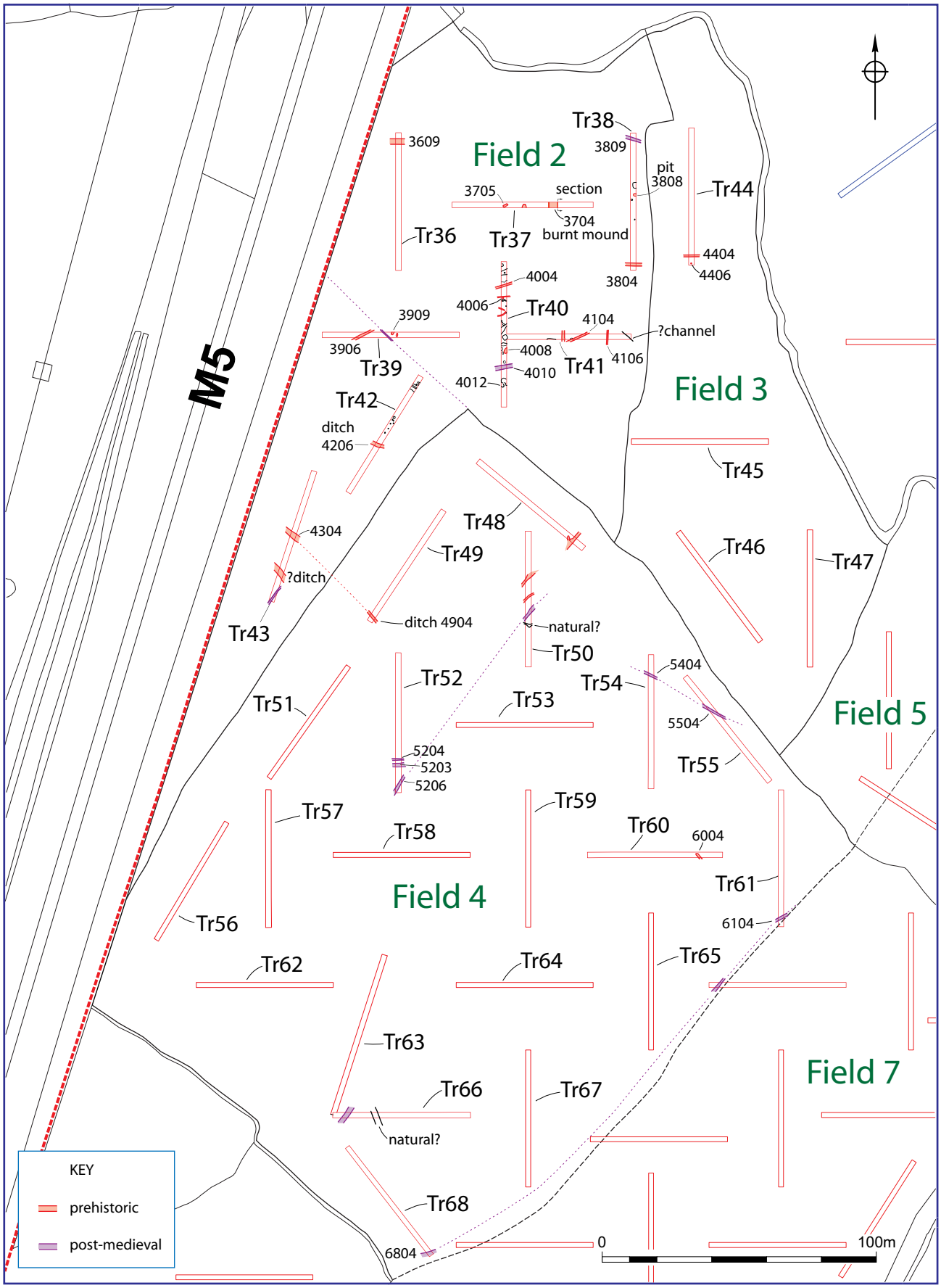
Transects and auger samples

Figure 8



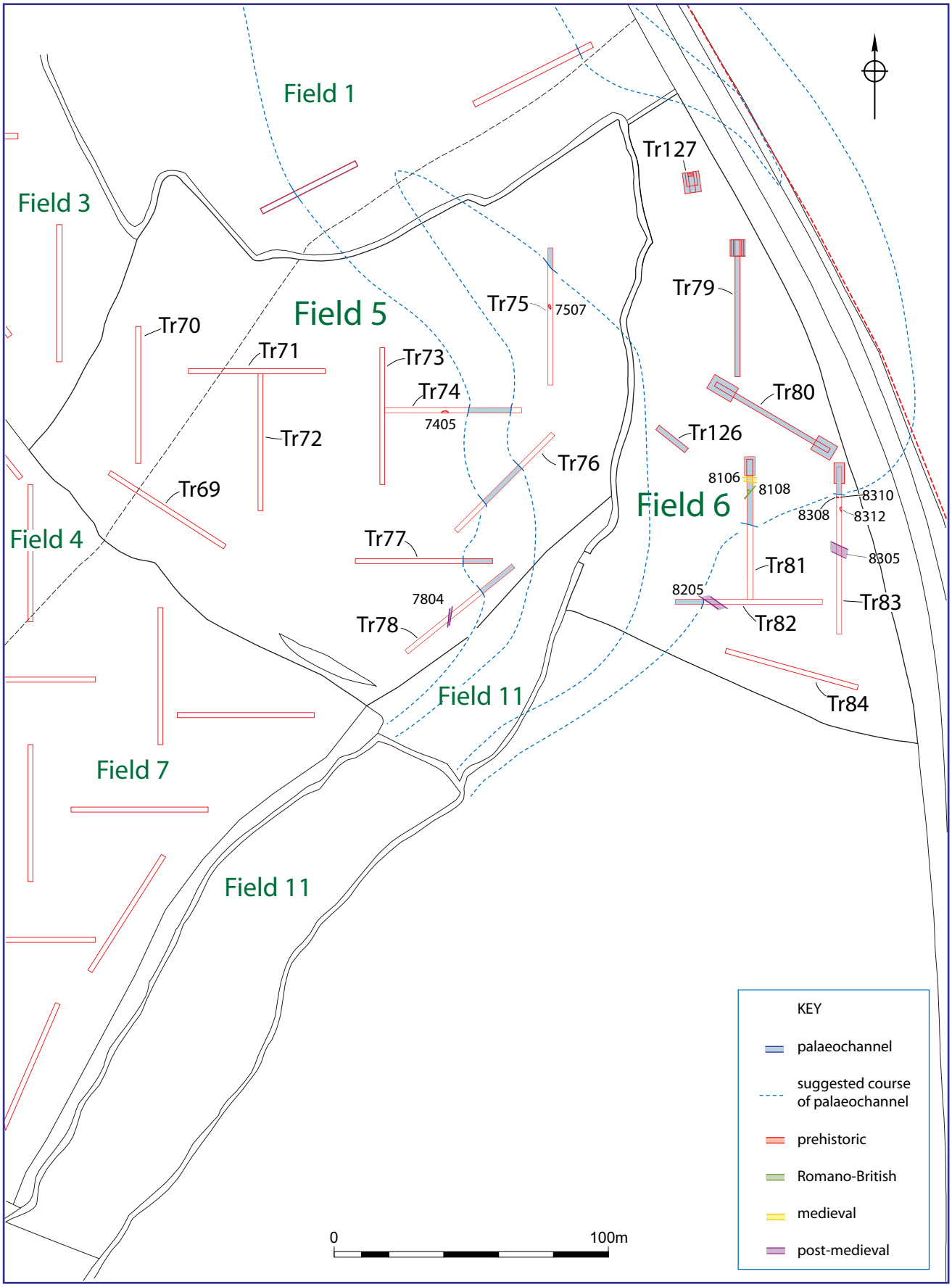
Transects A, B and C: profiles

Figure 9



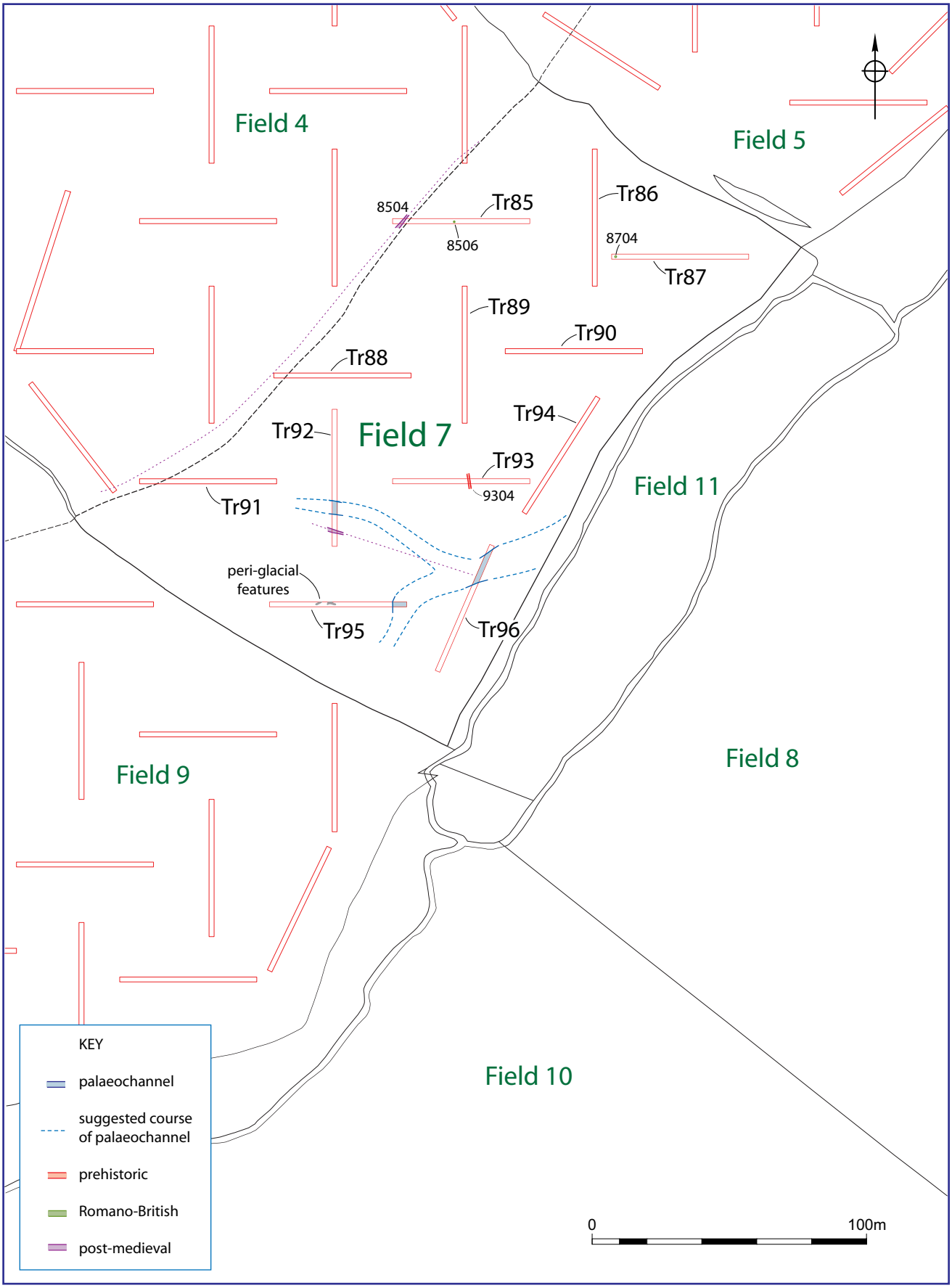
Fields 2, 3 and 4

Figure 10

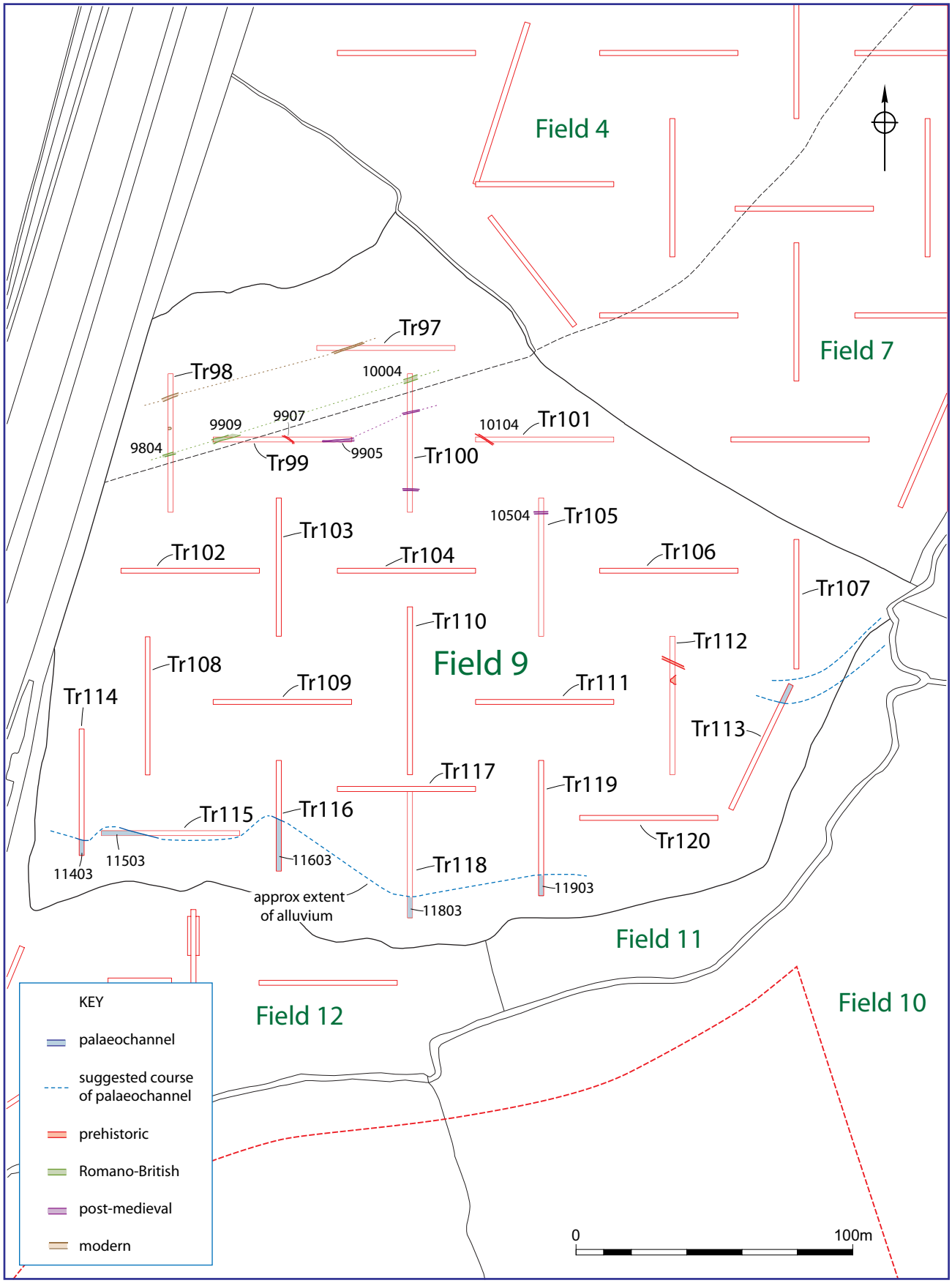


Fields 5 and 6

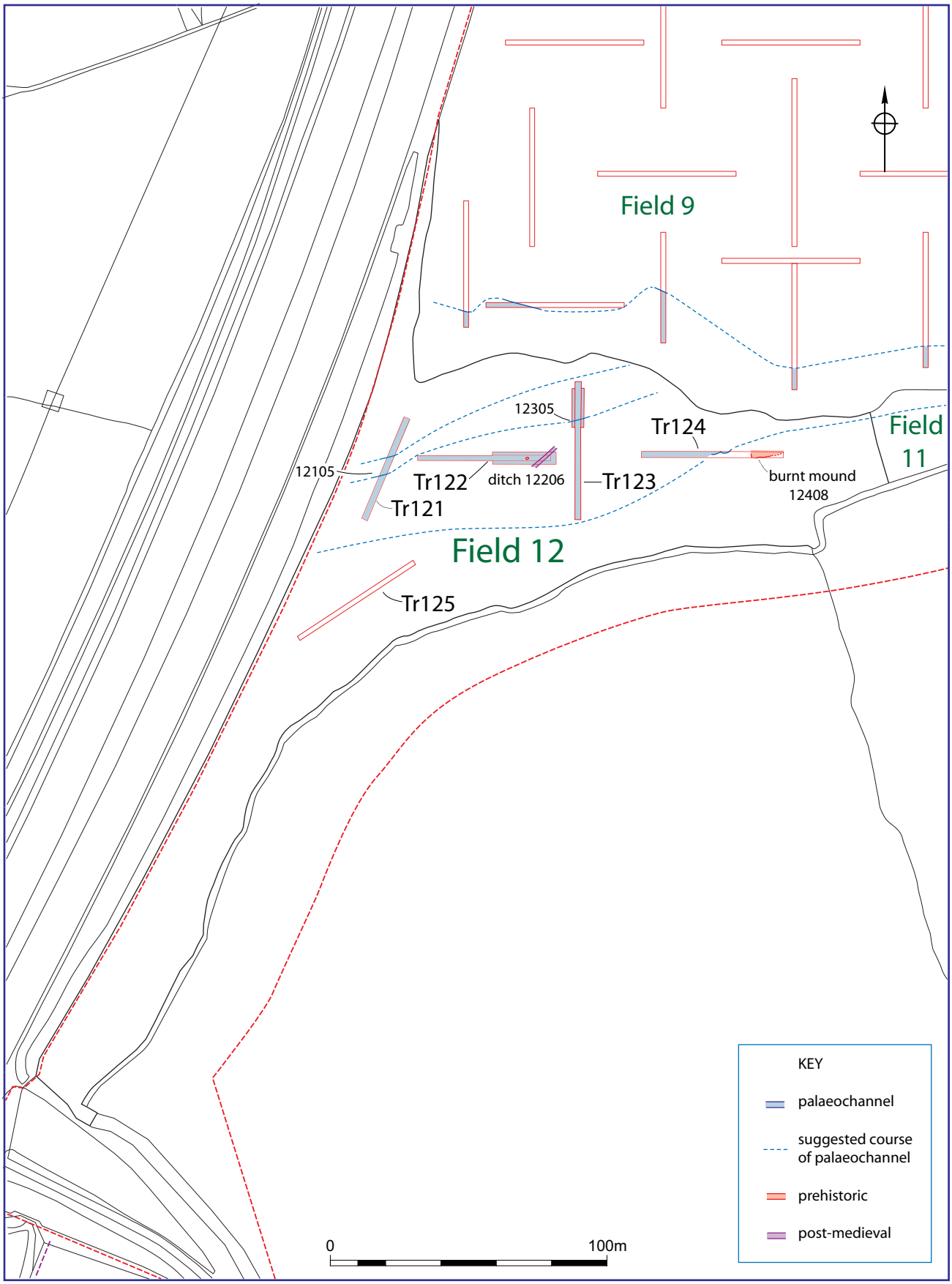
Figure 11



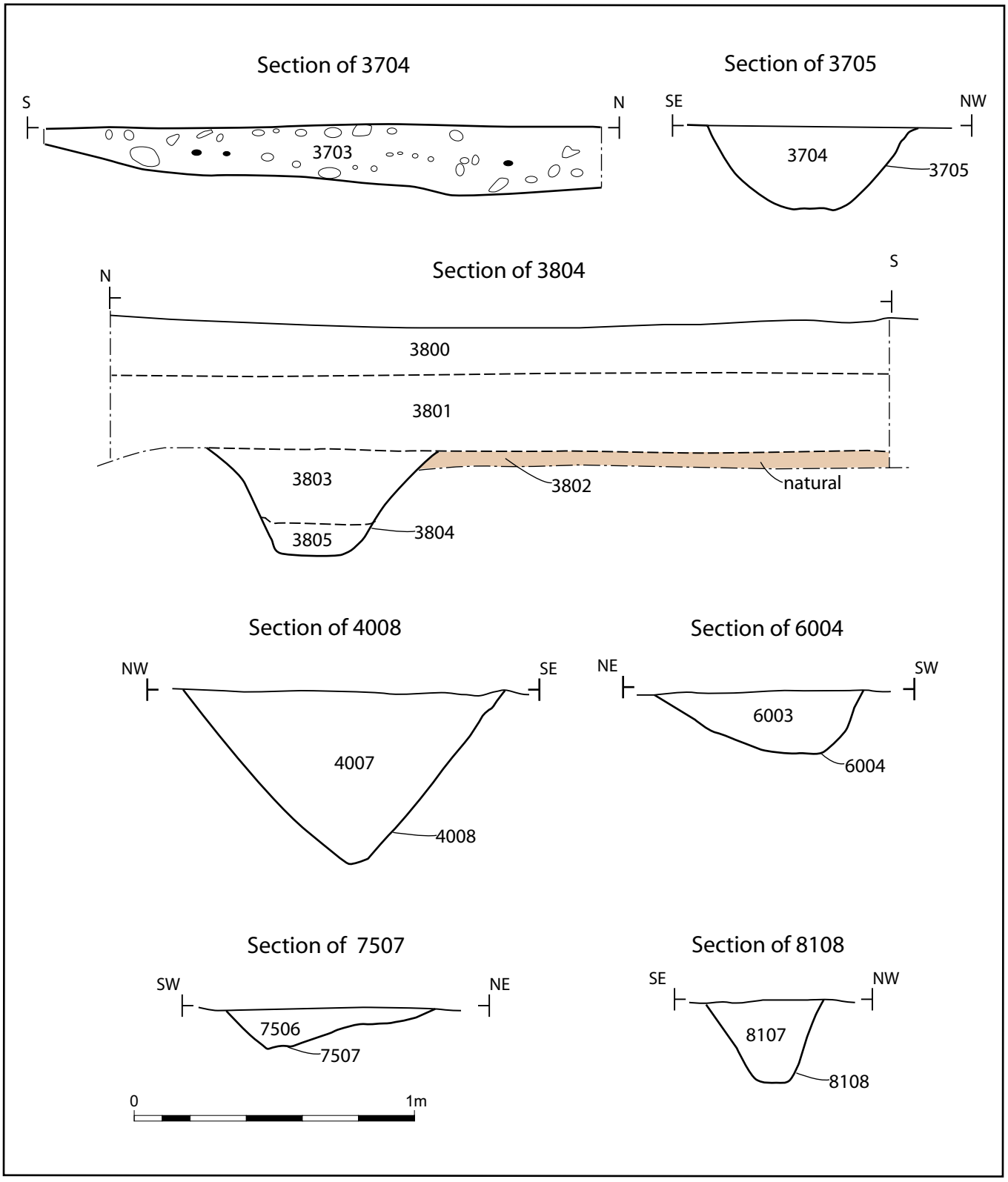
Field 7 *Figure 12*



Field 9 *Figure 13*

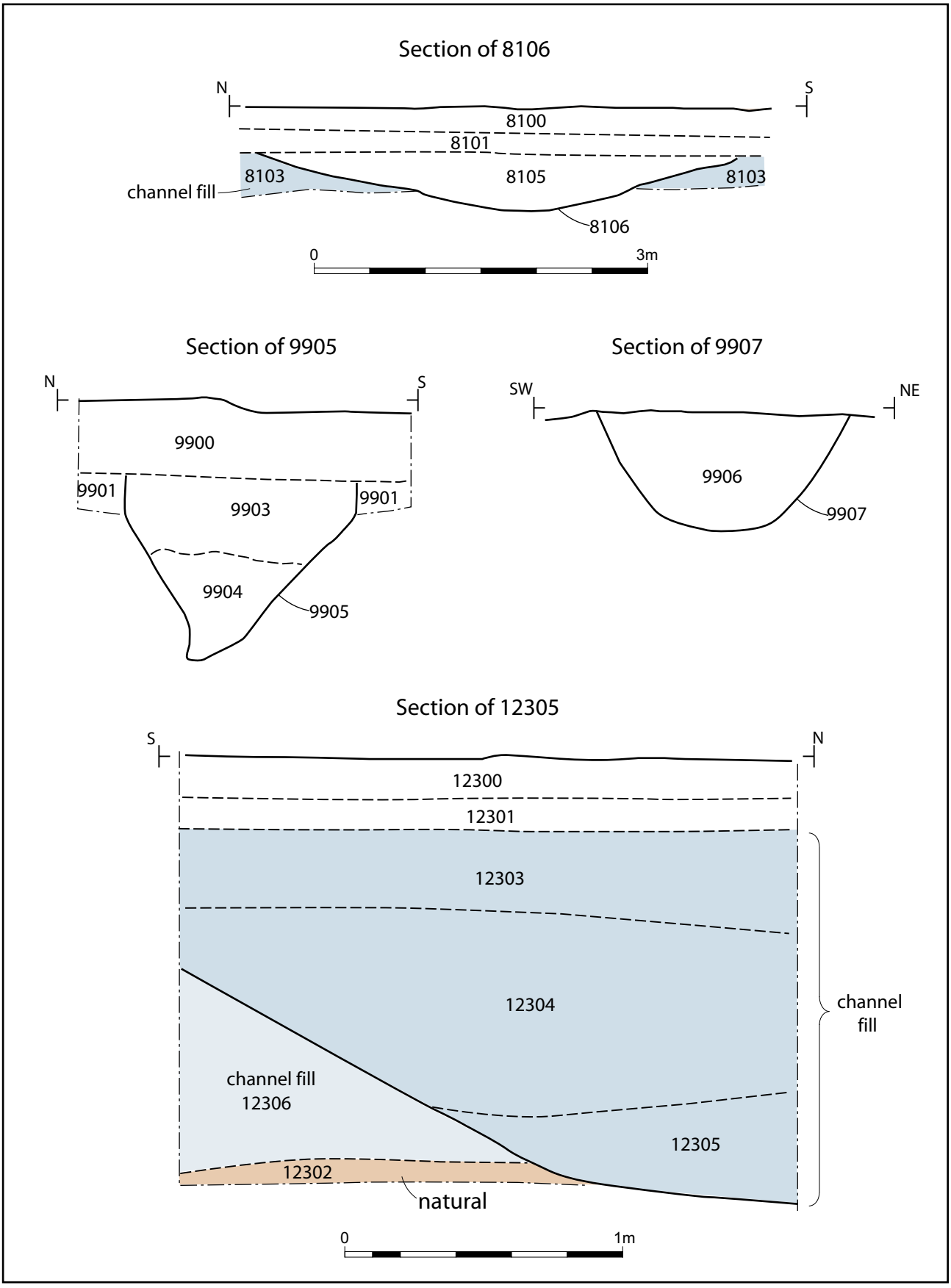


Field 12 *Figure 14*



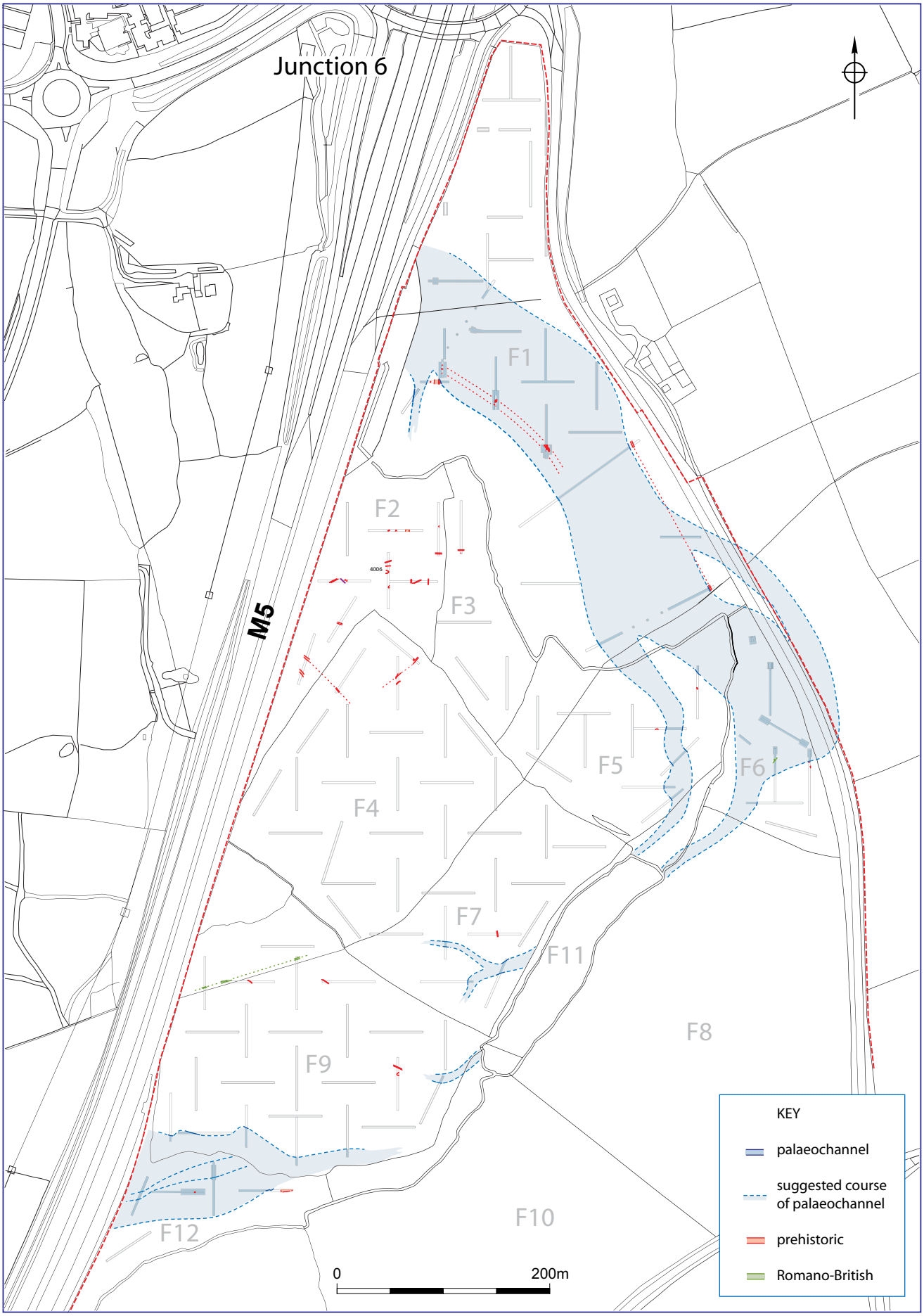
Sections

Figure 15a

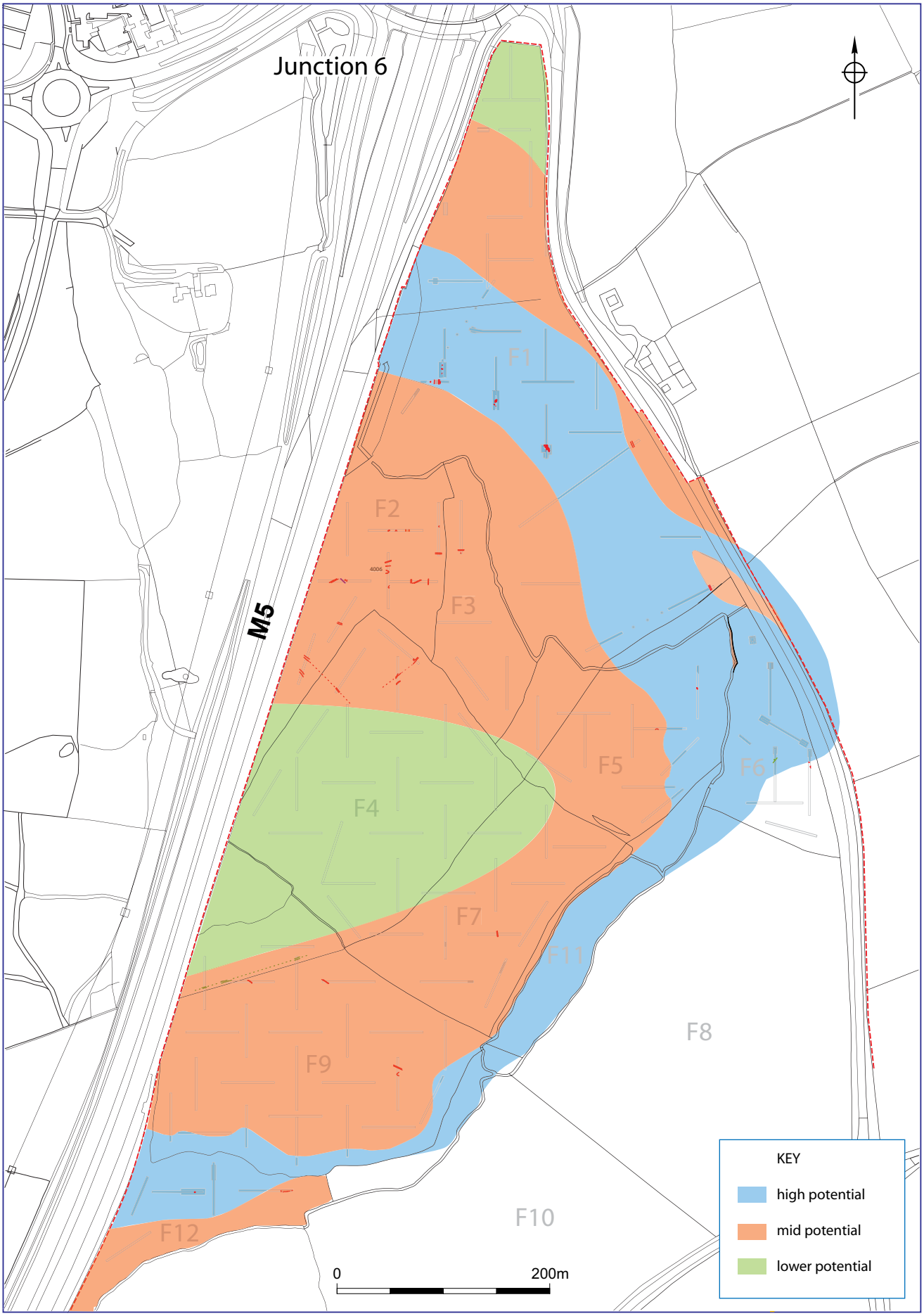


Sections

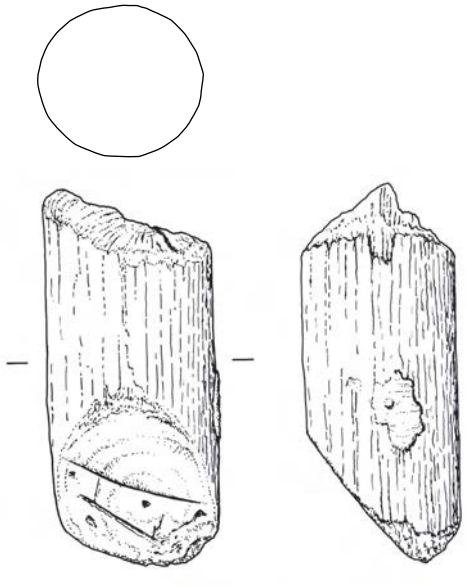
Figure 15b



Site overview *Figure 16*

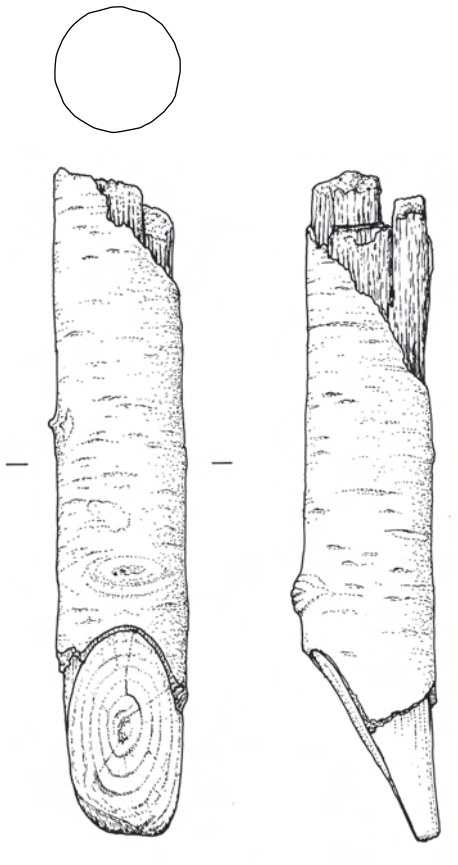


Areas of archaeological potential *Figure 17*



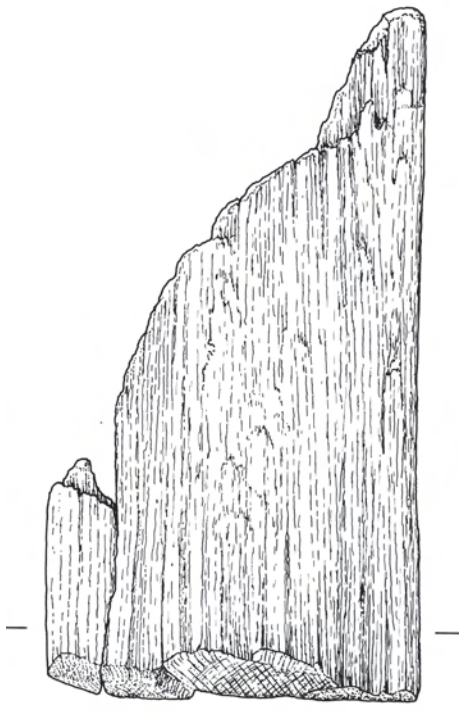
stake with chisel point (WS7)

0 100mm



stake with chisel point (WS6)

0 100mm



plank (WS1)

0 200mm

Worked wood

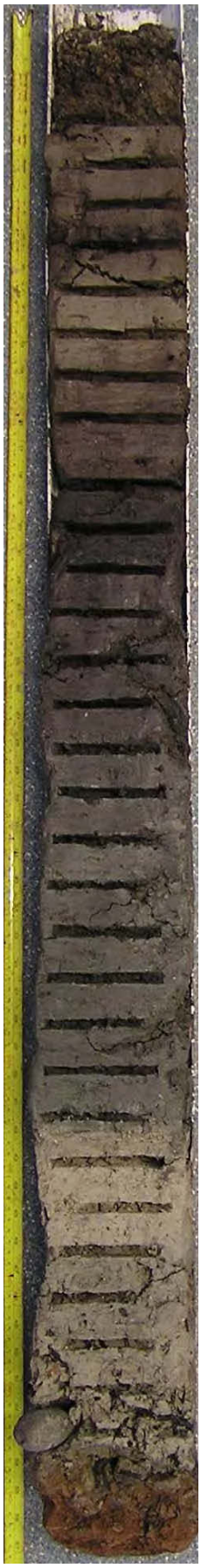
Figur 18

Unit 1	0–0.16m	Void
Unit 2	0.16-0.35m	5 Y 4/2 Dark greyish brown silt/clay with frequent root channels and occasional fine root fragments. Moderately iron-stained. Well sorted. Sharp boundary to:
Unit 3	0.35-0.41m	10 YR 3/2 Very dark greyish brown with coarse, wavy, discontinuous laminae of 10 YR 3/1 very dark grey silt/clay. Frequent fine roots and root holes. Well sorted. Diffuse boundary to:
Unit 4	0.41 – 0.50m	5 Y 5/1 Grey silt/clay with fine, straight, discontinuous laminae of 10 YR 3/2 very dark greyish brown clay, increasing downwards. Moderate fine roots and root holes. Occasional granular-sized charcoal fragments. Well sorted. Sharp, wavy boundary to:
Unit 5	0.50 – 0.67m	10 YR 2/2 Very dark brown organic silt/clay with frequent f brous plant remains. Occasional discrete granular-sized patches of fine sand. Diffuse boundary to:
Unit 6	0.67-0.74m	2.5 Y 3/2 Very dark greyish brown silt/clay with occasional discrete granular-sized patches of fine sand. Occasional granular-sized charcoal fragments. Occasional fine, vertically orientated roots. Diffuse boundary to:
Unit 7	0.74 – 1.01m	10 YR 2/1 Black moderately humified peat containing frequent granular to pebble-sized fibrous and twiggy plant macro remains.

Figure 19: Monolith <3>

Unit 8	0.00 – 0.12m	Void
Unit 9	0.12 – 0.54m	Gley 1 4/5GY dark greenish grey silt/clay with occasional granular and rare pebble-sized plant fragments. Mottled. Well sorted. Diffuse boundary to:
Unit 10	0.54 – 0.56m	5 Y 4/1 dark grey darkening to 5 Y 3/1 very dark grey silt clay with occasional granular humic/charcoal patches. Possible discontinuous, non-parallel, fine laminations. Well sorted. Sharp boundary to:
Unit 11	0.56-0.67m	Gley 1 4/5G Dark greenish grey oxidising to Gley 1 5/10Y Greenish grey silt/clay with occasional granular-sized shell fragments and frequent granular plant fragments. Frequent pebble-sized sub-angular to rounded quartzite and sandstone clasts. Poorly sorted. Diffuse boundary to:
Unit 12	0.67 – 0.81m	Gley 1 5/10Y Greenish grey silt clay with single thin bed and multiple coarse, straight, discontinuous laminae of 7.5 YR 4/4 brown silt/clay. Occasional pebble-sized plant fragments (?roots). Occasional pebble-sized sub-angular to rounded quartzite and sandstone clasts. Poorly sorted. Sharp boundary to
Unit 13	0.81 – 0.90m	7.5 YR 4/4 brown silt/clay with rare fine sand. Moderate vertical fine roots. Moderately sorted.

Figure 20: Monolith <11>



Unit 14	0–0.02m	.5 Y 4/2 Dark greyish brown silt/clay with occasional fine sand. Moderate rooting. Granular and pebble-sized patches of Gley 1 4/10Y dark greenish grey silt/clay. Minor iron staining. Well sorted. Sharp boundary to:
Unit 15	0.02-0.10m	10 YR 4/3 Brown silt/clay with pebble-sized patches of 10 YR 5/3 brown silt clay. Rare granular-sized charcoal. Minor iron staining. Moderately rooted. Well sorted. Sharp boundary to:
Unit 16	0.10-0.22m	5 Y 5/2 Olive grey silt clay with occasional pebble-sized charcoal fragments. Occasional pebble-sized patches of 10 YR 4/3 brown silt/clay. Moderately rooted. Moderately sorted. Sharp boundary to:
Unit 17	0.22 – 0.25m	YR 3/1 Black organic silt/clay. Well sorted. Diffuse boundary to:
Unit 18	0.25 – 0.35m	2.5 Y 5/1 Grey silt/clay. Moderate iron staining. Well sorted. Diffuse boundary to:
Unit 19	0.35-0.45m	2.5 Y 3/1 Very dark grey, mottled 2.5 Y 5/1 grey organic silt/clay. Rare pebble-sized charcoal fragments. Occasional granular-sized quartzite clasts. Moderately sorted. Diffuse boundary to:
Unit 20	0.45-0.70m	2.5 Y 2.5/1 Black organic silt/clay with frequent granular to pebble-size charcoal/waterlogged plant macro remains. Well sorted. Diffuse boundary to:
Unit 21	0.70-0.79m	Gley 1 4/10Y Dark greenish grey silt/clay with rare granular-sized plant macro remains. Well sorted. Diffuse boundary to:
Unit 22	0.79-1.03m	Gley 1 4/10Y Dark greenish grey silt/clay with moderate fine sand and occasional granular-sized waterlogged plant remains. Moderately sorted. Sharp boundary to:
Unit 23	1.03-1.14m	2.5 Y 7/1 Light grey fine sand/silt with frequent pebble-sized shell fragments. Occasional pebble-sized waterlogged plant macro-remains. Moderately sorted. Sharp boundary to:
Unit 24	1.14-1.24m	10 YR 2/1 Black moderately humified peat containing frequent granular to pebble-sized fibrous and twiggy plant macro remains. Diffuse boundary to:
Unit 25	1.24-1.32m	5 Y 6/2 Light olive grey silt/clay with frequent granular shell and waterlogged plant macro-remain fragments. Single twig. Sharp boundary to:
Unit 26	1.32-1.40m	7.5 YR 3/4 Dark brown silt/clay with moderate pebble and cobble-size rounded to angular sandstone and quartzite clasts.

Figure 21: Monolith <12>

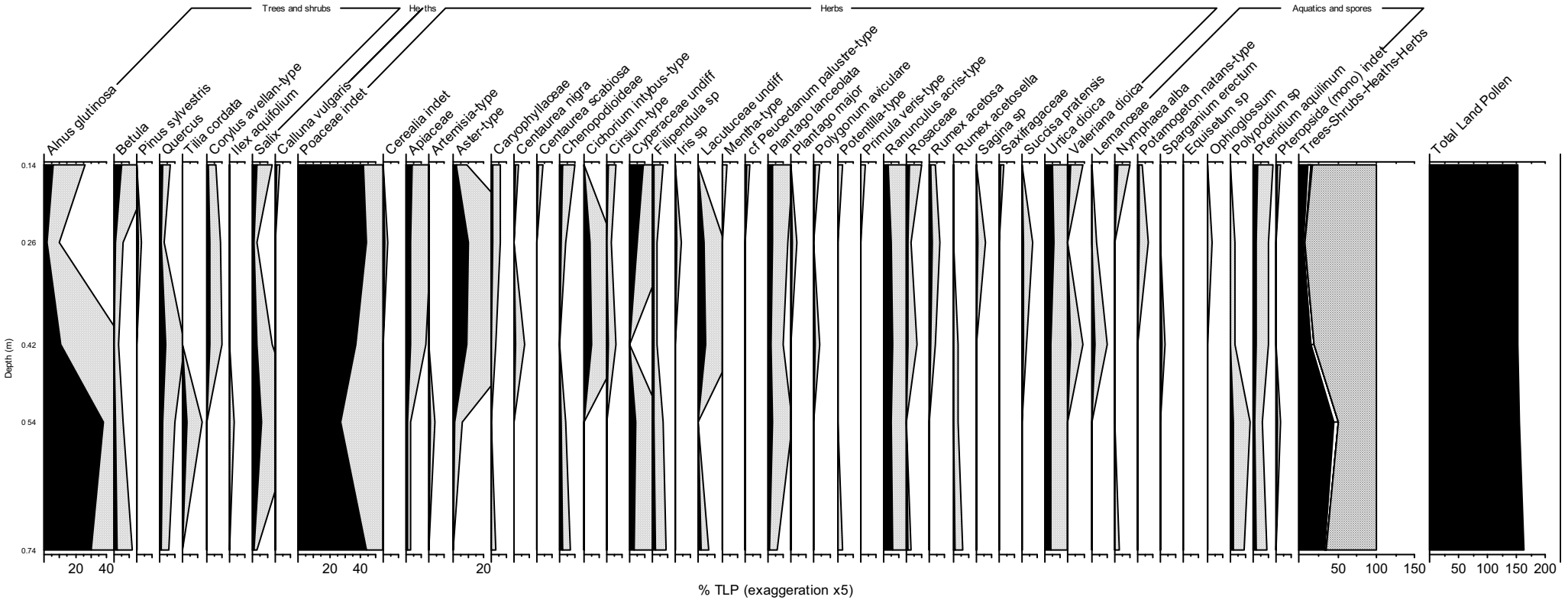
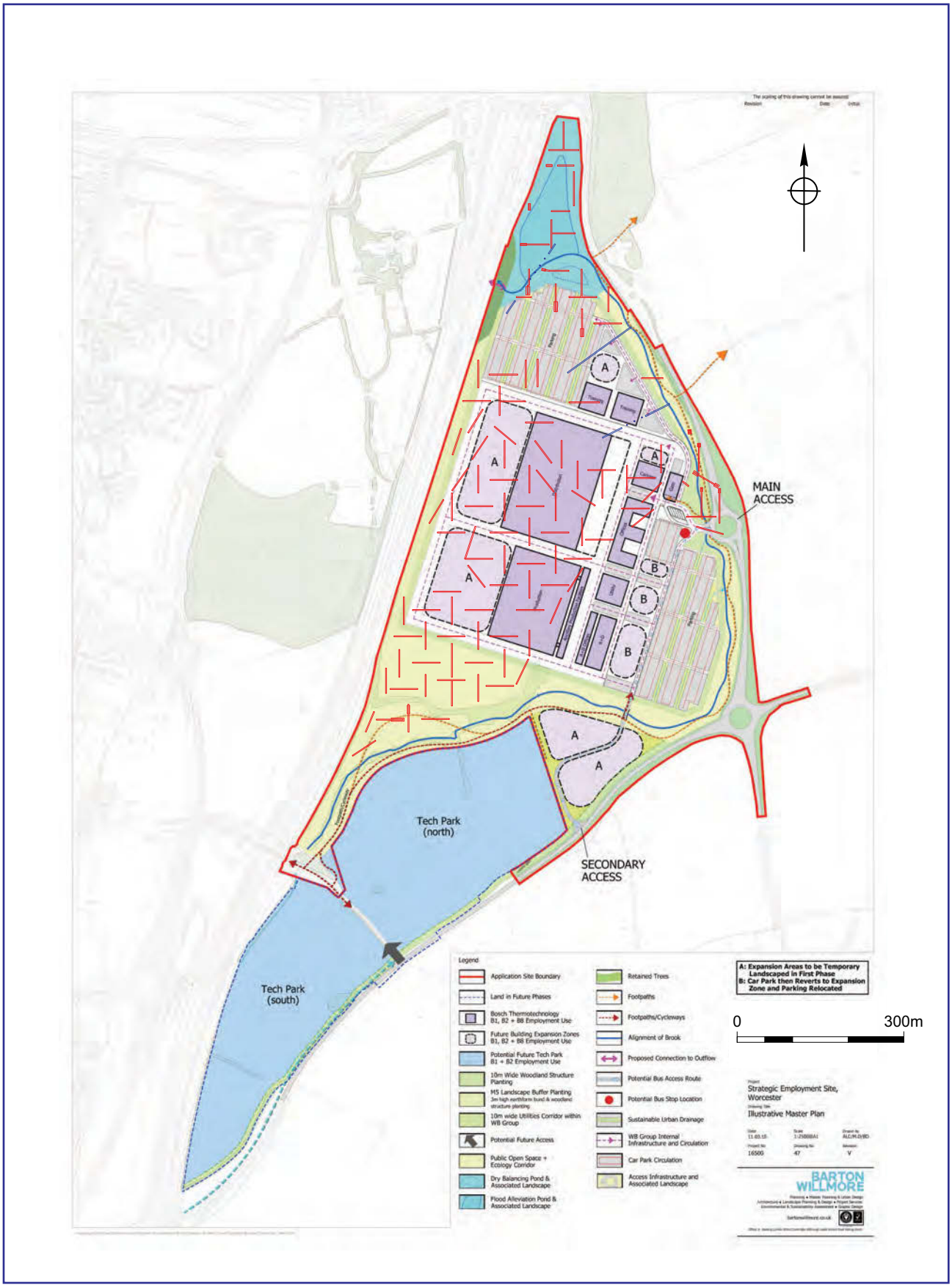


Figure 22: Pollen diagram for Monolith <3> sequence



Trench locations superimposed on Barton Willmore Dwg 47: Illustrative Masterplan, Revision V Figuer 23

Plates

Plate 1: Steeply sloping ground in Trench 87, Field 7, looking west.

Plate 2: Field 9, looking north, with gradually thickening alluvium to the south

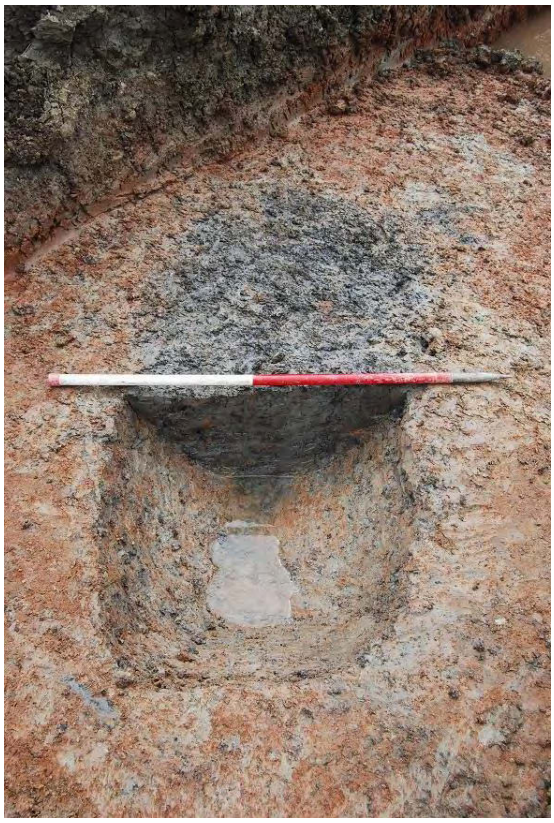


Plate 3: Pit [3705] in Field 2, looking south-west

Plate 4: Ditch [3806], Trench 2, with possible evidence of palisading, looking east.

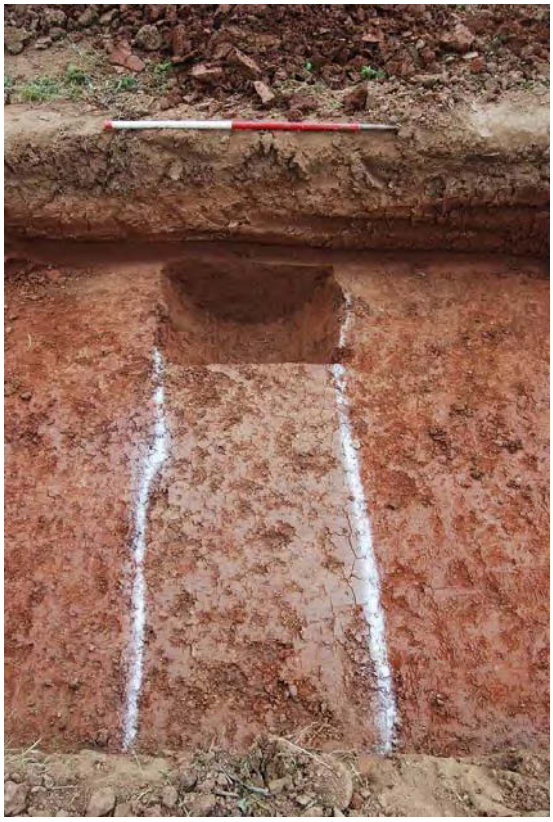


Plate 5: Ditch [4404], Field 3, looking west

Plate 6: Tree throw [7507], looking north-west

Plate 7: Trackway [1508], Trench 15, looking north.

Plate 8: Plank (1509), Trench 15, looking south-west

Plate 9: Timber structure [2106] in Field 1, looking south-east.

Plate 10: Difficult working conditions in Trench 21, looking north

Plate 11: Ditch [9909] in Field 9, looking north-east

Plate 12: Post-medieval ditch [1610] in Field 1, looking south-east

Plate 13: Alluvial sequence in Trench 127, with peat-rich primary fill, looking west

Plate 14: Plank (1516; Wood Sample 1) from Structure 1508

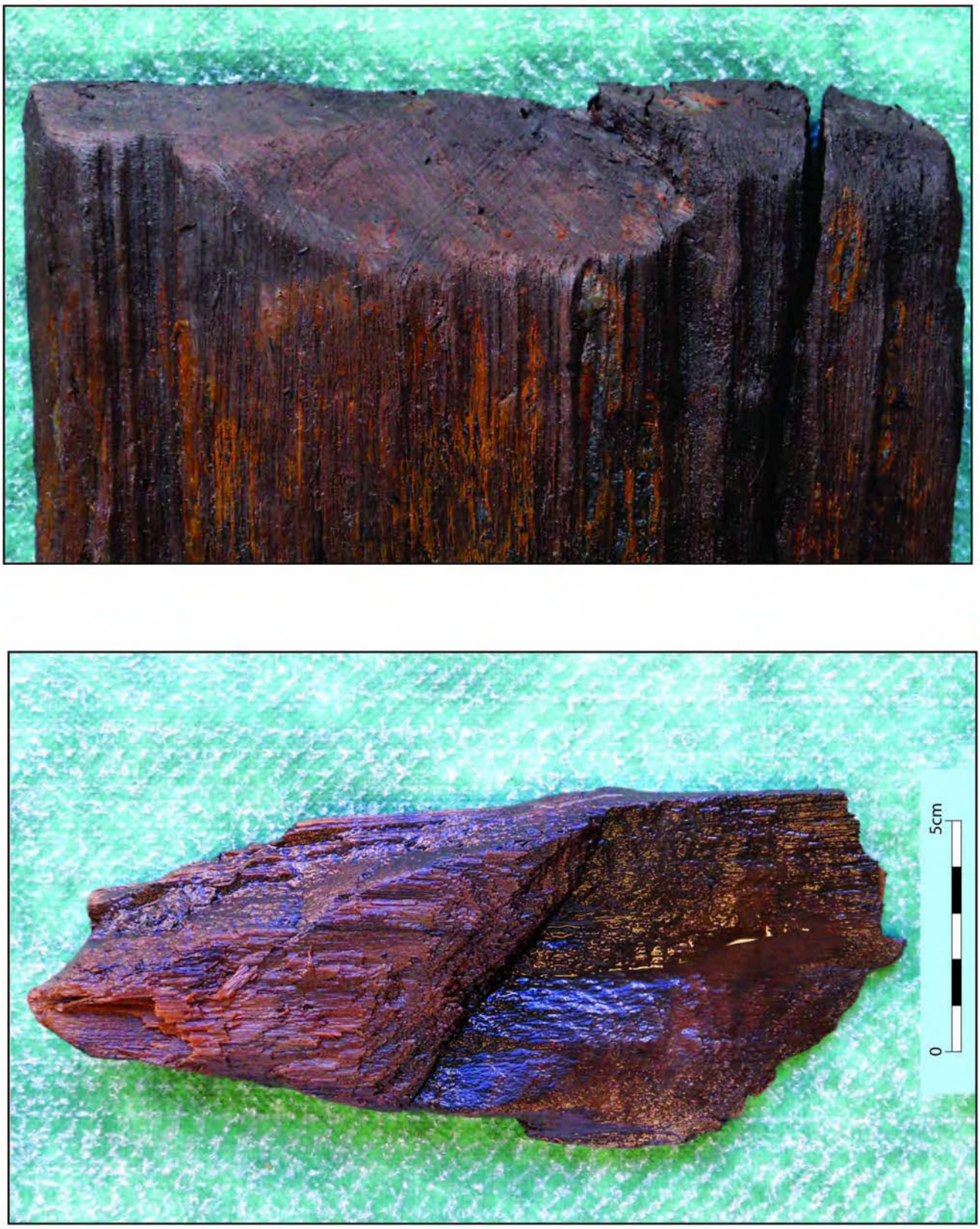


Plate 15: Detail of axe marks on Wood sample 1 (plank; above) and Wood sample 8 (Offcut; below)

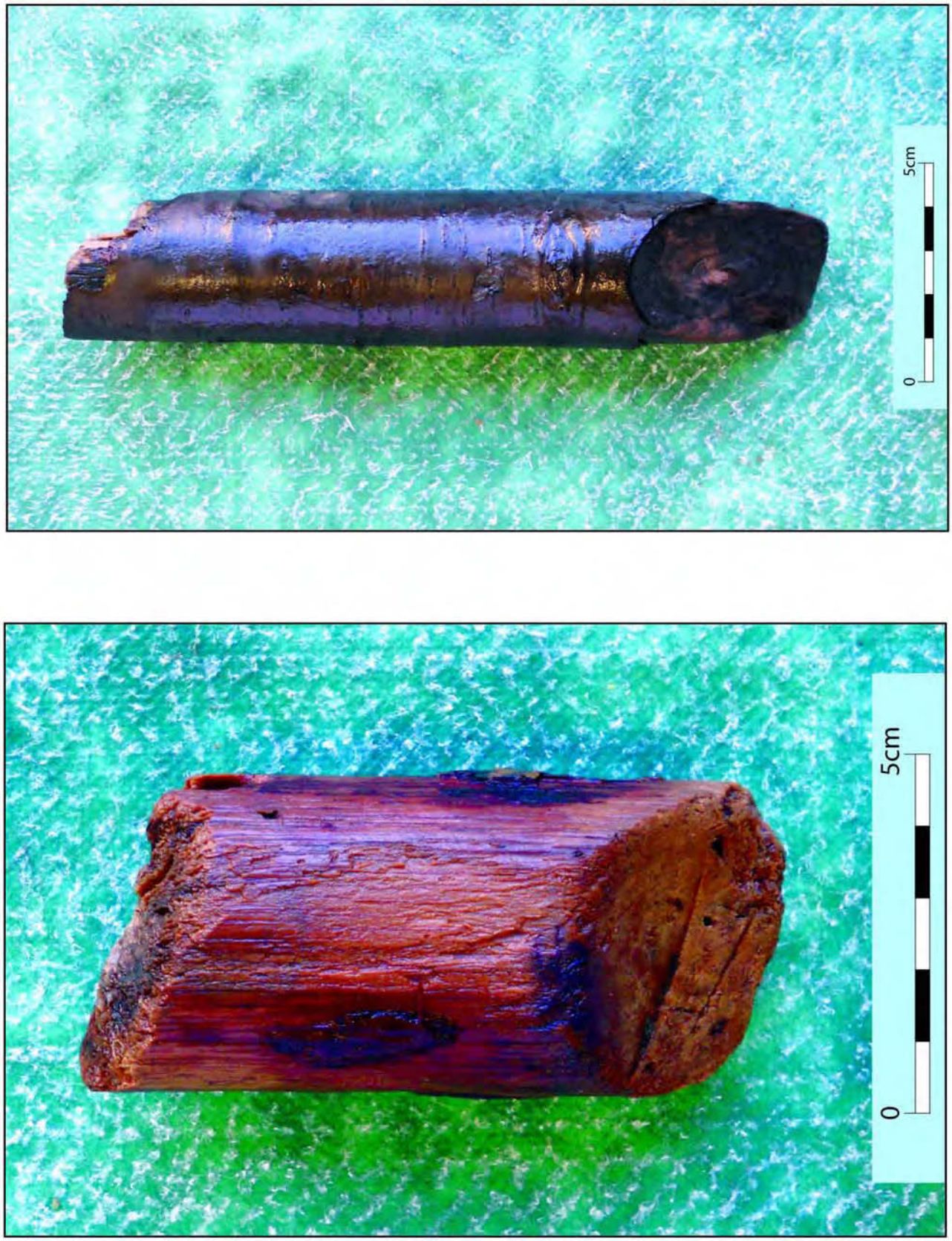


Plate 16: Wood samples 6 (above) and 7 (below): chisel point stakes from Structure [1309]

Tables

Material class	Period	Count	Weight (g)
Bone	Undated	43	512
Ceramic	Late medieval/ post-medieval	27	1632
Ceramic	Medieval	5	18
Ceramic	Modern	4	20
Ceramic	Post-medieval	58	2981
Ceramic	Post-med./modern	1	12
Ceramic	Prehistoric	5	18
Ceramic	Roman	31	372
Ceramic	Undated	2	46
Glass	Post-medieval	2	42
Metal	Undated	2	348
Mineral	Undated	6	49
Shell	Undated	1	4
Slag	Post-medieval	11	144
Stone	Prehistoric	1	1
Stone	Undated	25	10236
Totals:		224	16435

Table 1: Quantification of the assemblage

Period	Fabric code	Fabric common name	Count	Weight (g)
Prehistoric	5.3	Quartz and grog tempered	5	18
Roman	3.1	Slab-built Malvernian ware	3	50
Roman	12	Severn Valley ware	28	322
Medieval	55	Worcester-type sandy unglazed ware	3	6
Medieval	99	Miscellaneous medieval wares	2	12
Post-medieval	78	Post-medieval red wares	8	323
Post-medieval	81	Stonewares	1	2
Post-medieval	91	Post-medieval buff wares	3	32
Modern	85	Modern china	2	6
Modern	101	Miscellaneous modern wares	2	14
Totals:			59	829

Table 2: Quantification of the pottery by period and fabric-type

Context	Material class	Object specific type	Fabric code	Count	Weight (g)	Start date	End date	*tpq* range
903	ceramic	pot	101	2	14	1900	1950	1900-1950
905	stone	-	-	7	300	-	-	-
1200	ceramic	brick/tile	-	2	16	1400	1900	1400-1900
	ceramic	roof tile	-	1	18	1400	1800	
1310	stone	-	-	2	20	-	-	-
1507	stone	-	-	1	16	-	-	-
1600	ceramic	kiln item	-	2	24	1750	1900	1400-1950
	ceramic	brick/tile	-	1	4	1400	1900	
	ceramic	pot	85	1	4	1900	1950	
	ceramic	pot	91	1	8	1700	1800	
1602	ceramic	pot	3.1	3	50	200	400	1075-1400
	ceramic	pot	12	3	16	43	400	
	ceramic	pot	55	3	6	1075	1400	
	ceramic	pot	99	1	8	-	-	
1700	ceramic	brick/tile	-	1	4	1400	1900	1400-1950
	ceramic	pot	78	1	6	1700	1800	
	ceramic	pot	81	1	2	1600	1950	
	ceramic	pot	85	1	2	1800	1950	
	ceramic	pot	91	1	14	1700	1800	
	ceramic	roof tile	-	1	52	1400	1800	
1800	ceramic	brick	-	1	44	1600	1900	1400-1900
	ceramic	brick/tile	-	1	30	1400	1900	
	ceramic	pot	78	1	6	1600	1800	
1801	ceramic	roof tile	-	1	44	-	-	-
1802	ceramic	pot	12	1	22	100	300	100-300
1806	ceramic	brick	-	1	22	1600	1900	1400-1900
	ceramic	brick/tile	-	1	4	1400	1900	
1806	glass	vessel	-	1	10	1600	1900	1600-1900
2101	metal	button	-	1	4	-	-	-
2109	stone	-	-	3	110	-	-	-
2200	ceramic	brick	-	2	28	1600	1900	1400-1900
	ceramic	brick/tile	-	1	10	1400	1900	
3600	ceramic	pot	99	1	4	-	-	-
3601	stone	-	-	1	66	-	-	-
3903	metal	iron	-	1	344	-	-	-
4201	mineral	coal	-	2	46	-	-	1600-1900
	slag	-	-	11	144	1600	1900	
4301	ceramic	roof tile	-	7	366	1400	1800	1400-1800
4700	ceramic	brick/tile	-	1	14	1400	1900	1400-1900
4701	ceramic	roof tile	-	7	196	1400	1800	1400-1800
5001	ceramic	roof tile	-	1	212	1400	1800	1400-1800
5203	ceramic	brick/tile	-	1	4	1400	1900	1400-1900

Context	Material class	Object specific type	Fabric code	Count	Weight (g)	Start date	End date	*tpq* range
	ceramic	pot	78	1	16	1600	1800	
	ceramic	roof tile	-	1	58	1400	1800	
5205	ceramic	roof tile	-	1	156	1400	1800	1400-1800
7506	ceramic	pot	5.3	5	18	*c*.2700 BC	*c*.1600 BC	*c.* 2700-1600 BC
7506	stone	-	-	1	1	-	-	
8107	ceramic	fired clay	-	1	2	-	-	-
8703	ceramic	pot	12	1	1	43	400	43-400
9001	ceramic	roof tile	-	1	132	1400	1800	1400-1800
9903	ceramic	brick/tile	-	3	4	1400	1900	1400-1900
9903	mineral	coal	-	3	2	-	-	-
9904	ceramic	brick/tile	-	2	2	1400	1900	1400-1900
9906	ceramic	pot	12	1	2	43	400	43-400
9908	ceramic	pot	12	2	5	43	400	43-400
10001	ceramic	roof tile	-	1	30	1400	1800	1400-1800
10003	ceramic	pot	12	1	16	43	100	43-400
10700	ceramic	pot	91	1	10	1700	1800	1700-1800
12100	stone	-	-	1	6	-	-	-
12204	ceramic	pot	12	10	60	43	400	100-300
	ceramic	pot	12	8	198	100	300	
12205	ceramic	brick	-	1	288	1600	1750	1400-1900
	ceramic	brick	-	22	2104	1600	1900	
	ceramic	brick/tile	-	4	34	1400	1900	
	ceramic	pot	78	5	295	1600	1800	
	ceramic	roof tile	-	6	412	1400	1800	
	glass	vessel	-	1	32	1750	1800	
	mineral	coal	-	1	1	-	-	
	shell	-	-	1	4	-	-	
	stone	-	-	1	9500	-	-	
12503	ceramic	pot	12	1	2	43	400	43-400
13000	stone	-	-	9	218	-	-	-

Table 3: Summary of context dating based on artefacts

Context	Sample	Spit/Sub-sample (description)	Feature type	Residue assessed	Flot assessed
0	001	Monolith Trench 13 (west facing section)	Layer	No	No
1300	002	0-5cm Trench 13 (west facing section)	Layer	No	Yes
1300	002	13-18cm Trench 13 (west facing section)	Layer	No	No
1300	002	18-22cm Trench 13 (west facing section)	Layer	No	Yes
1300	002	22-27cm Trench 13 (west facing section)	Layer	No	No
1300	002	27-32cm Trench 13 (west facing section)	Layer	No	Yes
1300	002	32-37cm Trench 13 (west facing section)	Layer	No	No
1300	002	37-42cm Trench 13 (west facing section)	Layer	No	Yes
1300	002	42-47cm Trench 13 (west facing section)	Layer	No	Yes
1300	002	47-52cm Trench 13 (west facing section)	Layer	No	No
1300	002	5-13cm Trench 13 (west facing section)	Layer	No	Yes
1300	002	52-57cm Trench 13 (west facing section)	Layer	No	Yes
1300	002	57-62cm Trench 13 (west facing section)	Layer	No	No
1300	002	62-67cm Trench 13 (west facing section)	Layer	Yes	Yes
1300	003	Monolith Trench 13 (south facing section)	Layer	No	No
2905	004	Grab sample Trench 29 (north facing section)	Layer	No	No
2905	005	Grab sample Trench 29 (south facing section)	Layer	No	No
1205	006	Trench 12 (organic silt)	Layer	No	No
1208	007	Trench 12 (friable white layer)	Layer	No	No
1505	008	Trench 15 grab sample (molluscs)	Layer	No	No
1511	009	Trench 15 spot sample 'hiatus layer' fibrous organics	Layer	No	No
1502	010	3 x spot samples Trench 15 (top, middle, base of organics)	Layer	No	No
1200	011	Monolith Trench 12 (east facing section)	Layer	No	No
1200	012	Monolith Trench 12 (north facing section)	Layer	No	No
7506	013		tree throw	No	No
3704	014	Fill of possible water trough 3705 Trench 37	Linear	No	No
3703	015	Possible burnt mound	Layer	Yes	Yes
8306	016	Charcoal rich fill of tree throw	Layer	No	No
12407	017	Possible burnt mound fill	Burnt Feature	Yes	Yes
2109	018	Contains wooden trackway	Layer	No	No
1410	019	Possible burnt mound	Layer	Yes	Yes
905	020	Peat in trench 9	Layer	No	No
12707	021	Peat in very base of channel, Trench 127	Layer	No	No
12709	022	Interface between natural gravel and channel	Layer	No	No

Table 4: List of plant macrofossil samples taken and analysed

Sample/ monolith number	Depth (from top of monolith)	Depth (Below ground surface)	Context number
<3>	0.14m	0.59m	(1311)
<3>	0.26m	0.71m	(1313)
<3>	0.42m	0.87m	(1314)
<3>	0.54m	1.03m	(1316)
<3>	0.74m	1.19m	(1316)
<9>	Grab sample	Approx 1.60m	(1511)
<10>	Grab sample	0.62m	(1502)
<10>	Grab sample	0.88m	(1502)
<12>	0.22m	0.63m	(1203)
<12>	0.48m	0.89m	(1206)
<12>	0.72m	1.13m	(1207)
<12>	1.00m	1.41m	(1207)
<12>	1.24m	1.65m	(1210)
<21>	Grab sample	Approx 2.61m	(12707)

Table 5: List of samples selected for pollen analysis

Material	Laboratory code	Measured Age	13C/12C	Conventional Age	OxCal calibrated age (95.4% probability or 2 sigma)
Corylus avellana (wood)	Beta - 280909	2390 +/- 40 BP	-26.9 o/oo	2360 +/- 40 BP	Cal BC 520 to 380 (Cal BP 2470 to 2330)

Table 6: Results of radiocarbon dating

Latin name	Common name	Habitat	0-5cm	5-13cm	18-22cm	27-32cm	37-42cm	42-47cm	52-57cm	62-67cm
Waterlogged										
Lychnis flos-cuculi	ragged-robin	CDE						++		+
Ranunculus acris/repens/bulbosus	buttercup	CD	+	+	+++	++	+	+		+
Ranunculus sceleratus	celery-leaved buttercup	E			+	++	+	++		
Ranunculus flammula	lesser spearwort	E			+					
Ranunculus sbgen *Batrachium*	crowfoot	E		+		+				
Urtica dioica	common nettle	ABCD			++		+	+++		++
Alnus glutinosa	alder	CE					++	+++		+
Alnus glutinosa (cones)	alder	CE					++			+++
Alnus glutinosa (scales)	alder	CE						+		++
Corylus avellana shell fragment	hazelnut	C						++	+	+
Stellaria neglecta	greater chickweed	CE		+			++	+		+
Stellaria media	common chickweed	AB			+					
Polygonum aviculare	knotgrass	AB	+			+				
Rumex sp	dock	ABCD					+++	+		
Viola palustris	marsh violet	E						+		+
Rubus sect Glandulosus	bramble	CD	+		+		+			
P*otentilla* sp	cinquefoil	BCDE		+	+++	+				
Hydrocotyle vulgaris	marsh pennywort	E	+	++	+					
Solanum dulcamara	bittersweet	CDE					+			
Stachys palustris	marsh woundwort	E					+	+	+	+
Lycopus europaeus	gypsywort	E				+				
Mentha aquatica	water mint	E	++			++	+	+		+
Sambucus nigra	elderberry	BC							+	
Sonchus asper	prickly sow-thistle	ABD	+							
Alisma sp	water-plantain	E		+						
Juncus sp	rush	DE	+++	++++	++++	++++	++	+	+	
Eleocharis sp	spike-rush	E		++++	++	++				
Isolepis setacea	bristle club-rush	E				+				
Carex spp (2-sided)	sedge	CDE	++	++++		++	+	+		
Carex spp (3-sided)	sedge	CDE	+	+++	+++	++	++	+	+	

Table 7: Waterlogged plant remains from Trench 13 spit samples (corresponding to west facing Monolith 3)

Habitat	Quantity
A= cultivated ground	+ = 1 - 10
B= disturbed ground	++ = 11- 50
C= woodlands, hedgerows, scrub etc	+++ = 51 -100
D = grasslands, meadows and heathland	++++ = 101+
E = aquatic/wet habitats	
F = cultivar	

Key to Table 4

Context		905	1309	2109	1507	1516	Total
Species	**Common name**						
Alnus	Alder	1	2	4	1	1	9
Bark				4			4
Corylus	Hazel		1*	2*	*		3
Fraxinus	Ash		1				1
Quercus	Oak			2			2

*Table 8: Identified species of waterlogged wood *Hazel nuts (Corylus avellana) also present*

Latin Name	Family	Common Name(s)	<3> 0.14m	<3> 0.26m	<3> 0.42m	<3> 0.54m	<3> 0.74m	<9> (1511)	<10> Top	<10> Bottom	<12> 0.22m	<12> 0.48m	<12> 0.72m	<12> 1.00m	<12> 1.24m	<21> (12707)
Alnus glutinosa	Betulaceae	alder	8	3	16	60	49		3		5	61	18	2		1
Betula	Betulaceae	birch	8	2	1	2	4	20	2						3	9
Carpinus betulus	Betulaceae	hornbeam										1				
Corylus avellana -type	Betulaceae	hazel	2	3	3				1		2	8	2		1	6
Ilex aquifolium	Aquifoliaceae	holly				1										
cf *Juniperus communis*	Cupressaceae	common juniper						1								
Pinus sylvestris	Pinaceae	Scot's pine		1						1		2	1	1		
Quercus	Fagaceae	oak	2	1	5	3	2				3	4		1		3
Salix	Salicaceae	willow	4	1	4	9	1	3	1		5	1		2	1	10
Sorbus -type	Rosaceae	whitebeams													1	
Tilia cordata	Malvaceae	small-leaved lime				4				1		9	4			
Ulmus	Ulmaceae	elm				79			1							1
Calluna vulgaris	Ericaceae	heather/ ling	1													
Poaceae undiff	Poaceae	grass	64	67	57	43	73	128	42	15	67	37	9	33	123	91
Cerealia indet	Poaceae	unidentifiable cereal		1												
Apiaceae	Apiaceae	carrot family	6	5	4	1	1				4				1	
Artemisia -type	Asteraceae	mugwort				1						1				
Aster -type	Asteraceae	daisy/aster	3	16	14	2		1	6		15	2			2	
Caryophyllaceae	Caryophyllaceae	pink family	2	2	1		1		2		3	4				1
Centaurea nigra	Asteraceae	common knapweed	1		2											
Centaurea scabiosa	Asteraceae	greater knapweed	1													
Chenopodioideae	Amaranthaceae	goosefoot subfamily	3	1		1	2		2		1	1				1
Cichorium intybus -type	Lactuceae	chicory/dandelion		6	8				9	1						
Cirsium -type	Asteraceae	thistle	2	1	2				1							
Cyperaceae undiff	Cyperaceae	sedge	14	8		7	5	4		1	25	8	1		1	15
Fabaceae	Fabaceae	pea family									1					
Filipendula	Rosaceae	dropwort/ meadowsweet	2	1	1	2	3	1	2		8	2			4	5
Iris sp	Iridaceae	irises		1												
Lactuceae undiff	Asteraceae	chicory/dandelion/sowthistle		5	7		2		6	4		1			4	1
Lysimachia vulgaris -type	Primulaceae	Yellow loosestrife													1	
Mentha -type	Lamiaceae	mints/gypsywort	1													
cf *Peucedanum palustre* -type	Apiaceae	milk-parsley	1													
Plantago lanceolata	Plantaginaceae	ribwort plantain	5	4	3	5	2		1						2	2
Plantago major	Plantaginaceae	greater plantain		1								1				
Polygonum aviculare	Polygonaceae	knotgrass	1		1											
Potentilla- type	Rosaceae	cinquefoils	1				1									
Primula veris- type	Primulaceae	cowslip	1													
Ranunculus acris -type	Ranunculaceae	meadow buttercup	5	8	9	8	9		3		4	1	2	1	5	3
Rosaceae	Rosaceae	rose family	3	1	2		1				2					
Rumex acetosa	Polygonaceae	common sorrel	1	2	1											
Rumex acetosella	Polygonaceae	sheeps sorrel			1	1	2									
Sagina sp	Caryophyllaceae	pearlwort		2												
Saxifragaceae	Saxifragaceae	saxifrage	1								2				1	
Succisa pratensis	Dipsacaceae	devil's-bit scabious		2	1											
Urtica dioica	Urticaceae	stinging nettle	7	8	6	6	6		7		6	12	2	1	2	7
Valeriana dioica	Asteraceae	marsh valerian	3		3				1		1					
		TLP Grains counted	**153**	**153**	**152**	**235**	**164**	**158**	**90**	**23**	**154**	**156**	**39**	**41**	**152**	**156**
Equisetum	Equisetaceae	horsetails							3							
Lemnaceae	Lemnaceae	duckweed family		1	3							1				
Nymphaea alba	Nymphaeaceae	white water-lily	3				1									
Ophioglossum	Ophioglossaceae	adder's tongues		1												
Polypodium	Polypodiaceae	polypody		1	1	4	3		2	2		6	1		1	1
Potamogeton natans-type	Potamogetonaceae	broad-leaved pondweed	1	2												
Pteridium aquilinum	Dennstaedtiaceae	bracken	4	3	3	2	3		4		3	5		2	1	3
Pteropsida (mono) indet		ferns	1			1			7	6	4	13	8		2	4
Sparganium erectum	Typhaceae	branched bur-reed			1										1	1

Table 9: Pollen results

<table>
<tr><th>B.G.S depth</th><th>Geoarch Depth</th><th>Pollen Depth</th><th>Context</th><th>Pollen Preservation</th><th>Molluscan and Ostracod Preservation</th><th>Geoarchaeology Description</th><th>Water depth/environment</th><th>Vegetation</th></tr>
<tr><td>41-44cm</td><td>0-5cm</td><td>0-3cm</td><td rowspan="4">(1202)</td><td rowspan="4">Unassessed</td><td rowspan="12">Unassessed</td><td>UNIT 14:
Dark greyish brown silt/clay with occasional fine sand. Moderate rooting. Granular and pebble-sized patches of Gley 1 4/10Y dark greenish grey silt/clay. Minor iron staining. Well sorted. Sharp boundary to:</td><td rowspan="7">Floodplain sediments that have been modified by both redox processes (water table fluctuations) and pedogenesis</td><td rowspan="4">Unassessed</td></tr>
<tr><td>44-49cm</td><td>5-10cm</td><td>3-8cm</td><td>UNIT 15:
Brown silt/clay with pebble-sized patches of 10 YR 5/3 brown silt clay. Rare granular-sized charcoal. Minor iron staining. Moderately rooted. Well sorted. Sharp boundary to:</td></tr>
<tr><td>49-54cm</td><td>10-15cm</td><td>8-13cm</td><td rowspan="2">UNIT 16:
Olive grey silt clay with occasional pebble-sized charcoal fragments. Occasional pebble-sized patches of 10 YR 4/3 brown silt/clay. Moderately rooted. Moderately sorted. Sharp boundary to:</td></tr>
<tr><td>54-59cm</td><td>15-20cm</td><td>13-18cm</td></tr>
<tr><td>59-64cm</td><td>20-25cm</td><td>18-23cm</td><td>(1203)</td><td>✓</td><td>UNIT 17:
Black organic silt/clay. Well sorted. Diffuse boundary to:</td><td>Open marsh/ wet "rough" grassland</td></tr>
<tr><td>64-69cm</td><td>25-30cm</td><td>23-28cm</td><td rowspan="2">(1204)</td><td rowspan="3">Unassessed</td><td>UNIT 18:
Grey silt/clay. Moderate iron staining. Well sorted. Diffuse boundary to:</td><td rowspan="3">Unassessed</td></tr>
<tr><td>69-74cm</td><td>30-35cm</td><td>28-33cm</td><td rowspan="5">Organic mud strata formed in very shallow and still waters</td></tr>
<tr><td>74-79cm</td><td>35-40cm</td><td>33-38cm</td><td rowspan="2">(1205)</td><td>UNIT 19:
Very dark grey, mottled 2.5 Y 5/1 grey organic silt/clay. Rare pebble-sized charcoal fragments. Occasional granular-sized quartzite clasts. Moderately sorted. Diffuse boundary to:</td></tr>
<tr><td>79-84cm</td><td>40-45cm</td><td>38-43cm</td><td rowspan="4">UNIT 20:
Black organic silt/clay with frequent granular to pebble-size charcoal/waterlogged plant macro remains. Well sorted. Diffuse boundary to:</td></tr>
<tr><td>84-89cm</td><td>45-50cm</td><td>43-48cm</td><td rowspan="3">(1206)</td></tr>
<tr><td>89-94cm</td><td>50-55cm</td><td>48-53cm</td><td>✓</td><td>Alder carr flanking palaeochannel or occupying the wettest pockets of the floodplain surrounded by open marsh/ wet grassland. Mixed lime and oak woodland on the higher, drier ground to the east.</td></tr>
<tr><td>94-99cm</td><td>55-60cm</td><td>53-58cm</td><td rowspan="2">Unassessed</td><td rowspan="2">Unassessed</td></tr>
<tr><td>99-104cm</td><td>60-65cm</td><td>58-63cm</td></tr>
</table>

104-109cm	65-70cm	63-68cm						
109-114cm	70-75cm	68-73cm	(1207)	✗		UNIT 21: Dark greenish grey silt/clay with rare granular-sized plant macro remains. Well sorted. Diffuse boundary to:		Alder carr flanking palaeochannel or occupying the wettest pockets of the floodplain surrounded by open marsh/ wet grassland. Mixed lime and oak woodland on the higher, drier ground to the east.
114-119cm	75-80cm	73-78cm		Unassessed				
119-124cm	80-85cm	78-83cm				UNIT 22: Dark greenish grey silt/clay with moderate fine sand and occasional granular-sized waterlogged plant remains. Moderately sorted. Sharp boundary to:		
124-129cm	85-90cm	83-88cm						
129-134cm	90-95cm	88-93cm						
134-139cm	95-100cm	93-98cm						
139-144cm	100-105cm	98-103cm		✗				Open marsh/ wet "rough" grassland
144-149cm	105-110cm	103-108cm	(1208)	Unassessed	✓	UNIT 23: Light grey fine sand/silt with frequent pebble-sized shell fragments. Occasional pebble-sized waterlogged plant macro-remains. Moderately sorted. Sharp boundary to:	Channel fills of sediments accumulating in slow moving, but relatively deep water	Unassessed
149-154cm	110-115cm	108-113cm						
154-159cm	115-120cm	113-118cm	(1209)		Unassessed	UNIT 24: Black moderately humified peat containing frequent granular to pebble-sized fibrous and twiggy plant macro remains. Diffuse boundary to:		
159-164cm	120-125cm	118-123cm						
164-169cm	125-130cm	123-128cm	(1210)	✓		UNIT 25: Light olive grey silt/clay with frequent granular shell and waterlogged plant macro-remain fragments. Single twig. Sharp boundary to:		Open marsh/ wet "rough" grassland with possible willow carr formation close to active channel.
169-174cm	130-135cm	128-133cm	(1211)	Unassessed		UNIT 26: Dark brown silt/clay with moderate pebble and cobble-size rounded to angular sandstone and quartzite clasts.	Weathered surface of the Sidmouth Mudstone Formation	Unassessed
174-179cm	135-140cm	133-138cm						

Table 10: Trench 12 palaeoenvironmental summary

B.G.S depth	Geoarch Depth	Pollen Depth	Plant Macros Depth	Context	Pollen Preservation	Plant Macro preservation	Geoarchaeology Description	Water depth/environment	Vegetation
21-26cm	0-5cm								
26-31cm	5-10cm								
31-36cm	10-15cm								
36-41cm	15-20cm						UNIT 2: Dark greyish brown silt/clay with frequent root channels and occasional fine root fragments. Moderately iron-stained. Well sorted. Sharp boundary to:	Most likely formed within a palaeochannel	Open marsh landscape with rush and sedges occupying channel(s). "Rough" grassland flanking, high herbaceous species diversity
41-46cm	20-25cm	0-1cm							
46-51cm	25-30cm	1-6cm							
51-56cm	30-35cm	6-11cm	0-5cm		Unassessed	✓			
56-61cm	35-40cm	11-16cm	5-10cm	(1311)	✓	✓	UNIT 3: Very dark greyish brown with coarse, wavy, discontinuous laminae of 10 YR 3/1 very dark grey silt/clay. Frequent fine roots and root holes. Well sorted. Diffuse boundary to:		Open marsh landscape with rush and sedges occupying channel(s). "Rough" grassland flanking, high herbaceous species diversity
61-66cm	40-45cm	16-21cm	10-15cm		Unassessed	✓	UNIT 4: Grey silt/clay with fine, straight, discontinuous laminae of 10 YR 3/2 very dark greyish brown clay, increasing downwards. Moderate fine roots and root holes. Occasional granular-sized charcoal fragments. Well sorted. Sharp, wavy boundary to:		Open marsh landscape with rush and sedges occupying channel(s). "Rough" grassland flanking, high herbaceous species diversity
66-71cm	45-50cm	21-26cm	15-20cm	(1312)	✓	✓			
71-76cm	50-55cm	26-31cm	20-25cm	(1313)	Unassessed	✓	UNIT 5: Very dark brown organic silt/clay with frequent fibrous plant remains. Occasional discrete granular-sized patches of fine sand. Diffuse boundary to:	Formed within or at the edge of the palaeochannel during an episode of reduced water flow.	Open marsh landscape with rush and sedges occupying channel(s). "Rough" grassland flanking, high herbaceous species diversity
76-81cm	55-60cm	31-36cm	25-30cm			✓			
81-86cm	60-65cm	36-41cm	30-35cm	(1314)		✓			
86-91cm	65-70cm	41-46cm	35-40cm	(1315)	✓	✓	UNIT 6: Very dark greyish brown silt/clay with occasional discrete granular-sized patches of fine sand. Occasional granular-sized charcoal fragments. Occasional fine, vertically orientated roots. Diffuse boundary to:	Most likely formed within a palaeochannel	Moderately open rush and sedge dominated marshland with alder and willow carr occupying channel margins, "Rough" floodplain grassland still present within close proximity to marsh and dry deciduous woodland lying on higher, drier ground.
91-96cm	70-75cm	46-51cm	40-45cm		Unassessed	✓			

96-101cm	75-80cm	51-56cm	45-50cm	(1316)	✓	✓	UNIT 7: Black moderately humified peat containing frequent granular to pebble-sized fibrous and twiggy plant macro remains.	Formed in a shallow water environment, probably within a depression in the floodplain	Alder carr covers large areas of the marginal ground with the wettest locations being occupied by rushes and sedges. "Rough" floodplain grassland locally present although marginal and wet ground species are more prevalent. Deciduous woodland lying on higher, drier ground.
101-106cm	80-85cm	56-61cm	50-55cm		Unassessed	✓			
106-111cm	85-90cm	61-66cm	55-60cm			✓			
111-116cm	90-95cm	66-71cm	60-65cm			✓			
116-121cm	95-101cm	71-76cm	65-67		✓	✓			

Table 11: Trench 13 palaeoenvironmental summary

ARCHAEOLOGICAL EVALUATION AT PERSHORE LANE, TIBBERTON, WORCESTERSHIRE (TECHNICAL APPENDICES)

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Project 3295
Report 1782
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Appendix 1…Summary structural tables

Context	Feature type	Context type	Description	Interpretation/additional information
100	Topsoil	Layer	Compact Mid Yellowish Brown Silty clay	Topsoil - Occasional small-Medium rounded pebbles, abundant modern CBM- brick, plastic, wire, rope, clear & smooth boundary to (101).
101	Modern Layer	Layer	Compact Mid Orangish Brown Silty clay	Occasional streaks of light blue compact silty clay and occasional rounded small pebbles, smooth boundary to (102). Small fragments of Type 1 seen during machining.
102	Natural	Layer	Compact Mid Orangish Red Clay	Clay marl. Occasional streaks of light blue silty clay and occasional scattered quartz. Evidence of some plough scaring at northern end. Probably modern given regularity of spacing of scars.
200	Topsoil	Layer	Compact Mid Yellowish Brown Silty clay	Topsoil - Occasional small-medium rounded pebbles, abundant modern CBM- Brick, plastic, wire, rope. Clean and smooth boundary to (201).
201	Natural	Layer	Compact Mid Orangish Red Clay	Clay marl. Occasional streaks of light blue silty clay and occasional shattered quartz. Evidence of some plough scarring at northern end probably modern given regularity of spacing of scars.
300	Topsoil	Layer	Moderately Compact Mid Reddish Brown Silty clay	Abundant CBM- Modern, occasional small-medium rounded pebbles, clear and smooth boundary to 301
301	Modern Layer	Layer	Compact Mid Reddish Grey Silty clay	Patches of mid blue clay throughout, abundant concrete, wood, CBM.
302	Natural	Layer	Compact Mid Reddish Orange Silty clay	No inclusions
303	Layer	Layer	Compact Mid Reddish Brown Silty clay	Possible channel? Re-deposited natural from M5 construction? No inclusions- Very sterile.
304	Layer	Layer	Compact Mid Brownish Red Silty clay	Could be same as (301), full of crushed stone and CBM, bits of wood etc.
400	Topsoil	Layer	Moderately Compact Mid Reddish Brown Silty clay	Abundant CBM- Modern, occasioanlsmall- medium rounded pebbles.
401	Subsoil	Layer	Compact Mid Reddish Grey Silty clay	Patches of mid blue clay throughout, abundant concrete, wood, CBM.
402	Natural	Layer	Compact Mid Reddish Orange Silty clay	No inclusions.
600	Topsoil	Layer	Moderately Compact Mid Reddish Brown Silty clay	Abundant CBM- Modern, occasioanl small-medium rounded pebbles.
601	Layer	Layer	Compact Mid Orangish Brown Silty clay	Abundant small-medium rounded pebbles, clear and smooth boundary to (603)
602	Natural	Layer	Compact Mid Reddish Orange Silty clay	No inclusions.
603	Layer	Layer	Compact Mid Greyish Brown Silty clay	Mid greyish red brown with lighter blueish streaks. Abundant CBM, crushed stone and large tree stumps and branches- result of motorway construction. This trench is not fully open as when initially excavated it was evident that there were hydrocarbons- either diesel, oil or some other substance, within soil from the smell of the trench. The majority of layers in this trench are of the result of the motorway construction as all layers contained CBM and crushed stone. All measurements for section are taken from the surface. Overall trench depth gauged from level readings on the surface.
700	Topsoil	Layer	Moderately Compact Mid Reddish Brown Silty clay	Topsoil - Abundant CBM-modern, occasional small-medium rounded pebbles, clear and smooth boundary to (701)/(702) at east end of trench only for (702).
701	Subsoil	Layer	Compact Mid Greyish Black Silty clay	Not really subsoil! Abundant crushed stone, tarmac.
702	Natural	Layer	Compact Mid Reddish Orange Silty clay	No inclusions.
703	Layer	Layer	Compact Mid Greyish Orange Silty clay	Occasional small-medium subrounded pebbles.
704	Layer	Layer	Compact Light Greyish Blue Silty clay	Rare small rounded pebbles.
705	Ditch	Fill	Moderately Compact Dark Reddish Grey Silty clay	This fill looks like it was placed in at the time when the modern layers above associated with motorway construction were put in.
706	Ditch	Cut		This cut may be a modern ditch back filled at time of motorway construction or it could be a rut. Layer un excavated. To West has similar fill and is parallel.
707	Modern Layer	Layer		Modern layer full of clinker, tarmac, CBM, crushed stone, angular pebbles. Part of road .

Context	Feature type	Context type	Description	Interpretation/additional information
900	Topsoil	Layer	Moderately Compact Mid Reddish Brown Silty clay	Topsoil - Abundant CBM-modern, occasional small-medium rounded pebbles.
901	Subsoil	Layer	Compact Red Clay	Compact red marl layer with occasional small rounded stones.
902	Natural	Layer	Soft Reddish Red Clay	Reddish grey blue soft clay with frequent marl patches, natural though obviously waterlogged.
903	Furrow	Fill	Blueish Grey Clay	This is a fairly mixed layer of bule grey clay with frequent yellow and brown areas and with a darker grey lense at base- modern pot found.
904	Layer	Layer	Soft Light Greyish Blue Clay	Possibly same as (1005). Alluvium- possible channel.
905	Layer	Layer	Dark Brownish Black Clay	Clayey peat layer with frequent charcoal and organics.
906	Layer	Layer	Soft Light Greyish Blue Clay	Alluvium.
907	Linear	Fill	Compact Reddish Brown Clay	Occasional small stones.
908	Linear	Cut		Linear running NW- Se. Not excavated. Probably a modern drainage ditch.
909	Furrow	Cut		This is a cut for a possible modern furrow?
910	Layer	Layer	Moderately Compact Light Reddish Grey Silty clay	Light reddish yellow grey colluvium Possibly same as (1004).
911	Layer	Layer	Compact Mid Brownish Grey Silty clay	Slightly silty clay, fairly compact- possibly an alluvium.
1000	Topsoil	Layer	Moderately Compact Mid Reddish Brown Silty clay	Topsoil - Abundant CBM-modern, occasional small-medium rounded pebbles.
1001	Modern Layer	Layer	Moderately Compact Mid Reddish Grey Silty clay	Patches of mid blue clay throughout, abundant concrete, wood, CBM
1002	Natural	Layer	Compact Mid Orangish Red Silty clay	Mid orange red-light blue silty clay- possibly same as (702), natural is streaked with above colours.
1003	Layer	Layer	Compact Mid Greyish Brown Silty clay	Abundant root bioturbation, possibly a buried topsoil/subsoil horizon.
1004	Layer	Layer	Compact Mid Greyish Yellow Silty clay	Possibly same as (910). Abundant manganese and iron pan flecks- Colluvium.
1005	Layer	Layer	Compact Light Greyish Blue Silty clay	Possibly same as (904).
1006	Layer	Layer	Compact Dark Blueish Grey Silty clay	
1007	Layer	Layer	Compact Light Greyish Brown Silty clay	Possibly a colluvium?
1100	Topsoil	Layer	Moderately Compact Mid Reddish Brown Silty clay	Abundant CBM-modern, occasional small-medium rounded pebbles.
1101	Subsoil	Layer	Moderately Compact Mid Reddish Grey Silty clay	Patches of mid blue clay throughout, abundant concrete, wood, CBM
1102	Natural	Layer	Compact Mid Reddish Orange Silty clay	No inclusions.
1103	Layer	Layer	Compact Mid Greyish Brown Silty clay	Abundant root bioturbation, possibly a buried topsoil/subsoil horizon.
1104	Layer	Layer		Modern layer full of clinker, tarmac, CBM, crushed stone, angular pebbles. Part of road.
1200	Layer	Layer	Dark Greyish Brown Silty clay	Topsoil
1201	Subsoil	Layer	Orangish Grey	Alluvium.
1202	Layer	Layer	Grey	Alluvium with orange mottling.
1203	Layer	Layer	Dark Blackish Brown	Alluvium- Flood event.
1204	Layer	Layer	Grey	Alluvium.
1205	Layer	Layer	Dark Greyish Brown	Alluvium.
1206	Layer	Layer	Grey	Alluvium.
1207	Layer	Layer	Greenish Grey	Alluvium.
1208	Layer	Layer	Friable Whitish Grey	Alluvium.
1209	Layer	Layer	Greenish Grey	Alluvium.
1210	Layer	Layer	Whitish Grey	Alluvium with patches of green grey alluvium. Frequent small-medium stones- rounded and angular.
1211	Natural	Layer	Brownish Orange Silty sand	Natural

Context	Feature type	Context type	Description	Interpretation/additional information
1212				This number is given out to a wooden stake found point down into deposit (1202). There was no obvious cut so obviously just rammed into deposit. The end looks like it has been squared off to a point with slightly rounded wood on the end furthest from the point. There is also what looks like a barb on one side but may be natural.
1300	Layer	Layer	Mid Orangish Brown Silty clay	Topsoil
1301	Subsoil	Layer	Mid Orangish Grey Silty clay	Subsoil
1302	Layer	Layer	Mid Greyish Brown Silty clay	
1303	Layer	Layer	Light Grey Silty clay	
1304	Layer	Layer	Mid Greyish Brown Silty clay	
1305	Layer	Layer	Dark Grey Clay	
1306	Layer	Layer	Dark Blueish Grey Clay	
1307	Layer	Layer	Light Whitish Grey	
1308	Layer	Layer	Moderately Compact Mid Yellowish Grey Clay	Layer above structure 1309, result of silting and water actions as area in general is very wet and boggy in places.
1309	Trackway	Structure		Possible trackway as is seen in trenches 21 & 15. The irregular ammount of timbers in this trench (Tr 13) suggest that this maybe the very outer extremities of the trackway, as hazelnut shells and burnt stone have been found in abundance in this section of laid timbers but not in the other two (21 & 15). Could be next to an area of occupation?? Would have ben lost due to M5 construction in 1960s/70s?
1310	Layer	Layer	Soft Dark Blackish Brown Clay	Very peaty and slightly clayey layer with lots of organics- nut shells, seeds etc, not seen in trenches 15 or 21. No finds.
1400	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Topsoil - Occasional root bio-turbation.Occ-abt root bioturbation, Occasional small rounded pebbles.
1401	Subsoil	Layer	Compact Mid Reddish Brown Silty clay	No inclusions.
1402	Natural	Layer	Compact Mid Orangish Red Silty clay	Mottled with streaks and patches of light grey blue silty clay- water action.
1403	Layer	Layer	Compact Mid Brownish Grey Silty clay	Abundant Iron pan flecks.
1404	Layer	Layer	Compact Mid Brownish Grey Silty clay	
1405	Layer	Layer	Compact Dark Blackish Brown Silty clay	Decayed vegetation.
1406	Layer	Layer	Compact Mid Brownish Grey Silty clay	
1407	Layer	Layer	Compact Mid Brownish Grey Silty clay	Peaty clay, abundant organics.
1408	Linear	Fill	Soft Dark Brownish Grey Silty clay	Occasional charcoal flecks and small rounded stones. This is the fill of [1409]. The fill is slightly peaty so has organics present and is waterlogged.
1409	Linear	Cut		This is a small ditch, possibly for drainage. Unknown date.
1410	Layer	Layer	Compact Mid Blueish Grey Silty clay	Layer- possible burnt mound, although only evidence of burning is in the heat shattered pebbles and these are not in abundance- ditches beside (1410)- although cut by [1409], could indicate that this could be a road?.
1411	Layer	Layer	Compact Light Blueish Grey Silty clay	Alluvium layer.
1412	tree throw	Fill	Moderately Compact Light Yellowish Grey Silty clay	This fill is sterile and with diffuse edges, probably that of a tree throw.
1413	tree throw	Cut		Cut of probable tree throw, undefined edges with shallow concave base, near sterile fill (1412)- only manganese flecks- cut is quite diffuse in plan.
1414	Layer	Layer	Mid Greyish Black Silty clay	Channel.
1415	Ditch	Fill	Compact Mid Greyish Blue Silty clay	Fill of possible ditch- in section this feature is quite diffuse with patchy areas of light and dark fill and a sandy patch at the east side of the section- see section 2. Seems to be cut by ditch [1409], no finds in fill (1415). Appears to be a result of silting, could also be a second ditch nest to burnt

Context	Feature type	Context type	Description	Interpretation/additional information
				mound (1410)- which could be a road?
1416	Ditch	Cut		Cut of linear possible ditch, cut by [1409], only a possible ditch as in section fill is quite diffuse, cut is steeper on East side, no finds in fill (1415).
1500	Topsoil	Layer	Mid Brownish Red Silty clay	Topsoil
1501	Subsoil	Layer	Mid Orangish Brown Silty clay	Subsoil
1502	Layer	Layer	Mid Greyish Brown Silty clay	
1503	Layer	Layer	Mid Grey Clay	
1504	Layer	Layer	Light Grey Clay	
1505	Layer	Layer	Mid Greyish Blue Clay	
1506	Layer	Layer	Mid Blueish Grey Clay	With some gravels. Water level at this point so unsure what is below 1506 (Thought to be natural red silty clay with some gravel).
1507	Layer	Layer	Compact Mid Greyish Brown Silty clay	Layer over structure 1508- very organic (very eggy smell) as result of alluvial deposition- covers timber structure 1508. Fire cracked pebbles and animal bone recovered from top of layer at south end of Tr 15.
1508		Structure		Possible trackway, clear edge at North of Tr 15, less clear at South as water levels are quite high making exposure of this feature almost impossible. Structure seems to be laid limber over timber with heat cracked pebbles towards the edge in layer (1507). Evidence of timber working as there are several planks and split timbers & axe marks are present on these laid timbers.
1509		Structure		Single timber plank jutting out of stepped edge of Tr 15, worked timber as has been cut and smoothed to form a plank- unknown use or form- too high in strat to be directly related to 1508. Further excavation could prove otherwise? Depth approx as not fully excavated. Plank points in S/E direction towards a large tree stump, see plan 1509. These could relate? Can not see of there is a back on plank as can not turn it over but this could be the case as there are knots on the visible side and the grain is close together.
1510	Layer	Layer	Dark Blueish Black	This is a dark blue to black layer which starts at about 30m from north end of trench, is below (1504) and is aout 0.25m in depth.
1511	Layer	Layer		Hiatus layer in reopened Tr 15 seen by ND and FK-L, lay between natural and (1506)/ in base of (1506).
1512		Structure		Wooden plank, 0.35m x 0.07m x 0.02m. No back on visible side, smooth. Orientated SW-NE.
1513		Structure		Wooden plank upright, 0.08m x 0.05m x 0.02m. No back visible, smoothed and split down the middle. Orientated SW-NE.
1514		Structure		Upright, 0.10m x 0.11m x 0.03. No back visible, smoothed and presumably cut from middle of wood.
1515		Structure		Upright, 0.06m x 0.04m x 0.02m. No back visible left as a rough stake (not worked). Orientated SW-NE.
1516		Structure		Plank, 0.37m x 0 21m x 0.03m. No back visible, smoothed and cut from middle of wood. Orientated E-W.
1600	Topsoil	Layer	Dark Greyish Brown Silty clay	Topsoil
1601	Subsoil	Layer	Reddish Grey Silty clay	Subsoil
1602	Layer	Layer	Orangish Grey Silty clay	
1603	Layer	Layer	Dark Greyish Black Silty clay	
1604	Layer	Layer	Light Whitish Grey Silty clay	
1605	Layer	Layer	Mid Blueish Grey Clay	
1606	Layer	Layer	Mid Reddish Blue Clay	
1607	Layer	Layer	Mid Brownish Grey Silty clay	
1608	Layer	Layer	Greyish Red Sandy clay	Slightly sandy clay with some gravel as well.
1609	Linear	Fill	Compact Brownish Red Silty clay	Rare small rounded stones, post-med pot and bone within fill. Fill is below (1600).
1610	Linear	Cut		Cut of linear running NW-SE with steep to vertical sides and flat base. Fill by 1609. Post-med ditch.
1700	Topsoil	Layer	Dark Greyish Brown Silty clay	Topsoil

Context	Feature type	Context type	Description	Interpretation/additional information
1701	Subsoil	Layer	Soft Pinkish Red Silty clay	Subsoil
1702	Layer	Layer	Soft Mid Yellowish Grey	
1703	Layer	Layer	Dark Grey Silty clay	
1704	Layer	Layer	Mid Blueish Grey Clay	
1705	Layer	Layer	Dark Red Silty clay	With grey patches, Possibly natural?
1800	Topsoil	Layer	Dark Greyish Brown Silty clay	Topsoil
1801	Subsoil	Layer	Reddish Brown Silty clay	Subsoil
1802	Layer	Layer	Blueish Grey Clay	
1803	Natural	Layer	Orangish Grey Silty clay	Natural
1804	Natural	Layer		Natural
1805	Natural	Layer		Natural
1806	Natural	Layer		Natural
1807	Natural	Layer		Natural
1900	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Topsoil - Occasional root and bio-turbation. Occasional small rounded pebbles.
1901	Subsoil	Layer	Compact Mid Reddish Brown Silty clay	Subsoil - No inclusions.
1902	Natural	Layer	Compact Mid Orangish Red Silty clay	Mottles with streaks and patches of light grey blue silty clay - water action.
1903	Layer	Layer	Dark Blackish Brown Silty clay	Channel.
1904	Layer	Layer	Compact Light Greyish Blue Silty clay	No inclusions.
1905	Layer	Layer	Compact Mid Brownish Blue Silty clay	
2100	Topsoil	Layer	Compact Mid Blackish Brown Silty clay	Occ-abt root bioturbation, occasional small rounded pebbles.
2101	Subsoil	Layer	Compact Mid Orangish Brown Silty clay	Subsoil
2102	Layer	Layer	Mid Whitish Grey Silty clay	
2103	Layer	Layer	Mid Brownish Grey Clay	
2104	Layer	Layer	Mid Blueish Brown Clay	
2105	Layer	Layer	Mid Greyish Brown Clay	Layer covering timber trackway very organic (very eggy smell). Process of alluvial deposition on top of timber trackway 2106.
2106	Trackway	Structure		Timber trackway- same as 1508, not as carefully laid as 1508 and does not survive quite as well as in Tr 15, water table V. high in this trench compared to Tr 15, 2106 extends southwards, water level is significant enough to cover its extent. When pumped out, trackway is revealed to cover most of south end of Tr 21 where trench has been extended, see plan 21, plan of trackway shows an approx extent of 7m x 3m.
2107		Structure		Stake taken for C14- tip only taken.
2108		Structure		Small section of a stake taken for C14 dating.
2109	Layer	Layer	Compact Mid Blueish Grey Silty clay	Layer which contains wooden trackway 2106. Glayed clays are present in this area of trench 21, south end, indicates flooding and other water action taking place in this area.
2110	Layer	Layer	Compact Mid Reddish Orange Silty clay	Appears that this layer is under 2106 and 2109, its suggested by section at southerly most limit of Tr 21. Only seen as sump for trench.
2200	Topsoil	Layer	Firm Mid Orangish Brown Silty clay	Occasional small-medium rounded stones.
2201	Subsoil	Layer	Firm Mid Orangish Brown Silty clay	Very sterile deposit, only roots seen.
2202	Layer	Layer	Firm Light Orangish Grey Silty clay	Isolated orange reductions along root channels. No inclusions other than rooting. Sterile deposit.
2203	Layer	Layer	Firm Dark Blackish Grey Silty clay	Dark flood event. Mottled deposit with rooting.
2204	Layer	Layer	Soft Light Whitish Grey Silty clay	Deposit contains frequent flecks of white calcium and rooting.
2205	Layer	Layer	Soft Mid Greyish Brown	Organic peaty layer, occasional small-medium stones.
2206	Layer	Layer	Moderately Compact Dark Grey Silty clay	Occasional small-medium stones.

Context	Feature type	Context type	Description	Interpretation/additional information
2207	Layer	Layer	Moderately Compact Mid Greenish Grey Silty clay	With gravel.
2208	Natural	Layer	Moderately Compact Mid Greenish Grey Silty sand	Occasional small stones.
2900	Topsoil	Layer		Topsoil
2901	Subsoil	Layer	Mid Greyish Red Silty clay	Subsoil
2902	Layer	Layer	Light Brownish Grey Silty clay	
2903	Layer	Layer	Light Grey Clay	Slightly lighter grey band (lighter than (2902).
2904	Layer	Layer	Dark Greyish Blue Clay	
2905	Layer	Layer	Dark Greyish Brown	With areas of light grey. Some wood visible but trench too deep to investigate.
3000	Topsoil	Layer	Compact Mid Greyish Brown Silty clay	With some small rounded sub-angular stones.
3001	Subsoil	Layer	Moderately Compact Mid Orangish Yellow Silty clay	Frequent small angular and sub rounded stones towards the base.
3002	Natural	Layer	Mid Red Clay	With grey patches and mottling, some rare small stones within.
3003	Linear	Fill	Compact Greyish Red Silty clay	With rare small sub angular stones. Fills 3004.
3004	Linear	Cut		Linear running NW-SE with fairly steep concave side and concave base. Cuts (3001) & (3002), so is probably fairly modern. 1.40m wide and 0.56m deep.
3600	Topsoil	Layer	Compact Mid Brown Silty clay	With frequent angular and rounded stones, smooth and clear boundary to (3601).
3601	Subsoil	Layer	Compact Brownish Yellow Silty clay	Smooth and clear boundary to (3602), Occasional rounded and sub-rounded small-medium pebbles.
3602	Natural	Layer	Moderately Compact Reddish Grey Clay	Clay marl, Occasional- rare rounded and sub-rounded pebbles.
3603	Ditch	Fill	Compact Reddish Grey Clay	With frequent small rounded and angular pebbles. This fill feels a lot like natural. This is the fill of the possible re-cut [3604] of ditch [3609].
3604	Ditch	Cut		This is a possible re-cut of ditch [3609]- steep to moderate sided, concave base v-shaped re-cut.
3605	Ditch	Fill	Compact Dark Orangish Grey Silty clay	With frequent charcoal flecks and rare angular pebbles.
3606	Ditch	Cut		Steep sided possible re-cut with rounded base. Cut on N side by [3604].
3607	Ditch	Fill	Compact Orangish Grey Silty clay	With rare charcoal flecks and rare rounded stones.
3608	Ditch	Fill	Compact Red Clay	With frequent rounded stones and rare charcoal flecks.
3609	Ditch	Cut		Shallow sided with concave sides that break gradually to a concave base. Cut on N side by [3606] + [3604]. Possibly a boundary ditch.
3700	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Topsoil
3701	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Subsoil
3702	Natural	Layer	Mid Orangish Red Clay	Clay marl with light blue-grey mottlin throughout.
3703	Layer	Layer	Compact Mid Yellowish Brown Silty clay	Burnt mound layer, contains abundant fire cracked and shattered pebbles. Layer is stained black in places from burning with charcoal flecks, No other datable finds.
3704	Linear	Fill	Compact Mid Grey Silty clay	Occasional charcoal flecks, rare small rounded and sub-angular stones. This fill is probably created due to water born silting and claying, maybe suggesting it was left open after use.
3705	Linear	Cut		Sub-rectangular with rounded corners. Running NE-SW. This cut is probably a water trough used in processes which created burnt mound (3703).
3800	Topsoil	Layer	Friable Mid Greyish Brown Silty clay	Occasional root bio-turbation, smooth and clear boundary to subsoil (3801).
3801	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional- rare root bio-turbation, smooth and clear boundary to (3802).
3803	Ditch	Fill	Compact Mid Yellowish Grey Silty clay	Occasional mottled red orange patches throughout fill. Occasional small rounded pebbles and fragments of quartz, occasional manganese flecks. Fill of ditch running E-W across south end of Tr 38. Could be secondary fill of palisaded ditch, fill is relatively sterile, no finds or organics, suggested palisaded as lower fill (3805) is directly below (3803) and is seen in baulk

Context	Feature type	Context type	Description	Interpretation/additional information
				section at East excavated section .
3804	Ditch	Cut		Contemporary with [3806]. Cut of ditch running E-W across south part of Tr 38. No finds in fills (3803) or (3805). This feature could be a palisaded ditch as [3806] appears ot be a contemporary cut within ditch [3804] as fill (3805) is seen in both baulk and excavated sections. Remains of cut is quite shallow
3805	Ditch	Fill	Compact Mid Blueish Brown Silty clay	Occasional-rare sub-rounded pebbles & occasional manganese flecks. Primary fill of ditch & posthole [3806]/[3804]- These cuts are contemporary as this primary fill (3805) and secondary fill (3803) are seen in both baulk and excavated sections, fill is relatively sterile with no finds.
3806	Posthole	Cut		Cut of posthole contemporary with ditch cut [3804] as both (3803) and (3805) are seen in both baulk and excavated sections. This cut provides evidence of a possible pallisaded ditch running E-W across south end of Tr 38.
3807	Pit	Fill	Compact Orangish Grey Silty clay	Becomes more blue grey towards base. This is the fill of a possible pit. This fill is very sterile and blue especially towards base.
3808	Pit	Cut		Oval though runs under baulk so is largely unknown. This is the cut of a possible pit but fill is very sterile suggesting it may be a natural feature.
3809	Ditch	Fill	Compact Light Reddish Brown Silty clay	Fill of ditch [3810] probably fairly modern but no dating recovered.
3810	Ditch	Cut		Linear ditch cut running NW-SE, probably a post-med drainage ditch but no dating recovered.
3900	Topsoil	Layer	Moderately Compact Mid Reddish Brown Silty clay	Occasional sub-rounded-rounded pebbles. Smooth and clear boundary to (3901), (3907) or (3910) depending on which area of Tr 39.
3901	Subsoil	Layer	Compact Mid Brownish Yellow Clay	Rare rounded pebbles, smooth and clear boundary to (3902). * See section [3904]- subsoil appears to be covered by alluvial deposit (3910).
3902	Natural	Layer	Friable Mid Reddish Grey Clay	Clay marl, no inclusions. Slightly mottled red with blueish grey patches.
3903	Ditch	Fill	Compact Mid Reddish Brown Silty clay	Fill of probable post-med drainage ditch with rare small rounded stones.
3904	Ditch	Cut		Linear. Cut of what is probably a post-med drainage ditch.
3905	Ditch	Fill	Moderately Compact Light Pinkish Grey Silty clay	Fill of ditch running NE-SW, no finds, fill as result of alluvial deposition.
3906	Ditch	Cut		Cut of linear, runs NE-SW. At west end of Tr 39, no finds in fill (3905), used as drainage ditch as similar feature to East of [3906] and land is very boggy and retains water.
3908	Pit	Fill	Moderately Compact Light Yellowish Grey Silty clay	This is possibly the fill of a small pit but is very sterile so could be a natural feature.
3909	Pit	Cut		Oval cut for a feature which may be a small pit but could also be a tree throw.
4000	Topsoil	Layer	Moderately Compact Mid Greyish Brown Silty clay	Occasional rounded stones.
4001	Subsoil	Layer	Moderately Compact Mid Yellowish Grey Silty clay	Some gravels and small pebbles within.
4002	Natural	Layer	Compact Red Clay	Clay marl with purple/grey patches.
4003	Ditch	Fill	Compact Light Pinkish Grey Clay	Fill of [4004] ditch cut- no finds, relatively sterile fill, could be one of many drainage ditches within field as ground is very wet. Unknown date.
4004	Ditch	Cut		Linear cut of E-W drainage ditch. Clearly cut under subsoil, unknown date as fill (4003) yielded no finds, cut probably part of system of drainage ditches seen across site as land is very boggy and wet.
4005	Posthole	Fill	Compact Mid Yellowish Grey Silty clay	Fill of possible posthole. Contained a lot of charcoal- could indicate burning of post *in-situ*?
4006	Posthole	Cut		Circular cut of a possible posthole. This looked initially like it was part of a posthole group but under further investigation it turned out to be natural staining or bioturbation.
4007	pit	Fill	Compact Light Yellowish Blue Silty clay	Mod-abt medium-large rounded pebbles & occasional charcoal flecks concentrated at base. This fill was very sterile apart from a few charcoal flecks at the base. No finds, limit of excavation of trench means no possible to determine the true nature or extent of feature- hence undetermined pit/linear terminus.
4008	Pit	Cut		This is the cut of a possible pit/ linear terminus, limit of trench excavation makes determining what this feature is very difficult, cut is very V shaped, no finds in fill (4007), therefore unknown date.
4009	Ditch	Fill	Compact Mid Greyish	Fill of ditch [4010], probably post-med as cut into subsoil (4001) and

Context	Feature type	Context type	Description	Interpretation/additional information
			Brown Silty clay	directly below topsoil (4000). No finds - very shallow in plan as mostly seen in section.
4010	Ditch	Cut		Cut of a possibly post-med drainage ditch. Cut into subsoil, directly below topsoil. Part of a system of drainage ditches across site? No finds from fill (4009).
4011	Pit	Fill	Compact Mid Reddish Brown Silty clay	Fill of [4012], possible pit. No finds in fill (4011), clearly under subsoil, relatively sterile fill, cut by land drain, fill is mottled with natural looking reddish streaks- Worm Bio-turbation?
4012	Pit	Cut		Cut of possible pit. Fill (4011) is very sterile, no finds. Cut [4012] is quite shallow and regular, feature goes into baulk at West and is cut by land drain at north. Surrounding features appear to be irregular and natural variations in (4002).
4100	Topsoil	Layer	Moderately Compact Greyish Brown Silty clay	Occasional small-medium rounded pebbles, smooth and clear boundary to (4101)
4101	Subsoil	Layer	Moderately Compact Mid Yellowish Grey Silty clay	Occasional medium-large rounded pebbles.
4102	Natural	Layer	Moderately Compact Mid Orangish Red Clay	Clayey marl with mottled light greyish blue patches throughout.
4103	Ditch	Fill	Compact Mid Greyish Blue Silty clay	Fill of ditch [4104]. Occasional small rounded pebbles. No finds, feature filled up with ground water almost immediately on excavating it. Feature is probably a drainage ditch.
4104	Ditch	Cut		Linear cut of ditch running NE-SW across Tr 41. Cut is quite steep yet concave base. Could still relate to other drainage ditches within other trenches and in field in general. As ground is very wet and boggy.
4105	Ditch	Fill	Compact Light Reddish Grey Clay	Rare small rounded pebbles. This is the fill of ditch [4106]. Has a grey clay fill so has been waterlogged. No dating was recovered.
4106	Ditch	Cut		This is a small linear drainage or boundary ditch of unknown date.
4200	Topsoil	Fill	Compact Mid Greyish Brown Silty clay	Abundant root bioturbation, diffuse and mixed boundary to (4201).
4201	Subsoil	Layer	Moderately Compact Mid Yellowish Brown Silty clay	Rare-occasional large-medium subrounded pebbles. Clear and smooth boundary to (4202).
4202	Natural	Layer	Compact Mid Orangish Red Clay	Mottled abundantly with light greyish blue clay.
4205	Ditch	Fill	Compact Mid Blueish Orange Silty clay	Fill of possible ditch [4206]. The fill is not uniform and appears as possible redeposited natural on the NE side of section only, this area in general seems to have been left a little high post machining. Or this area could be a channel but compared to the rest of the trench this area has been left high. No finds, sterile fill.
4206	Ditch	Cut		Cut of possible ditch. Cut is more established and 'real' on SW side, becomes less so at NE to point of losing it entirely and excavating what seems like re deposited natural or otherwise, difficult to see in plan on NE side, cut is only really defined by slightly lighter clay in section. Over excavated because of this in NE side.
4300	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occasional small rounded pebbles, diffuse and mixed boundary to (4301). Abundant root bioturbation.
4301	Subsoil	Layer	Compact Mid Yellowish Brown Silty clay	Occasional small rounded pebbles, clear and smooth boundary to (4302).
4302	Natural	Layer	Compact Mid Reddish Brown Clay	Silty/marl clay. Abundant mottled light blue-grey patches seen throughout natural.
4303	Ditch	Fill	Compact Mid Blackish Brown Silty clay	Rare fire cracked pebbles, occasional small rounded pebbles. Fill of ditch [4304], no finds fill is very compacted, possibly a drainage ditch, hence fill is a result of silting.
4304	Ditch	Cut		Cut of linear ditch- possible drainage ditch aligned E-W, No finds in fill (4303).
4400	Topsoil	Layer	Moderately Compact Mid Pinkish Brown Silty clay	Abundant root bioturbation, diffuse and mixed boundary to (4401).
4401	Subsoil	Layer	Moderately Compact Mid Yellowish Grey Silty clay	No inclusions, clear and smooth boundary to (4402).
4402	Natural	Layer	Compact Mid Pinkish Red Silty clay	Occasional manganese flecks.
4403	Ditch	Fill	Compact Mid Greyish Brown Silty clay	Abundant manganese flecks. Fill of ditch- possibly drainage ditch seen in many trenches in this area and in adjacent field, fill is as a result of silting.
4404	Ditch	Cut		Cut for ditch running E-W across south of Tr 44 possibly part of system of drainage ditches seen in adjacent field also, cut is concave and cut below

Context	Feature type	Context type	Description	Interpretation/additional information
				(4401).
4405	Posthole	Fill	Compact Mid Reddish Grey Silty clay	Occasional small rounded pebbles, abundant charcoal flecks. Fill of posthole, charcoal could suggest burning in situ? No finds, no other postholes within trench. Unknown date and function.
4406	Posthole	Cut		Cut of posthole in very south end of Tr 44. Cut is steep/vertical sided and clear in plan, No finds in fill (4405).
4500	Topsoil	Layer	Moderately Compact Mid Pinkish Brown Silty clay	Abundant root bioturbation, rare medium rounded pebbles, diffuse and smooth boundary to (4501).
4501	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	No inclusions, clear and smooth boundary to (4502).
4502	Natural	Layer	Moderately Compact Mid Orangish Red Silty clay	Abundant large patches of mottling with light blue/grey silty clay.
4600	Topsoil	Layer	Moderately Compact Mid Pinkish Brown Silty clay	Occasional medium rounded pebbles, diffuse and mixed boundary to (4601).
4601	Subsoil	Layer	Moderately Compact Mid Yellowish Brown Silty clay	Diffuse boundary to (4602).
4602	Natural	Layer	Compact Mid Red Clay	Bright red clay marl with grey patches.
4700	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	
4701	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	
4702	Natural	Layer	Mid Orangish Red Clay	Clay marl with abundant light blue-grey mottling throughout.
4800	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occasional-rare medium rounded pebbles, clear and smooth boundary to (4801).
4801	Subsoil	Layer	Compact Mid Yellowish Brown Silty clay	Rare rounded medium pebbles, clear and smooth boundary to (4802).
4802	Natural	Layer	Compact Mid Reddish Brown Silty clay	Abundant light grey blue patches throughout natural.
4900	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Rare subrounded medium pebbles, clear and smooth boundary to (4901).
4901	Subsoil	Layer	Compact Dark Reddish Brown Silty clay	Occasional light grey patches within natural.
4903	Ditch	Fill	Compact Light Yellowish Grey Silt	Clayey silt. This is the fill of a small shallow ditch of unknown date or function. This may have been truncated as is directly below topsoil.
4904	Ditch	Cut		This is a small linear ditch or gully of unknown date or function.
5000	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation, occasional small rounded stones.
5001	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
5002	Natural	Layer	Mid Orangish Red Clay	Clay marl with abundant light blue-grey mottling throughout.
5100	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Rare sub rounded medium stones.
5101	Natural	Layer	Compact Mid Reddish Orange Clay	Clay marl with abundant light grey flecking and patches.
5200	Topsoil	Layer	Compact Mid Pinkish Grey Silty clay	Occasional subrounded-rounded pebbles, diffuse and mixed boundary to (5201).
5201	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles, clear and smooth boundary to (5202).
5202	Natural	Layer	Compact Mid Reddish Orange Clay	Clay marl. Occasional mottled light blue-grey patches seen within trench.
5203	Layer	Layer	Compact Light Greyish Brown Silt	Clayey silt. This is a fairly modern spread of stone rubble, on plan it looks like two distinct areas but is probably just one.
5204	Layer	Layer	Compact Light Greyish Brown Silt	Clayey silt. This is a fairly modern spread of stone rubble, on plan it looks like two distinct areas but is probably just one.
5205	Ditch	Fill	Compact Mid Greyish Red Clay	Rare rounded stones on surface. This ditch fill was identified on surface by a yellow stripe, but fill below became increasingly read so may just be a plough scar. There is a chance it could be a shallow ditch or gully, but seems unlikley.
5206	Ditch	Cut		Linear, possible shallow gully but more likely to be a plough scar, see sheet (5205).
5300	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abundant root bioturbation, occasional small rounded pebbles.

Context	Feature type	Context type	Description	Interpretation/additional information
5301	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
5302	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
5400	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occasional - abundant root bioturbation. Occasional small rounded pebbles.
5401	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
5402	Natural	Layer	Mid Orangish Red Clay	Clay marl abundant light blue-grey mottling throughout.
5403	Ditch	Fill	Compact Light Reddish Grey Silt	Clayey silt. This is the fill of ditch [5404]. Fill looks like a re-deposited natural and is probably the same as (5503). N
5404	Ditch	Cut		This is probably a small post-med drainage ditch. Probably the same as [5504].
5500	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occasional - abundant root bioturbation. Occasional small rounded pebbles.
5501	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
5502	Natural	Layer	Mid Orangish Red Clay	Clay marl abundant light blue-grey mottling throughout. Abundant root bioturbation from trees and hedge to NE side of trench.
5503	Ditch	Fill		This is the fill of ditch [5504], which is probably a post-med drainage ditch. The fill feels like a re-deposited natural.
5504	Ditch	Cut		This is the cut for what is probably a small post-med drainage ditch.
5600	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occasional - abundant root bioturbation. Occasional small rounded pebbles.
5601	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
5602	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
5700	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occasional - abundant root bioturbation. Occasional small rounded pebbles.
5701	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
5702	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
5800	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occasional - abundant root bioturbation, Occasional small rounded pebbles. Slightly diffuse and smooth boundary to (5801).
5801	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles. Clear and smooth boundary to (5802).
5802	Natural	Layer	Mid Orangish Red Clay	Clay marl. Abundant light blue-grey mottling throughout.
5900	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
5901	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
5902	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
6000	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occasional - abundant root bioturbation. Occasional small rounded pebbles.
6001	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
6002	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey motlting throughout.
6003	Linear	Fill	Moderately Compact Mid Yellowish Brown Silt	Clayey silt . Fill of [6004]. This fill is more silty than other features possibly suggesting it has been left open to silt up.
6004	Linear	Cut		This is possibly the terminus of a small ditch of unknown function or date.
6100	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
6101	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
6102	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
6103	Ditch	Fill	Compact Mid Orangish Grey Silt	Clay silt but . This is the fill of [6104] which is probably a post-med boundary, truncated- probably by modern ploughing. See section [6104].
6104	Ditch	Cut		This is the cut of a linear ditch. No finds in fill, probably a post-med boundary ditch, cut through subsoil- Quite heavily truncated-probably by modern ploughing..
6200	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.

Context	Feature type	Context type	Description	Interpretation/additional information
6201	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
6202	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
6300	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
6301	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
6302	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
6400	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ- abt root bioturbation. Occasional small rounded pebbles.
6401	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
6402	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
6500	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ- abt root bioturbaiton. Occasional small rounded pebbles.
6501	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
6502	Natural	Layer	Mid Pinkish Red Clay	Clay marl, abundant light blue- grey mottling throughout.
6600	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ- abt root bioturbation, occasional small rounded pebbles.
6601	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
6602	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
6700	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occasional- abundant root bioturbation. Occasional small rounded pebbles.
6701	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
6702	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
6800	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
6801	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
6802	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
6803	Ditch	Fill	Firm Mid Orangish Brown Silty clay	Occ-abt small subrounded pebbles. Fill of ditch [6804] only find was a single small fragment of CBM- Brick or otherwise suggests it is modern. As cut under topsoil (6800)- Could be drainage ditch.
6804	Ditch	Cut		Cut of linear ditch, CBM- small fragment found in (6803) suggests feature could be modern drainage ditch. Also feature is cut below topsoil (6800).
6900	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
6901	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
6902	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
7000	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
7001	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
7002	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
7100	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
7101	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
7102	Natural	Layer	Mid Orangish Red Clay	Clay marl, same as (5802) except large areas of light blue silty clay within red silty clay, especially at Eastern end of trench- result of water action.
7103	Layer	Layer	Mid Reddish Blue Clay	Reddish grey blue clay marl. Same as (7703) alluvial. Only seen in section at Eastern end of trench. This is probably the same as (7102) but has been affected by water action.
7200	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
7201	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
7202	Natural	Layer	Mid Orangish Brown Clay	Clay marl, abundant light blue-grey mottling throughout.

Context	Feature type	Context type	Description	Interpretation/additional information
7300	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
7301	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
7302	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
7303	Layer	Layer	Mid Reddish Blue Clay	This is probably the same as (7302) but has been affected by water action.
7400	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbaiton. Occasional small rounded pebbles.
7401	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
7402	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
7403	Layer	Layer	Mid Reddish Blue Clay	Mid reddish blue clay marl. This is probably 7402 which has been affected by water action.
7404	tree throw	Fill	Compact Dark Greyish Blue Silty clay	Frequent charcoal flecks.
7405	tree throw	Cut		Roughly oval in plan though slightly irregular with fairly shallow sides and flat base. This is probably a tree throw but had charcoal within fill (7404).
7500	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
7501	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
7502	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
7503	Layer	Layer	Mid Reddish Blue Clay	Mid reddish grey blue clay marl alluvial. This is possibly the same as (7502) but has been affected by water action.
7504	Layer	Layer	Compact Mid Blueish Grey Silty clay	Very compact, no inclusions.
7505	Layer	Layer	Compact Mid Greyish Brown Silty clay	Part of channel, abundant streaks of small rounded pebbles within alluvial deposit.
7506	tree throw	Fill	Moderately Compact Light Reddish Grey Silty clay	Frequent charcoal flecks, occasional small rounded stones and heat cracked stones. Also frequent manganese flecks. This is the fill of [7507]. The fill is light grey clay, is probably the result of silting and water action. Finds include Bronze Age or possibly Neolithic pot and flint fragments. Possibly waste flint.
7507	tree throw	Cut		This is probably a tree throw as is irregular but looks like it has been used as a rubbish dump or pit. Finds in fill (7506) include pot and flint. Probably Bronze Age/Neolithic.
7600	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
7601	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
7602	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout. Same as (5802) except in middle of this trench there is an area of light blue silty clay.
7603	Layer	Layer	Mid Reddish Blue Clay	Mid reddish grey blue clay marl. This is probably the same as (7602) but has been affected by water action.
7700	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
7701	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
7702	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
7703	Layer	Layer	Mid Reddish Blue Clay	Mid reddish grey blue clay marl. This is probably the same as (7702) but has been affected by water action.
7800	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
7801	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
7802	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
7803	Ditch	Fill	Mid Reddish Brown Clay	Reddish grey brown clay is "blocky" and breaks up easily. One bone found in fill. Rare small rounded stones.
7804	Ditch	Cut		Linear running Se-NW with moderate concave sides and concave base. Is probably post-med as is cut from below topsoil. Drainage ditch?
7805	Layer	Layer	Mid Reddish Blue Clay	Mid reddish grey blue clay marl. This is probably the same as (7802) but has been affected by water action.
7900	Topsoil	Layer	Compact Mid Pinkish	Occ-abt root bioturbation. Occasional small rounded pebbles.

Context	Feature type	Context type	Description	Interpretation/additional information
			Brown Silty clay	
7901	Subsoil	Layer	Compact Light Reddish Grey Silty clay	Occasional small rounded pebbles. Same as (5801) but a bit more clayey and light reddish grey in colour
7902	Natural	Layer	Red Clay	Bright red clay marl.
7903	Layer	Layer	Compact Mid Greyish Brown Silty clay	Alluvial.
7904	Layer	Layer	Compact Mid Greyish Brown Silty clay	Mid greyish blue brown, becomes paler blue towards the base.
8000	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
8001	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
8002	Natural	Layer	Red Clay	Bright red clay marl. Same as (7902) though in NW end the natural is discoloured due to rooting and presence of organics. Has become a dark reddish brown.
8003	Layer	Layer	Compact Mid Greyish Brown Silty clay	Alluvial.
8004	Layer	Layer	Mid Greyish Brown Silty clay	Mid greyish blue brown becomes a paller blue towards the base.
8100	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
8101	Subsoil	Layer	Light Reddish Grey Silty clay	Occasional small rounded pebbles. Same as (5801) except a bit more clayey and light reddish grey in colour.
8102	Natural	Layer	Red Clay	Bright red clay marl.
8103	Layer	Layer	Compact Mid Greyish Brown Silty clay	Alluvial.
8104	Layer	Layer	Mid Greyish Brown Silty clay	Mid greyish blue brown becomes a paler blue towards the base.
8105	Linear	Fill	Soft Mid Greyish Red Sandy clay	This fill feels like natural that has been dug up from somewhere else which originally suggested it was machine filled but it is sealed by subsoil making this unlikely.
8106	Linear	Cut		This cut has the shape more like a furrow than a ditch but fill is sealed by subsoil so seems unlikely it is a post-med furrow.
8107	Ditch	Fill	Compact Light Greyish Brown Silty clay	Streaked with abundant iron pan and rare charcoal flecks. Fill of ditch [8108], very similar colour to surrounding alluvial- probably filled with alluvial as a result of water action? Hence iron pan? A single small fragment of possibly bronze age pot from fill. Fill iself is relatively sterile, except for the rare fragments of charcoal.
8108	Ditch	Cut		Cut of ditch, Fill (8107) appears to result from water action on surrounding alluvium. As fill looks same/ similar to surrounding alluvial (8103). Cut is very steep and almost flat bottomed- could be drainage ditch given the marshy conditions of surrounding area.
8109	Pit	Fill	Moderately Compact Light Reddish Grey Silty clay	Frequent charcoal flecks. This fill is clayey and is probably filled by water activity.
8110	Pit	Cut		Roughly round. This is possibly a small pit or base of posthole of unknown date or function.
8200	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
8201	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay loam	Occasional small rounded pebbles.
8202	Natural	Layer	Mid Orangish Red Clay	Clay marl same as (5802) except larger areas of light blue grey silty clay- water action.
8203	Layer	Layer	Compact Mid Blueish Brown Silty clay	Light-mid blue greyish brown silty clay. Probably same as (7903).
8204	Ditch	Fill	Moderately Compact Mid Reddish Grey Silty clay	Occasional small rounded and angular stones. This is the fill of [8205], probably a post-med drainage ditch.
8205	Ditch	Cut		Cut of modern ditch- as under topsoil (8200), no finds in fill (8204), possibly a post-med drainage ditch.
8300	Topsoil	Layer	Compact Dark Brown Silt	Clayey silt. Occasional small- medium rounded stones.
8301	Subsoil	Layer	Compact Orangish Brown	Moderate small-medium rounded stones.
8302	Layer	Layer	Compact Mid Brownish Grey Silt	Clayey silt but . Moderate small-large rounded stones. Alluvial.
8303	Natural	Layer	Orangish Red Clay	Natural marl.

Context	Feature type	Context type	Description	Interpretation/additional information
8304	Ditch	Fill	Mid Orangish Brown Silty clay	Occasional small-large rounded stones.
8305	Ditch	Cut		Cut of channel/ditch.
8306	Layer	Layer	Firm Mid Orangish Brown Silt	Sandy silt. Frequnt very fine flecks of charcoal, manganese, stones and CBM. Colluvial layer.
8307	Posthole	Fill	Compact Light Orangish Grey Silt	Sandy clayey silt. Occasional flecks of CBM and charcoal- larger than those seen in layer (8306) above. Surprisingley low clay content for the area.
8308	Posthole	Cut		Sub-ovoid cut, full extent not seen. No corners. Might conceivably be a posthole in a ditch terminus.
8309	Posthole	Fill	Compact Light Orangish Grey Silt	Sandy clayey silt. Occasional flecks of CBM and charcoal- larger than those seen in layer (8306) above. Surprisingley low clay content for the area.
8310	Posthole	Cut		Posthole cut.
8311	Tree throw	Fill	Firm Mid Orangish Brown Silt	Sandy silt. Frequent very fine flecks of charcoal, mangaese, stones and CBM. Uppermost parts of fill like (8306), but becomes more clay rich and with fewer inclusions with depth. Appears disturbed. Loose fill of tree throw with re-deposited natural mixed in alluvial deposits. Also, likely that some of layer (8306), which seals this feature, washed/ sank- colluvial.
8312	Tree throw	Cut		Tree throw appeared linear in plan, but extends beyond LoE and probably misleading. Only the SW part of the edge felt good (the terminus was prper flakey). Top Bos clear and steep in parts, diffuse in others. Sides shallow concave curve @ c.40%. No base as such- beyond LoE. Orientated NW-SE if at all. Not truncated, filled by (8311). Prehistoric tree throw.
8400	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
8401	Subsoil	Layer	Compact Mid Reddish Grey Silty clay	Same as (5801) except that colour is more reddish grey than yellowish grey. Occasional small rounded pebbles.
8402	Natural	Layer	Mid Orangish Red Clay	Clay marl. Like (5802) except larger patches of light blue-grey silty clay.
8500	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
8501	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
8502	Natural	Layer	Mid Orangish Red Clay	Clay marl. Abundant patches of light blue-grey mottling throughout.
8503	Ditch	Fill	Compact Mid Orangish Grey Silt	Clayey silt.
8504	Ditch	Cut		Cut of linear - no finds in fill (8503), probably a post-med boundary ditch, cut through subsoil.
8505	Posthole	Fill	Compact Mid Reddish Grey Silty clay	Occasional small rounded pebbles. This is the fill of [8506], the base of a possible posthole.
8506	Posthole	Cut		This cut is possibly the base of a small posthole.
8600	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
8601	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
8602	Natural	Layer	Mid Orangish Red Clay	Clay marl. Abundant light blue-grey mottling throughout.
8700	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
8701	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
8702	Natural	Layer	Mid Orangish Red Clay	Clay marl. Same as (5802) except larger patches of light blue grey marl with mid orange/red clay/marl.
8703	Posthole	Fill	Mid Red Clay	Clay marl fill of possible posthole. One small piece of Severn Valley ware in fill. Otherwise fill looked natural.
8704	Posthole	Cut		Posthole. Fill looked natural with only one small piece of Severn Valley ware.
8800	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
8801	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
8802	Natural	Layer	Mid Orangish Red Clay	Clay marl. Abundant light blue-grey mottling throughout.
8900	Topsoil	Layer	Dark Brown Silt loam	Occasional small aub-angular gravels. Occasional charcoal flecks. Grassed.
8901	Subsoil	Layer	Mid Brown Silt loam	Occasional small sub-angular gravels.
8902	Natural	Layer	Reddish Brown Clay	Natural clay marl.
9000	Topsoil	Layer	Compact Mid Pinkish	Occ-abt root bioturbation. Occasional small rounded pebbles.

Context	Feature type	Context type	Description	Interpretation/additional information
			Brown Silty clay	
9001	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
9002	Natural	Layer	Mid Orangish Red Clay	Clay marl. Abundant light blue-grey mottling throughout.
9100	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
9101	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
9102	Natural	Layer	Mid Orangish Red Clay	Clay marl. Abundant light blue-grey mottling throughout.
9200	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
9201	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
9202	Natural	Layer	Mid Orangish Red Clay	Clay marl. Abundant light blue-grey mottling throughout.
9203	Palaeochannel	Layer	Dark Reddish Blue Clay	Dark reddish grey blue clay- probably a palaeochannel fill.
9300	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
9301	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
9302	Natural	Layer	Mid Orangish Red Clay	Clay marl. Abundant light blue-grey mottling throughout.
9303	Ditch	Fill	Compact Light Yellowish Grey	Mixed colour:- light yellow grey- mid brownish red. Occasional small-medium rounded pebbles. Fill of ditch- feels like disturbed natural in places within feature, as fill is mixed and variable. Unknown cause possibly bioturbation?
9304	Ditch	Cut		This has the shape and appearance of a small ditch but fill is very variable and feels geological. No dating was recovered.
9400	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
9401	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
9402	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
9500	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
9501	Subsoil	Layer	Compact Light Brownish Grey Silt	Clayey silt. Occasional small-medium rounded stones. Moderate orange iron pan flecks, occasional manganese flecks.
9502	Layer	Layer	Compact Mid Greyish Brown Silty clay	Moderate orange iron pan flecks. Only appears at East end of trench. Alluvium.
9503	Natural	Layer	Mid Brownish Red Clay	Clay marl with green grey patches.
9600	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
9601	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
9602	Natural	Layer	Mid Orangish Red Clay	Clay marl. Abundant light blue-grey mottling throughout.
9603	Palaeochannel	Layer	Compact Dark Greyish Blue Clay	
9700	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
9701	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
9702	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
9800	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional smalll rounded pebbles.
9801	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
9802	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
9803	Ditch	Fill	Compact Mid Reddish Brown Silty clay	Mid greyish red brown. Frequent rounded pebbles. This is the fill of boundary ditch [9804].
9804	Ditch	Cut		This ditch is in the correct place for a field boundary shown on a post-med map and also apears in correct place in trenches 99-100. The cut in-fill excavated in these trenches are all sealed by subsoil and only roman pttery recovered, though not in this trench. Possibly a Roman field boundary

Context	Feature type	Context type	Description	Interpretation/additional information
				ditch?
9900	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
9901	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
9902	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
9903	Ditch	Fill	Compact Mid Yellowish Brown Silty clay	Mottled with streaks of mid orange red. Rare small rounded pebbles. Secondary fill of ditch [9905], no finds. Probably post-med drainage ditch, fill is very similar to primary silting fill (9904), cut through subsoil (9901).
9904	Ditch	Fill	Compact Light Yellowish Brown Silty clay	Rare angular small pebbles. Primary fill of ditch [9905], no finds, similar to secondary fill (9903). (9904) must be initial silting phase of feature, ditch is potentially a post-med drainage ditch as is cut through subsoil (9901).
9905	Ditch	Cut		Cut of ditch [9905], primary and possible secondary silting stages in fills (9903) & (9904)- Feature probably associated with other drainage ditches within adjacent fields- as ground water is quite high in this area in general.
9906	Ditch	Fill	Compact Light Blueish Grey	Abundant iron pan streaks and flecks. Occasional small subrounded pebbles. Fill of slightly curving linear. Single main silting phase= (9906). No finds, probably a drainage ditch.
9907	Ditch	Cut		Cut of possible drainage ditch, main silting phase (9906). No finds in fill, under subsoil (9901). Potentially post-med?
9908	Ditch	Fill	Compact Light Reddish Grey Silty clay	Occasional rounded and angular stones. Fill of ditch [9909].
9909	Ditch	Cut		This ditch appears on a map of post-med field boundaries. It is sealed by subsoil and only Roman pot found within fills. Could be a Roman field boundary that has survived in some form into post-med period? This ditch was excavated in trenches 98 & 100.
10000	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
10001	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
10002	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout. Same as (5802) except occasional small-medium rounded pebbles.
10003	Ditch	Fill	Compact Light Greyish Blue Silty clay	Streaked with mid orange red. Occasional sub rounded pebbles. Fill of boundary ditch, upper part of fill is redder with a possible band of this at top of feature. Could be result of ploughing or some other disturbance, fill in general is mottled and streaked with this red/orange, could suggest silting up of feature. No finds.
10004	Ditch	Cut		Cut of boundary ditch- cut is almost V shaped follow same alignment of boundary ditch that is seen on map showing field boundaries within this area. No finds in fill (10003).
10100	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
10101	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
10102	Natural	Layer	Mid Orangish Red Clay	Clay marl. Abundant light blue-grey mottling throughout. Same as (5802) except rare occasional small rounded pebbles.
10103	Furrow	Fill	Compact Light Yellowish Grey Silty clay	Mod small-medium rounded pebbles. Fill of furrow/plough scar, feature seems to be directly under topsoil (10100). Suggests relatively modern- fill is light in colour and quite pebbly. No finds.
10104	Furrow	Cut		Furrow/plough scar, very little remains in plan, very shallow feature. Indistinct edges suggest this feature is a plough scar/furrow- also these features have been seen in other adjacent trenches - Tr 100.
10200	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
10201	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
10202	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
10300	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
10301	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
10302	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
10400	Topsoil	Layer	Compact Mid Pinkish	Oc-abt root bioturbation. Occasional small rounded pebbles.

Context	Feature type	Context type	Description	Interpretation/additional information
			Brown Silty clay	
10401	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
10402	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundnat light blue-grey mottling throughout.
10500	Topsoil	Layer	Compact Mid Blackish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
10501	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
10502	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
10503	Ditch	Fill	Compact Mid Brownish Red Silty clay	Occasional small rounded pebbles. The fill is reddish in colour so is natural that has been re-deposited and it is cut from below topsoil so is probably post-med.
10504	Ditch	Cut		This small ditch cuts subsoil so is probably post-med, drainage ditch?
10600	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
10601	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
10602	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
10700	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
10701	Subsoil	Layer	Compact Mid Brownish Grey Silty clay	Occasional small rounded pebbles.
10702	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
10800	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
10801	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles. This is the same as (5801) although in this trench it is often thin or not visible as is probably at least partially ploughed out.
10802	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
10900	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
10901	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
10902	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
11000	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
11001	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
11002	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
11100	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
11101	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
11102	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
11200	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
11201	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
11202	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
11300	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
11301	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
11302	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
11303	Layer	Layer	Dark Reddish Brown Silty clay	This layer is described as a mid-dark reddish-purple-black-brown silty clay, and is seen at the NE end of the trench only. Possibly the same channel seen in Tr 92?
11400	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
11401	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
11402	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout. Same as (5802)

Context	Feature type	Context type	Description	Interpretation/additional information
				except root bioturbation seen within natural at south end of trench.
11403	Layer	Layer		Alluvial- only seen in section at south of trench.
11500	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
11501	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
11502	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
11505	Layer	Layer		Alluvial- seen at West end of trench.
11600	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
11601	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
11602	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
11603	Layer	Layer		Alluvial.
11700	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
11701	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
11702	Natural	Layer	Mid Pinkish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
11800	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
11801	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
11802	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
11803	Layer	Layer	Compact Light Blueish Grey Clay	Glayed clay, occasional small rounded pebbles. Alluvial.
11900	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
11901	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
11902	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
11903	Layer	Layer	Compact Light Blueish Grey Clay	Glayed clay, occasional small rounded pebbles. Alluvial.
12000	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
12001	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
12002	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout.
12100	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
12101	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	
12102	Natural	Layer	Light Blueish Grey Silty clay	Comparable to (5802) but more light blue grey silty clay marl with streaks of mid reddish orange brown rather than an orangish brown with light blue grey mottling (5802).
12103	Layer	Layer	Compact Mid Greyish Brown Silty clay	Alluvial. Occasional iron pan flecks.
12104	Layer	Layer	Compact Mid Blueish Grey Silty clay	Occasional medium rounded pebbles.
12105	Palaeochannel	Layer	Dark Blue Clay	
12200	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
12201	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
12202	Natural	Layer	Light Blueish Grey Silty clay	Same as (5802) except more light blue grey silty caly marl with streaks of mid reddish orange brown rather than orangeish red marl with light blue-grey mottling (5802).
12203	Layer	Layer	Compact Mid Greyish Brown Silty clay	Alluvial. Occasional iron pan flecking.
12204	Layer	Layer	Compact Mid Blueish Grey Silty clay	Alluvial. Occasional medium rounded pebbles.

Context	Feature type	Context type	Description	Interpretation/additional information
12205	Ditch	Fill	Compact Mid Reddish Grey Clay	Fill of post-med ditch, finds include post-med brick, glazed pot, CBM and one larg worked stone with a depression in the centre. Post pad? Door stop? Possibly purposely back-filled drainage ditch?
12206	Ditch	Cut		Post-med ditch cut. Possibly purposely backfilled drainage ditch? Cut only seen in section- machine excavated, post-med as under subsoil.
12300	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
12301	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	
12302	Natural	Layer	Light Blueish Grey Silty clay	Same as (5802) except more light blue-grey silty clay marl with streaks of mid reddish orange brown rather than orangish red with light blue-grey mottling (5802).
12303	Layer	Layer	Compact Mid Greyish Brown Silty clay	Occasional iron pan flecks.
12304	Layer	Layer	Compact Mid Blueish Grey Silty clay	Alluvial. Occasional medium rounded pebbles.
12305	Layer	Layer	Compact Mid Reddish Grey Clay	No inclusions.
12306	Layer	Layer	Compact Mid Greyish Brown Silty clay	Mid greyish blue brown. No inclusions.
12400	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root biotubation. Occasional small rounded pebbles.
12401	Subsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occasional small rounded pebbles. Similar to (5801) but slightly more clayey and pink brown in colour.
12402	n	Layer	Mid Orangish Red Clay	Clay marl, similar to (5802) but has a lot more areas of blue grey clay running through it, due to water action.
12403	Layer	Layer	Mid Yellowish Grey Clay	Very frequent small rounded pebbles. Alluvial.
12404	Layer	Layer	Mid Reddish Grey Clay	Occasional small rounded pebbels.
12405	Layer	Layer	Soft Mid Greyish Blue Clay	Part of an alluvial channel.
12406	Layer	Layer	Soft Light Blueish Grey Clay	Probably alluvial.
12407	Fill/layer	Fill	Compact Mid Blueish Black Silty clay	Dark black- mid blueish grey black. Abundant fire-cracked and shattered pebbles and quartzite. Fill/layer - burnt mound – sat in shallow cut. No finds. Feature is very irregular in shape but this may result from o confines of trench.
12408	Cut	Cut		Cut containing burnt mound. E-W aligned, True extent unknown due to confines of trench. No finds in fill (12407). Cut not fully excavated.
12500	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
12501	Subsoil	Layer	Compact Mid Reddish Brown Silty clay	No inclusions. Slightly wavey but clear boundary to (12503)
12502	Natural	Layer	Mid Orangish Red Clay	Clay marl, abundant light blue-grey mottling throughout. Mod-abundant small-medium rounded pebbles.
12503	Layer	Layer	Compact Mid Yellowish Brown Silty clay	Mid greyish yellow brown. Occasional small rounded pebbles and flecks of manganese, smooth and clear boundary to (12405).
12504	Layer	Layer	Compact Mid Greyish Blue Silty clay	Mid greyish blue- red brown. Occasional small rounded pebbles, clear and smooth boundary to (12502)
12600	Topsoil	Layer	Compact Mid Pinkish Brown Silty clay	Occ-abt root bioturbation. Occasional small rounded pebbles.
12601	Subsoil	Layer	Firm Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
12602	Natural	Layer	Compact Mid Greyish Blue Silty clay	Streaked with mid reddish orange silty clay. Occasional small-medium rounded pebbles.
12603	Layer	Layer	Compact Mid Greyish Brown Silty clay	No inclusions.
12604	Layer	Layer	Compact Light Greyish Brown Silty clay	No inclusions.
12605	Layer	Layer	Compact Mid Greyish Blue Silty clay	No inclusions.
12606	Palaeo-channel	Layer	Compact Dark Blackish Blue Silty clay	Occasional root bioturbation- probably a decayed vegetation layer- Possible palaeochannel?
12700	Topsoil	Layer	Compact Mid Pinkish	Occ-abt root bioturbation. Occasional small rounded pebbles.

Context	Feature type	Context type	Description	Interpretation/additional information
			Brown Silty clay	
12701	Subsoil	Layer	Compact Mid Yellowish Grey Silty clay	Occasional small rounded pebbles.
12702	Natural	Layer	Mid Reddish Brown Silty sand	Abundant small-medium sub rounded pebbles.
12703	Layer	Layer	Compact Light Reddish Brown Silty clay	No inclusions.
12704	Layer	Layer	Compact Light Yellowish Blue Silty clay	Becomes darker.
12705	Layer	Layer	Compact Mid Greyish Blue Silty clay	
12706	Layer	Layer	Compact Mid Greyish Blue Silty clay	Streaks of reddish brown silty clay throughout.
12707	Layer	Layer	Compact Dark Brownish Black Silty clay	Silty clay peat on top of gravels (12709)
12708	Layer	Layer	Compact Mid Greyish Blue Silty clay	
12709	Layer	Layer	Mid Blueish Grey Silty clay	c. 60% rounded flint gravel. V top of natural with alluvial clays mixed in and Occasional flecks of charcoal and possible daub - sampled.

Appendix 2 Radiocarbon dating results

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REPORT OF RADIOCARBON DATING ANALYSES

Dr. Nick Daffern

Report Date: 6/29/2010

University of Worcester

Material Received: 6/21/2010

Sample Data	Measured Radiocarbon Age	13C/12C Ratio	Conventional Radiocarbon Age(*)
Beta - 280909	2390 +/- 40 BP	-26.9 o/oo	2360 +/- 40 BP

SAMPLE : P3295/(2108)
ANALYSIS : AMS-Standard delivery
MATERIAL/PRETREATMENT : (wood): acid/alkali/acid
2 SIGMA CALIBRATION : Cal BC 520 to 380 (Cal BP 2470 to 2330)

Dates are reported as RCYBP (radiocarbon years before present, "present" = AD 1950). By international convention, the modern reference standard was 95% the 14C activity of the National Institute of Standards and Technology (NIST) Oxalic Acid (SRM 4990C) and calculated using the Libby 14C half-life (5568 years). Quoted errors represent 1 relative standard deviation statistics (68% probability) counting errors based on the combined measurements of the sample, background, and modern reference standards. Measured 13C/12C ratios (delta 13C) were calculated relative to the PDB-1 standard.

The Conventional Radiocarbon Age represents the Measured Radiocarbon Age corrected for isotopic fractionation, calculated using the delta 13C. On rare occasion where the Conventional Radiocarbon Age was calculated using an assumed delta 13C, the ratio and the Conventional Radiocarbon Age will be followed by "*". The Conventional Radiocarbon Age is not calendar calibrated. When available, the Calendar Calibrated result is calculated from the Conventional Radiocarbon Age and is listed as the "Two Sigma Calibrated Result" for each sample.

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-26.9:lab. mult=1)

Laboratory number: **Beta-280909**

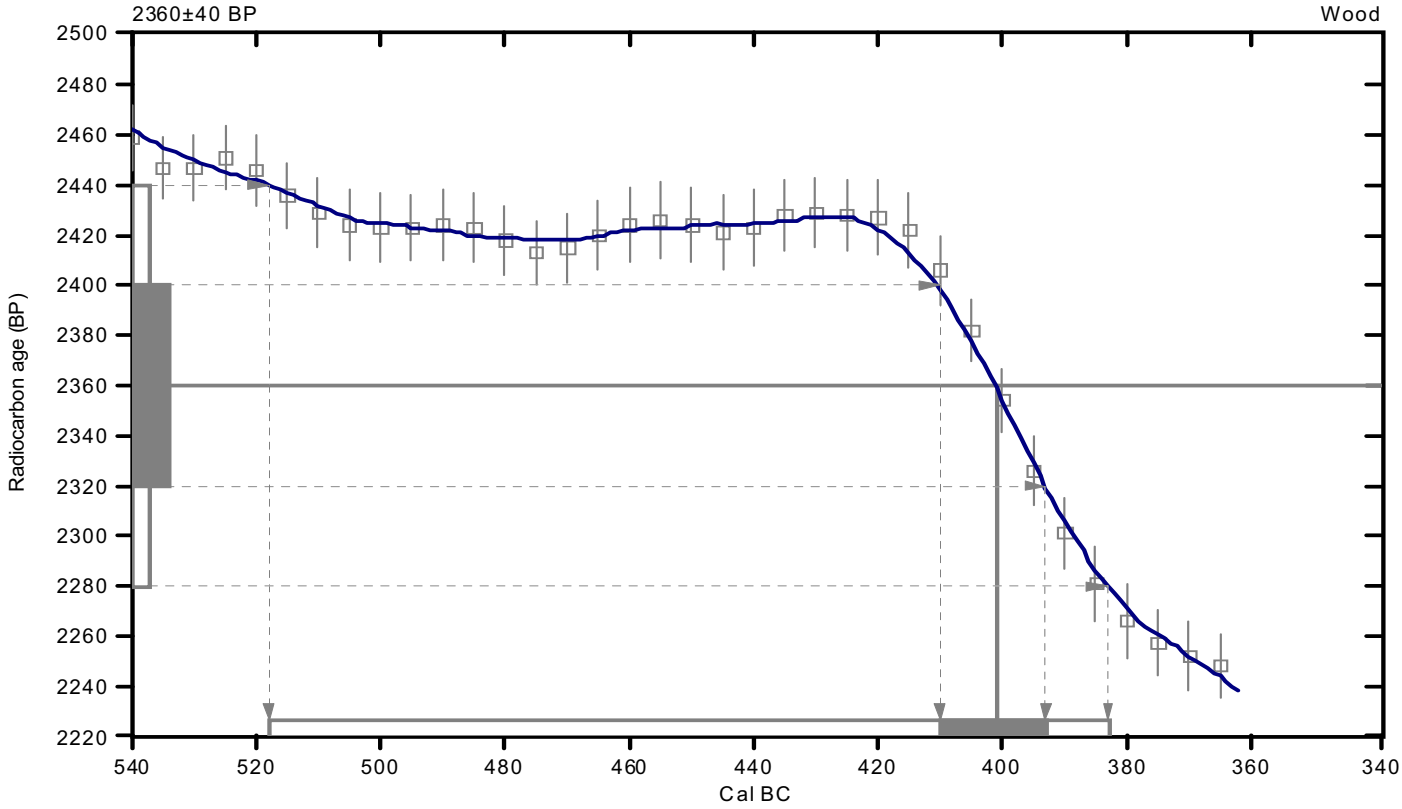
Conventional radiocarbon age: **2360±40 BP**

2 Sigma calibrated result: (95% probability) **Cal BC 520 to 380 (Cal BP 2470 to 2330)**

Intercept data

Intercept of radiocarbon age with calibration curve: Cal BC 400 (Cal BP 2350)

1 Sigma calibrated result: (68% probability) Cal BC 410 to 390 (Cal BP 2360 to 2340)



References:

Database used

INTCAL04

Calibration Database

INTCAL04 Radiocarbon Age Calibration

IntCal04 Calibration Issue of Radiocarbon (Volume 46, nr 3, 2004).

Mathematics

A Simplified Approach to Calibrating C14 Dates

Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2), p317-322

Beta Analytic Radiocarbon Dating Laboratory

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Appendix 3 Pollen processing methodology

(Tim Mighall, Department of Geography & Environment, University of Aberdeen)

ABSOLUTE POLLEN ANALYSIS: PREPARATION SCHEDULE

PRECAUTIONARY NOTES: All procedures, up to stage 25, should take place in the fume cupboard. Read precautionary notices on fume cupboard before starting. Ascertain whereabouts of First Aid equipment NOW. Please wear laboratory coat, gloves and goggles when dealing with all chemicals. Please organize fume cupboard carefully to maximize workspace. Use the containment trays provided. Always keep the fume cupboard door down as far as practically possible. Make sure the fume cupboard is switched on and functioning correctly.

A) SOLUTION OF HUMIC COMPOUNDS

1) Switch on hotplate to heat water bath. Prepare 12 to 16 samples concurrently.

HCl. is an irritant and can cause burns. Wear gloves. Wash with water if spilt on your skin.

Using a clean spatula, place a known volume or weight of sediment (c. 2cm^3) and one spore tablet in each 50ml centrifuge tube. Add a few cm^3 of distilled water (enough to cover the pellet and tablets) and a few drops of 2M HCl. Wait until effervescence ceases, then half fill tubes with 10% KOH; place in a boiling water bath for 15 minutes. Stir to break up sediment with clean glass rod. Return HCl and KOH bottles to the chemical cabinet.

2) Centrifuge at 3,000 rpm for 5-6 minutes, ensuring first that tubes are filled to the same level. This applies throughout the schedule (Mark 7 on centrifuge).

3) Carefully decant, i.e. pour away liquid from tube, retaining residue. Do it in one smooth action.

4) Disturb pellet using vortex mixer; add distilled water, centrifuge and decant.

5) Using a little distilled water, wash residue through a fine (180 micron) sieve sitting in filter funnel over a beaker. NB Be especially careful in keeping sieves, beakers and all tubes in correct number order. Wash residue on sieve mesh into petri dish and label the lid. If beaker contains mineral material, stir contents, wait four seconds, then decant into clean beaker, leaving larger mineral particles behind. Repeat if necessary. Clean centrifuge tube and refill with contents of beaker.

6) Centrifuge the tubes and decant.

B) HYDROFLUORIC ACID DIGESTION

***(Only required** if mineral material clearly still present. Otherwise, go to stage 13)*

NB Hydrofluoric acid is extremely corrosive and toxic; it can cause serious harm on contact with eyes and skin. Rubber gloves and mask/ goggles MUST be worn up to and including stage 11. Please fill sink with H_20; have $CaCo_3$ gel tablets ready. Place pollen tube rack into tray filled with sodium bicarbonate.

7) Disturb pellet with vortex mixer. Add one cm^3 of 2M HCl.

8) With the fume cupboard sash lowered between face and sample tubes, very carefully one-third fill tubes with concentrated HF (40%). Place tubes in water bath and simmer for 20 minutes.

9) Remove tubes from water bath, centrifuge and decant down fume cupboard sink, flushing copiously with water.

10) Add 8cm^3 2H HCl to each tube. Place in water bath for 5 minutes. Do not boil HCl.

11) Remove tubes, centrifuge while still hot, and decant.

12) Disturb pellet, add distilled water, centrifuge and decant.

C) ACETYLATION

NB Acetic acid is highly corrosive and harmful on contact with skin. Wash with H_20 if spilt on skin.

13) Disturb pellet, add 10cm^3 glacial acetic acid, and centrifuge. Decant into fume cupboard sink with water running during and after.

14) Acetic Anhydride is anhydrous. Avoid contact with water. The acetylation mixture can cause severe burns if spilt on skin. Wash with water.

15) Make up 60cm^3 of acetylation mixture, just before it is required. Using a measuring cylinder; mix acetic anhydride and concentrated sulphuric acid in proportions 9:1 by volume. Measure out 54cm^3 acetic anhydride first, then add (dropwise) 6cm^3 concentrated H_2S0_4 carefully, stirring to prevent heat build—up. Stir again just before adding mixture to each tube.

Disturb pellet; then add 7cm^3 of the mixture to each sample.

16) Put in boiling water bath for 1-2 minutes. (Stirring is unnecessary—never leave glass rods in tubes as steam condenses on the rods and runs down into the mixture reacting violently). One minute is usually adequate; longer acetylation makes grains opaque. Switch off hot plate.

17) Centrifuge and decant all tubes into large (1,000ml) beaker of water in fume cupboard. Decant contents of beaker down fume cupboard sink.

18) Disturb pellet, add 10cm^3 glacial acetic acid, centrifuge and decant.

19) Disturb pellet, add distilled water and a few drops of 95% ethanol centrifuge and decant carefully.

D) DEHYDRATION, EXTRACTION AND MOUNTING IN SILICONE FLUID

20) Disturb pellet; add 10cm^3 95% ethanol, centrifuge and decant.

21) Disturb pellet; add 10cm^3 ethanol (Absolute alcohol), centrifuge and decant. Repeat.

22) Toluene is an irritant. Avoid fumes.

Disturb pellet; add about 8cm^3 toluene, centrifuge and decant carefully into 'WASTE TOLUENE' beaker in fume cupboard (leave beaker contents to evaporate overnight).

23) Disturb pellet; then using as little toluene as possible, pour into labelled specimen tube.

24) Add a few drops of silicone fluid - enough to cover sediment.

25) Leave in fume cupboard overnight, uncorked, with fan switched on. Write a note on the fume cupboard *'Leave fan on overnight - toluene evaporation',* and date it. Collect specimen tubes next morning and cork them. Turn off fan.

26) Using a cocktail stick, stir Contents and transfer one drop of material onto a clean glass slide and cover with a cover slip (22mm x 22mm). Label the slide.

27) Wash and clean everything you have used. Wipe down the fume cupboard worktop. Remove water bath from fume cupboard if not needed by the next user. Refill bottles and replace them in chemical cabinets.

Appendix 4 Technical information

The archive

The archive consists of:

126	Context records AS1
29	Fieldwork progress records AS2
11	Photographic records AS3
1	Spit sample record AS16
1	Sample records AS18
1	Level record sheet AS19
18	Augerhole record sheet AS26
68	Drawing film AS34
121	Trench record sheet AS41
1	Box of finds

The project archive is intended to be placed at:

Worcestershire County Museum
Hartlebury Castle
Hartlebury
Near Kidderminster
Worcestershire DY11 7XZ
Tel Hartlebury (01299) 250416

Summary of data for Worcestershire HER

WSM 42137

Period	Material class	Object specific type	Count	Weight(g)	Start date	End date
late medieval/ post-medieval	ceramic	roof tile	27	1632	1400	1800
medieval	ceramic	pot	1	4	-	-
medieval	ceramic	pot	3	6	1075	1400
medieval	ceramic	pot	1	8	1200	1620
modern	ceramic	pot	1	2	1800	1950
modern	ceramic	pot	3	18	1900	1950
post-medieval	ceramic	kiln item	2	24	1750	1900
post-medieval	ceramic	brick	1	288	1600	1750
post-medieval	ceramic	brick	26	2198	1600	1900
post-medieval	ceramic	brick/tile	18	126	1600	1900
post-medieval	ceramic	pot	1	2	1400	1950
post-medieval	ceramic	pot	7	317	1600	1900
post-medieval	ceramic	pot	3	32	1700	1800
post-medieval	ceramic	pot	1	6	1700	1900
post-medieval	ceramic	roof tile	27	1632	1600	1900
post-medieval	glass	vessel	1	10	1600	1900
post-medieval	glass	vessel	1	32	1750	1800
post-medieval	slag	-	11	144	1600	1900
prehistoric	ceramic	pot	5	18	-	-
prehistoric	stone	-	1	1	-	-
Roman	ceramic	pot	19	102	43	400
Roman	ceramic	pot	9	220	100	300
Roman	ceramic	pot	3	50	200	400
undated	bone	-	43	512	-	-

Period	Material class	Object specific type	Count	Weight(g)	Start date	End date
undated	ceramic	-	1	2	-	-
undated	ceramic	brick	1	288	-	-
undated	ceramic	roof tile	1	44	-	-
undated	metal	-	1	344	-	-
undated	metal	button	1	4	-	-
undated	mineral		5	48	-	-
undated	mineral	coal	1	1	-	-
undated	shell		1	4	-	-
undated	stone		25	10236	-	-

Finds assemblage for the HER