

T H A M E S V A L L E Y

ARCHAEOLOGICAL

S E R V I C E S

**Land at Forge Wood, Tinsley Green,
Crawley, West Sussex**

An archaeological excavation

By James McNicoll-Norbury

FWC14/59

(TQ 2920 3910)

Land at Forge Wood, Tinsley Green, Crawley, West Sussex

An Archaeological Excavation

For CgMs Consulting

by James McNicoll-Norbury

Thames Valley Archaeological Services Ltd

Site Code FWC 14/59

October 2015

Summary

Site name: Land at Forge Wood, Tinsley Green, Crawley, West Sussex

Grid reference: TQ 2920 3910

Site activity: Excavation

Date and duration of project: 8th July - 7th August 2014

Project manager: Steve Ford

Site supervisor: James McNicoll-Norbury

Site code: FWC 14/59

Area of site: 0.6 ha

Summary of results: The excavation revealed the presence of medieval field boundaries and pits including evidence of nearby metalworking along with a Saxon pit, post-medieval field boundaries and possible Bronze Age features on the western side of the site.

Location and reference of archive: The archive is presently held at Thames Valley Archaeological Services, Reading and will be deposited at Crawley Museum in due course.

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Report edited/checked by: Steve Ford ✓ 08.10.15 Steve Preston ✓ 08.10.15

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Report 14/59c

Introduction

This report documents the results of an archaeological excavation carried out at Forge Wood, Crawley, West Sussex (TQ 2920 3910) (Fig. 1). The work was commissioned by Mr Duncan Hawkins of CgMs Consulting on behalf of Persimmon Homes.

Planning permission (CR/98/0039/OUT) has been gained from Crawley Borough Council to develop the site for housing. The consent is subject to a condition (19) relating to archaeology. An initial phase of archaeological investigation by means of trial trenching revealed evidence of medieval and possible prehistoric deposits across the site, as a result of which further mitigation has been requested targeting specific areas of archaeological interest within the overall site.

This is in accordance with the Department for Communities and Local Government's *National Planning Policy Framework* (NPPF 2012) and the Borough's policies on archaeology. The field investigation was carried out to a specification approved by Mr John Mills, Senior Archaeologist for West Sussex County Council, the archaeological adviser to the Borough. The fieldwork was undertaken by James McNicoll-Norbury, Kyle Beaverstock, Daniel Bray, Lizzi Lewins, Andy Taylor and Benedikt Tebbit between 8th July and 7th August 2014 and the site code is FWC 14/59.

The archive is presently held at Thames Valley Archaeological Services, Reading and will be deposited at Crawley museum in due course.

Location, topography and geology

The site is located in a parcel of land to the south-east of Gatwick Airport and north-east of Crawley, close to the hamlet of Tinsley Green (Fig. 1). The overall development site is spread across a number of open grass fields to the west of Steers Lane with Gatwick Stream running through the middle of the site from north to south (Fig. 2). To the east of Gatwick Stream the site is generally flat although it slopes down to the south, an old farm track runs from east to west from Steers Lane (which bounds the site to the east) to the location of the former Forge Farm and the old abattoir in the centre of the site (demolished building) with Forge Wood in the south eastern corner and other areas of woodland scattered across the area, there are also a number of existing boundary

ditches some of which have trees and hedgerows along them, and to the south lies Crawley crematorium which forms the southern boundary of the site.

To the west of Gatwick Stream the site is less even. The track continues east to west and again there are a number of existing boundary ditches across the area with trees and hedgerows. The westernmost part of the site adjacent to the railway line is covered in trees and is very uneven possibly due to work that took place during the construction of the railway. The southern part of the site is fenced off with a security fence.

The underlying geology is mapped as Weald Clay on the eastern side of the site with River Medway 1st terrace deposits on the western side with an outcrop of Weald Clay on the north western corner (BGS 1972) which were observed on the site in their respective areas as anticipated. The site lies between 62m and 64m above Ordnance Datum, with the highest point located to the north east and the lowest in the south. The site is currently in use as open pasture for horses but was previously occupied by an abattoir in the centre of the site and was the site of Forge Farm in the centre of the site.

Within the overall site, the excavations covered three small rectangular areas (site 1, in the east, sites 2 and 3 in the west) and a larger, irregular area was covered by a watching brief on an access road, within which features were identified only in the part closest to site 1.

Archaeological background

The archaeological potential of the site had first been highlighted in a desk-based assessment (Hawkins 1997) with subsequent results of a small scale field survey (WA 1998). In summary, the site lies in the Weald and relatively little is recorded for the environs of the site, even if more recent discoveries subsequent to the original desktop study are considered. However, the exception to this relates to iron production for which the Weald, and Crawley in particular, are notable centres for pre-industrial production. A number of iron production sites are recorded, such as Rathlin Road (Pine 2013) of Iron Age, Roman, Saxon and Medieval date. The proposal site also includes that of Tinsley Forge which operated in late medieval and early post-medieval times (AD1554-1736). Recent evaluation has added further information to the archaeological knowledge of the site (McNicoll-Norbury 2014). This fieldwork revealed a modest volume of deposits and finds but did locate an area of iron production associated with medieval features, a number of ditches which are probably post-medieval field boundaries, and a sherd of Early Bronze Age beaker pottery, which is exceptionally rare find for the claylands forming the Weald. As a result, excavation was focussed on three small areas within the overall site.

Objectives and methodology

A number of countrywide policy documents for archaeological research have considered the timespan that the deposits represent (eg. EH 2005). Specific guidelines for country-wide archaeometallurgical research have also been published (EH 2001) and an overview of the archaeology of Sussex has been presented (Rudling 2003).

The general objectives of the project are to:

Excavate and record all archaeological deposits and features within the areas affected by the proposed development.

Produce relative and absolute dating and phasing for deposits and features recorded on the site.

Establish the character of these deposits in attempt to define functional areas on the site such as industrial, domestic, etc.

Produce information on the economy and local environment and compare and contrast this with the results of other excavations in the region.

The specific objectives of the excavation and post-excavation project will:

Set out the archaeological background to the site, drawing together the results of previous archaeological work in the vicinity of the site.

Complete a site archive of all project records, artefacts, ecofacts, any other sample residues and summaries of the context, artefact and environmental records.

Complete an assessment report on the site archive and its potential to answer the research questions and for further analysis.

The project will also address the following research questions:

What is the nature of any prehistoric activity on the site and what is its date and extent?

What is the nature and extent of medieval occupation on the site?

Was medieval metal production taking place on the site? If so do any structures associated with this production survive on site? What is the specific chronology, nature of the metal working and the technology used?

If medieval metalworking is demonstrated, are there any (easily accessible) historic reference to this specific site?

What use was made of floral and faunal resources and can these be identified and assessed from a programme of environmental sampling?

What is the palaeoenvironmental setting of the various episodes of activity on the site?

The excavation area of the project comprised a total of 6025 sq m. Topsoil and subsoil deposits were removed using a 360° type mechanical excavator, fitted with a toothless ditching bucket, under constant archaeological supervision. Four areas were examined:

Area 1 - centred on evaluation trench 30 to examine an area of medieval deposits and ironworking

Area 2 - centred on trench 87 to examine the location of Beaker pottery, and trench 90 to examine the location of undated, charcoal-rich pits

Area 3 - centred on trench 79 to examine an area of late medieval/post-medieval deposit

Area 4 - Two evaluation trenches, 25m long, centred on trench 128 to examine the location of undated ditches

The areas were stripped to fully expose any archaeological deposits. Following machine clearance, all investigation of archaeological levels was by hand, with cleaning, examination and recording both in plan and in section. Appendix 1 summarizes all the excavated features, with phasing and dating evidence.

Results

Three areas were monitored as excavation areas and other areas were monitored as watching briefs, two trenches were dug as required in Area 4 and the results of which were included in the evaluation report (Fig. x). ?? the excavation areas revealed the presence of medieval boundary ditches with associated pits and postholes as well as undated linear features and modern features.

Area 1 (Fig. 4)

Saxon

A single pit (518) which measured 1.35m wide and was 0.52m deep was truncated by cut 517 of gully 1003 (Fig. 8), and was filled with mottled grey and yellow brown silty clay (587) from which two sherds of Saxon pottery were recovered: this appears to be the only Saxon features on the site, but of course any number of undated features could be of similar date.

Medieval Ditches

Ditch 1000 measured 69.25m in length and had an alignment of N-S before turning and assuming a NE-SW alignment. It measured 1.18-1.71m wide and 0.35-0.73m deep (Fig. 7). Seven slots were excavated across it (401, 402, 406, 416, 424, 514 and 515) in addition to three from the evaluation trenching (29, 34, 40) which revealed steep sides and a rounded base, with up to three deposits, from which medieval pottery and iron slag were recovered. Three slots further revealed the presence of an earlier cut (400, 403, 407) which measured up to 0.62m in width and 0.13m deep, it is possible that this may be the same as gully 1001. Cut 514 was revealed to be cut by adjacent pit 513 (previously recorded in the evaluation as pit 36), while at slot 40, the ditch had cut pit 39. Pit 39 had produced over 5kg of smelting slag, and much of the rest of the slag from the evaluation came from features that had cut into this pit, including ditch 1000.

Gully 1001 was aligned NW-SE and measured 28.7m in length with a width of 0.45-0.64m and a depth between 0.09-0.18m (Fig. 8). Five slots were excavated into it (407, 410, 411, 417 and 420) which revealed a single deposit of light brown grey silty clay from which medieval pottery was recovered from a single slot, the gully was also revealed to be cut by both Ditch 1000 and Gully 1002.

Gully 1002 was aligned NNW-SSE and measured 17.7m in length, 0.34-0.76m wide and 0.11-0.28m deep (Fig. 8): five slots were excavated (414, 415, 418, 419 and 520) which revealed grey brown silty clay from which medieval pottery and slag were recovered. The gully was revealed to cut gully 1001. It may have been subdividing the enclosure formed by ditch 1000, to whose N-S arm it was broadly parallel.

Gully 1003 was right angled gully south of gully 1002 which measured 10.25m in length, 0.58-0.67m wide and 0.08-0.22m deep (Fig. 9). Three slots were excavated (444, 517 and 523) which revealed a dark brown grey silty clay from which medieval pottery and slag were recovered.

Medieval Pits and postholes (Figs 9 and 10)

Pit 409 measured 1.03m wide and was 0.14m deep and was filled with grey brown silty clay (464) from which nine sherds of medieval pottery and slag were recovered.

Pit 423 measured 0.60m wide and was 0.17m deep and filled with mid grey brown silty clay (480) from which six sherds of medieval pottery and slag were recovered.

Pit 502 measured 0.90m wide and was 0.24m deep and filled with mid grey brown silty clay (570) from which three sherds of medieval pottery were recovered.

Pit 509 represents the first pit cut in a small cluster and measured 1.30m wide and was 0.38m deep and filled with dark grey and yellow brown silty clay (578) from which pottery and slag were recovered and a later deposit of light grey silty clay (577) which was cut by pit 508 which measured 3.16m wide and 0.28m deep and was filled with light grey silty clay (576) from which no finds were recovered and was later cut by pit 507 measuring 1.48m wide and 0.19m deep and filled with a mottled yellow brown and grey silty clay (575) from which pottery and slag were recovered. A final pit (506) cut this and measured 0.90m wide and was 0.14m deep and filled with grey brown silty clay (574) from which pottery was recovered.

Posthole 422 measured 0.35m wide and was 0.07m deep and filled with mid grey brown silty clay (479) from which three sherds of medieval pottery was recovered.

Posthole 500 measured 0.42m wide and was 0.12m deep and filled with mid grey brown silty clay (565) from which a single sherd of medieval pottery were recovered.

Posthole 521 measured 0.55m wide and was 0.15m deep and filled with mid grey brown silty clay (590) from which a single sherd of medieval pottery was recovered.

Post Medieval - Modern

Ditch 1005 was a large linear feature comprising of two cuts (Fig. 8) which measured 76m in length and corresponds with ditches on historic maps, four slots were excavated (404/5, 442/3, 445/6, 447/8) which revealed post medieval pottery and modern finds in both cuts (including blast furnace slag in slot 404, along with modern bottle glass). At right angles to ditch 1005, a ditch explored in the evaluation (46) towards the south of the area, was also post-medieval or modern. Both cut gully 1004.

Undated Linear Features

Gully 1004 was aligned NE-SW and measured 12.7m long, 0.60-0.78m wide and 0.16m deep (Fig. 8) and consisted of two excavated slots (519 and 522) which revealed a light brown grey deposit from which no finds were recovered. The gully was clearly cut by the modern ditch 1005.

Undated Pits and postholes

Pit 501 measured 0.88m wide and was 0.52m deep, the earliest deposit comprised of dark grey brown silty clay (569) followed by later deposits of yellow brown silty clay (568), dark grey brown silty clay (567) and with a final deposit of brown silt clay (566) from which no finds were recovered.

Pit 513 measured 1.02m wide and was 0.06m deep and filled with dark grey brown silty clay (582) from which no finds were recovered. The pit cut adjacent ditch slot (514)

The following contained no datable finds and exhibited no stratigraphy (Fig. 9). All were filled with a mid grey brown silty clay.

Type	Cut	Fill (s)	Diameter or with (m)	Depth (m)	Finds
Pit	449	564	1.14	0.25	slag
Pit	503	571	0.60	0.10	slag
Pit	510	579	0.93	0.21	
Pit	511	580	0.67	0.11	
Posthole	408	463	0.28	0.04	
Posthole	412	465	0.19	0.07	
Posthole	413	466	0.30	0.02	
Posthole	421	478	0.30	0.09	
Posthole	437	498	0.50	0.08	
Posthole	438	499	0.50	0.08	
Posthole	439	550	0.50	0.08	
Posthole	440	551	0.47	0.07	
Posthole	441	552	0.40	0.08	
Posthole	504	572	0.39	0.14	
Posthole	505	573	0.29	0.05	
Posthole	512	581	0.50	0.08	

The postholes do not appear to form a part of any obvious structure. Given their position within the enclosure, similar dimensions and fills, it would appear they are all of a similar date but this would be a tenuous link at best.

Watching Brief (Figs 3 and 10)

Ditch 1009 was aligned E-W measuring 27.75m long, 0.6-0.76m wide and up to 0.25m deep, three slots were excavated (425, 426 and 427) which revealed a single fill of dark brown grey silty clay from which no finds were recovered and the ditch was cut by ditch 1010.

Ditch 1010 was a modern ditch containing fragments of modern brick measuring 7.25m in length consisting of one cut (428) and is possibly the continuation of ditch 1005 to the north and it cuts ditch 1009.

Two parallel linear features Gully 1011 and Gully 1012 aligned NE-SW and measuring 16.25m in length, 0.5-0.60m wide and up to 0.06m deep, five slots were excavated in total (429, 430, 432, 433 and 436) from which a single sherd of pottery was recovered and gully 1011 was revealed to cut ditch 1013.

Ditch 1013 was aligned E-W and measured 27.25m in length, 0.70-1.00m wide and 0.25-0.32m deep, three slots were excavated (431, 434 and 435) from which slag was recovered.

Area 2 (Figs 5 and 11)

Linear Features

Gully 1006 was aligned NW-SE and measured 36.35m in length, 0.36-0.64m wide and up to 0.19m deep, three slots were excavated (524, 525, 526) revealing a light brown grey silty clay with no finds. This feature had not been apparent in the evaluation.

Gully 1007 was aligned SW-NE and measured 6.7m in length, 0.74m wide and 0.10m deep, a single slot was excavated at the terminal (530), which revealed a single fill of grey brown silty clay from which no finds were recovered. However, the other terminal (14) had been previously excavated during the evaluation, and produced four sherds of ironstone- and flint-tempered (possibly) Bronze Age pottery. It is not clear if this pottery really provides a date for the feature (except as the most general *terminus post quem*), but the recovery of a further sherd of similar pottery from a pit (528, *see below*) lends support to the idea of some Bronze Age activity in the area.

Pits

Pit 527 measured 1.22m wide and was 0.43m deep and filled with dark grey brown silty clay (597), a lighter grey brown silty clay (598) and a primary fill of dark grey brown silty sand (599) from which no finds were recovered.

Pit 528 measured 0.70m wide and was 0.61m deep and filled with dark grey brown silty sand (650) from which a single possible sherd of prehistoric pottery was recovered.

Pit 529 measured 0.40m wide and was 0.14m deep and filled with mid grey brown silty sand (651) from which no finds were recovered.

Three intercut pits (11 to 13) revealed in this area in the evaluation contained no finds.

Area 3 (Figs 6 and 11)

Ditch 1008 measured 26.75m in length and was up to 1.30m wide and 0.24m deep, two slots were excavated (532 and 534) which revealed a grey brown silty sand deposit (654 and 656) and no finds were recovered. An additional slot (4) had been excavated in the evaluation (where interpreted as a pit): this contained two sherds of late medieval or early post-medieval pottery and truncated an earlier (but undated) gully (5): ditch 1008 is thus of late medieval or early post-medieval date.

Pit 533 measured 2.40m wide and was 0.18m deep and filled with dark grey brown silty clay (655) from which a tiny piece of mammal bone but no datable finds were recovered. As no bone survived elsewhere on the site it is possible that this implies the pit was relatively modern. Two further pits (6, 7) and a gully (5) from the evaluation had also contained no finds.

Finds

Pottery by Paul Blinkhorn

The pottery assemblage comprised 113 sherds with a total weight of 942g. It was mainly medieval or later in date, with a few sherds of prehistoric, Roman and early/middle Anglo-Saxon material. Given the geographical location of the site, most of the medieval fabrics are similar to those defined in the Surrey type-series (Jones 1988). The following fabric types were noted:

IAF: Ironstone and Flint. Bronze Age? Sparse to moderate sub-rounded black ironstone up to 2mm, rare to sparse sub-angular white flint up to 3mm. 1 sherd, 5g.

Roman: Roman Greyware. 2 sherds, 18g.

E/MS: Early/middle Anglo-Saxon Hand-built Wares, 5th – 9th century. Fine sandy fabric, rare calcareous material and flint. Burnished outer surface. 2 sherds, 35g

GRE: Post-medieval Redwares, mid-16th – 18th century (Brears 1969). 1 sherd, 4g.

GSW: Grey/Brown Sandy Ware, 12th – 13th century. Very similar to Surrey fabric **Q2**. 38 sherds, 565g.

LRW: Limpsfield-type Reduced Wares, late 13th – 15th century. Surrey fabric **LQ**. 2 sherds, 35g

OSW: Orange Sandy Ware, mid 12th – 14th century. Very similar to Surrey fabric **OQ**. 59 sherds, 262g.

The pottery occurrence by number and weight of sherds per context by fabric type is shown in Appendix 2.

The range of fabric types indicates that the main period of activity at the site was during the 12th – late 13th/early 14th centuries.

The bulk of the pottery is from unglazed jars, although other vessels were present, particularly the white-slipped and glazed jugs which are typical products of kiln at Earlswood in Surrey (Turner 1974), c. 10km to the north of this site. They are included in the OQ category in the Surrey type-series. The assemblage from here included stamped and/or sgraffito decorated vessels which have direct parallels with material from the kiln site (Turner 1974, figs 4 and 5). All the sherds of GSW from context (481) are from the reconstructable full profile of a skillet. It has a very thin glaze on the inner surface and an incised wavy line on the rim, and is very similar to a vessel from Godalming in Surrey (Jones 1998b, fig. 5.22 no. 89). The outer surface of the vessel from here is burnt and sooted, and it has clearly been used for cooking. The assemblage is typical of the high medieval period in the region, and appears entirely domestic in nature.

Animal Bone by Danielle Milbank

The small single fragment of animal bone was recovered from pit (533) is from a medium sized animal (sheep/goat or pig). No further information could be gained from the piece due to its small size.

Slag and Industrial Debris by Steven Crabb

Just under 15.5kg of slag was recovered from this site to add to 9.6kg from the evaluation (most of the latter from a single pit). Much of this material has been significantly abraded through plough damage. The slag also appears to have been weathered with some masses being covered in iron oxide concretions. Both of these factors make identification of diagnostic features problematic, and may suggest much of it is redeposited. However all of the material which it was possible to identify can be said to relate to iron smelting rather than iron smithing. A few fragments of heavily abraded tap slag were identified from features 406, 414, 423, 424, 446, 507 and 520. These are characteristic evidence of a slag tapping iron smelting furnace. This type of structure is generally associated with the Roman and high Medieval periods, with non-slag tapping furnaces being associated with the Iron Age and early Medieval periods. The evidence for this type of furnace being used is corroborated by a single section of slag tube leading to a small mass of tapped slag. Slag tubes are created by tap slag flowing through a tube rather than in the open air.

Two fragments of slag were recovered from ditch 442 which suggest the shape and form of the base of the furnace. Both are sheets of dense slag with occasional but large porosity. One of these has a partially circular depression indicating the location of the tuyere, which shows that it was located at least 150mm from the base of the furnace.

A single fragment of very glassy black slag recovered from ditch 404, is likely to be the product of a blast furnace. It is the only fragment of slag recovered which is not heavily abraded. Therefore this is likely to date from close to the date the context was deposited.

A large piece of siderite iron ore was recovered from posthole 437, it has not been crushed or roasted and therefore has not been prepared for smelting. This ore is commonly present in outcrops of Wealden Clay.

The heavily abraded nature of most of the slag recovered suggests that it is not a primary deposition and was likely to have been significantly altered and or moved prior to final deposition. It seems likely that the slag (other than the blast furnace slag) predates the features that contain it, the form of the slag suggests a date of either Roman or Medieval (prior to the introduction of the blast furnace c.AD1500). Iron smelting was being carried out in the vicinity of this site or debris from iron smelting was brought to this site but it does not seem likely that iron smelting was being carried out in this area. There is evidence for the use of earlier slag being reused as road surfacing material in the Weald of Sussex and Kent.

Forge Farm (sited within the development area) is known to have had a smithy in the mid-19th century, but the slag here is not smithing slag. Documentary sources, however, indicate that as early as 1589 Henry Bowyer died in possession of a forge at Tinsley, an ironworking site in Worth and a furnace at Tilgate, all of which can be traced through later centuries as well (Hawkins 1997). It is possible that the slag found here could have been produced elsewhere on the Weald and transported here for secondary uses.

Fired Clay by Danielle Milbank

Fired clay fragments were recovered from seven contexts encountered during the excavation. These are all small pieces (c. 1-2g) of varied fabric types, with fairly hard fine clay from 415 (deposit 470), 500 (deposit 650) and 528 (deposit 650). A fragment from 414 has fine groggy inclusions and may represent poorly-fired brick or tile. Small fragments of a friable sandy clay material were recovered from 528 (deposit 650) which are dark orange red.

The majority of the fired clay was found in the form of very small fragments which could not be identified, however it is possible that some of the material represents very fragmented daub.

Environmental Samples by Rosalind McKenna

A programme of sampling was implemented during the excavation, which included the collection of 24 soil samples with a further five bags of hand selected charcoal, all from sealed contexts. The samples were floated

and sieved using a 0.25mm mesh and air dried. The flots were examined in the laboratory, under a low-power binocular microscope at magnifications between x12 and x40. where they were described using a pro forma.

A four point semi quantitative scale was used, from '1' – one or a few specimens (less than an estimated six per kg of raw sediment) to '4' – abundant remains (many specimens per kg or a major component of the matrix). Data were recorded on paper and subsequently on a personal computer using a Microsoft Access database.

Identification was carried out using published keys (Jacomet 2006, Biejerinkc 1976, Jones – unpublished and Zohary and Hopf 2000), online resources (<http://www.plantatlas.eu/za.php>), the authors own reference. Taxonomy and nomenclature follow Stace (1997).

The flot was then sieved into convenient fractions (4, 2, 1 and 0.3mm) for sorting and identification of charcoal fragments. Identifiable material was only present within the 4 and 2mm fractions. A random selection of ideally 100 fragments of charcoal of varying sizes was made, which were then identified. Where samples did not contain 100 identifiable fragments, all fragments were studied and recorded. Identification was made using the wood identification guides of Schweingruber (1978) and Hather (2000). The full species list appears in Table 1 at the end of this report. Taxa identified only to genus cannot be identified more closely due to a lack of defining characteristics in charcoal material.

No charred plant macrofossils were present within the samples.

Charcoal fragments were present in all of the samples, scoring between a '1' and '4' on the semi quantitative scale. The preservation of the charcoal fragments was generally poor. The majority of the fragments were too small to enable successful fracturing that reveals identifying morphological characteristics. Where fragments were large enough, the fragments were very brittle, and the material crumbled or broke in uneven patterns making the identifying characteristics difficult to distinguish and interpret, and so only a limited amount of environmental data can be gained from the samples. Identifiable remains were however present in small numbers in fourteen of the flot samples and the five hand selected charcoal samples. The results of this analysis can be seen in Appendix 4 below.

The total range of taxa comprises oak (*Quercus*), hazel (*Corylus avellana*) and willow / poplar (*Salix* / *Populus*). These taxa belong to the groups of species represented in the native British flora. A local environment with a relatively wide range of trees and shrubs is indicated from the charcoal of the site. As seen in Appendix 4a, oak is the most frequently recorded remain within the samples, with hazel, willow/poplar and ash fragments also recorded. It is possible that these were the preferred fuel woods obtained from a local environment containing a broader choice of species.

All of the samples produced varying but small amounts of charcoal. The compositions of the samples are all similar, it is probable therefore that these small assemblages of charcoal remains reflect the intentional deposition or accumulation of domestic waste. However, as the samples are so small in size nothing of great interpretative value can be gained.

Conclusion

The excavation of the three highlighted areas and the watching brief revealed further archaeological evidence in the form of linear features, pits and postholes from the medieval and post-medieval periods expanding on the earlier evaluation results for the site and the area in general. Further evidence of prehistoric activity was identified on the site showing that the feature in which the beaker pottery was recovered from in the earlier phase of works was part of a short gully the rest of which has probably been ploughed away since it was first cut, and an additional pit nearby in Area 2 contained one further sherd of similar pottery. It is conceivable, though far from clear, that other features in Area 2 could be of a similar period.

A single pit contained two sherds of early or middle Saxon pottery but it exists in apparent isolation.

The excavation of Area 1 revealed a small number of linear features, probably representing boundary (enclosure) ditches from the medieval period in the north-west corner of the excavation area. Contained within these ditches and on their periphery were a number of pits varying in size, and postholes. Whilst the postholes do not appear to form part of any identifiable structure (apart, perhaps from several pair of posts) the thin subsoil in the area could suggest that subsequent ploughing may have removed evidence of any supportive evidence for structures or defined occupation areas if these had been present. The pottery (comprising the only type of artefact present other than iron smelting slag) from medieval features is typical of the area and entirely domestic.

No evidence of any features directly relating to metalworking such as hearths or furnaces were found during the excavation, however the large amounts of slag recovered and the size of some of the pieces would suggest that metalworking was being carried out in the near vicinity to the excavation area, possibly to the north-west under the adjacent treeline and further within the enclosure area, and the recovered slag has been dispersed through ploughing. However, the vast majority of this material appears to be residual and redeposited and may have originated elsewhere.

The excavation of Areas 2 and 3 whilst revealing more archaeological features than previously identified during the evaluation did not produce much more artefactual evidence to help date them nor with which to address the research aims of the project.

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APPENDIX 1: Feature Details

<i>Group</i>	<i>Cut</i>	<i>Fill (s)</i>	<i>Type</i>	<i>Date</i>	<i>Dating evidence</i>
1000	400	450	Ditch	Medieval	Association
1000	401	451, 452	Ditch	Medieval	Association
1000	402	453, 454, 455	Ditch	Medieval	Pottery
1000	403	456	Ditch	Medieval	Association
1005	404	457	Ditch	Post-medieval	Blast furnace slag
1005	405	458, 459	Ditch	Post-medieval	Association
1000	406	460, 461	Ditch	Medieval	Pottery
1001	407	462	Gully	Medieval	Association
	408	463	Posthole	Unphased	None
	409	464	Pit	Medieval	Pottery
1002	410	467	Gully	Medieval	Association
1002	411	468	Gully	Medieval	Association
	412	465	Posthole	Unphased	None
	413	466	Posthole	Unphased	None
1002	414	469	Gully	Medieval	Pottery
1002	415	470	Gully	Medieval	Pottery
1000	416	471, 472, 473	Ditch	Medieval	Pottery
1001	417	474	Gully	Medieval	Association
1002	418	475	Gully	Medieval	Pottery
1002	419	476	Gully	Medieval	Association
1001	420	477	Gully	Medieval	Pottery
	421	478	Posthole	Unphased	None
	422	479	Posthole	Medieval	Pottery
	423	480	Pit	Medieval	Pottery
1000	424	481, 482	Ditch	Medieval	Pottery
1009	425	483, 484	Ditch	Unphased	None
1009	426	485	Ditch	Unphased	None
1009	427	486	Ditch	Unphased	None
1010	428	487	Ditch	Modern	
1011	429	488	Gully	Medieval	Association
1011	430	489	Gully	Medieval	Association
1013	431	490, 491	Ditch	Medieval	Stratigraphy
1012	432	492	Gully	Medieval	Pottery
1012	433	493	Gully	Medieval	Association
1013	434	494	Ditch	Medieval	Stratigraphy
1013	435	495, 496	Ditch	Medieval	Association
1011	436	497	Gully	Medieval	Association
	437	498	Posthole	Unphased	None
	438	499	Posthole	Unphased	None
	439	550	Posthole	Unphased	None
	440	551	Posthole	Unphased	None
	441	552	Posthole	Unphased	None
1005	442	553	Ditch	Post-medieval	Association
1005	443	554, 556	Ditch	Post-medieval	Association
1003	444	555	Gully	Medieval	Pottery
1005	445	557, 558	Ditch	Post-medieval	Association
1005	446	559	Ditch	Post Medieval	Pottery
1005	447	560, 561	Ditch	Post-medieval	Association
1005	448	562, 563	Ditch	Post-medieval	Association
	449	564	Pit	Unphased	None
	500	565	Posthole	Medieval	Pottery
	501	566, 567, 586, 569	Pit	Unphased	None
	502	570	Pit	Medieval	Pottery
	503	571	Pit	Unphased	None
	504	572	Posthole	Unphased	None
	505	573	Posthole	Unphased	None
	506	574	Pit	Medieval	Pottery
	507	575	Pit	Medieval	Pottery
	508	576	Pit	Unphased	None
	509	577, 578	Pit	Medieval	Pottery
	510	579	Pit	Unphased	None
	511	580	Pit	Unphased	None
	512	581	Posthole	Unphased	None
	513	582	Pit	Unphased	None
1000	514	583	Ditch	Medieval	Association
1000	515	584	Ditch	Medieval	Pottery
1000	516	585	Gully	Medieval	Association
1003	517	586	Gully	Medieval	Association

<i>Group Cut</i>	<i>Fill (s)</i>	<i>Type</i>	<i>Date</i>	<i>Dating evidence</i>
	518	587	Pit	Early - Middle Saxon Pottery
1004	519	588, 593	Gully	Unphased None
1002	520	589	Gully	Medieval Pottery
	521	590	Posthole	Medieval Pottery
1004	522	592	Gully	Unphased None
1003	523	591	Gully	Medieval None
1006	524	594	Gully	Unphased None
1006	525	595	Gully	Unphased None
1006	526	596	Gully	Unphased None
	527	597, 598, 599	Pit	Unphased None
	528	650	Pit	Late Bronze Age? Pottery
	529	651	Pit	Unphased None
1007	530	652	Gully	Prehistoric Evaluation pottery
	531	653	Pit	Unphased None
1008	532	654	Ditch	Late Medieval or later Association
	533	655	Pit	Unphased None
1008	534	656	Ditch	Late Medieval or later Association

APPENDIX 2: Pottery Catalogue by number of sherds and weight (in g)

<i>Cut</i>	<i>Deposit</i>	<i>IAF</i>		<i>Roman</i>		<i>E/MS</i>		<i>GSW</i>		<i>OSW</i>		<i>LRW</i>		<i>GRE</i>	
		<i>No</i>	<i>Wt</i>	<i>No</i>	<i>Wt</i>	<i>No</i>	<i>Wt</i>	<i>No</i>	<i>Wt</i>	<i>No</i>	<i>Wt</i>	<i>No</i>	<i>Wt</i>	<i>No</i>	<i>Wt</i>
402	454							2	17	1	21				
406	460							1	9						
409	464							1	1	8	23				
414	469							2	11	12	37				
415	470									2	3				
416	471							1	1						
418	475									2	7				
420	477									2	5				
422	479									3	7				
423	480									2	4	4	16		
424	481							14	283	9	61				
432	492							1	18						
444	555							1	3						
446	559													1	4
500	565									1	5				
502	570							1	1	2	7				
506	574							1	10						
507	575							1	9	3	12				
509	577			2	18			2	101	3	39				
509	578							3	11						
515	584									2	3				
518	587					2	35								
520	589							1	23	7	28	6	37		
521	590							1	2						
528	650	1	5												
	u/s							5	65						
	Total	1	5	2	18	2	35	38	565	59	262	10	53	1	4

APPENDIX 3: Slag Catalogue by number of pieces and weight (in g)

<i>Cut</i>	<i>Deposit</i>	<i>Group</i>	<i>Type</i>	<i>Date</i>	<i>Area</i>	<i>No</i>	<i>Wt (g)</i>	<i>Notes</i>
402	454	1000	Ditch	Medieval	1	10	498	
404	457	1005	Ditch	Post-medieval	1	8	1828	Blast furnace slag
406	460	1000	Ditch	Medieval	1	3	351	
409	464		Pit	Medieval	1	4	78	
414	469	1002	Gully	Medieval	1	1	21	
415	470	1002	Gully	Medieval	1	3	71	
423	480		Pit	Medieval	1	3	42	
424	481	1000	Ditch	Medieval	1	4	600	Clinker
431	Surface	1013	Ditch	Medieval	1	2	30	
432	492	1012	Gully	Medieval	1	1	12	
437	498		Posthole		1	1	1896	Iron ore
438	499		Posthole		1	1	126	
442	553	1005	Ditch	Post-Medieval	1	2	6726	Hearth bottom
446	559	1005	Ditch	Post-Medieval	1	3	1031	
448	563	1005	Ditch	Post-Medieval	1	3	176	
449	564		Pit		1	2	444	
507	575		Pit	Medieval	1	7	906	
509	578		Pit	Medieval	1	3	288	
517	586	1003	Gully	Medieval	1	3	242	
520	589	1002	Gully	Medieval	1	2	49	

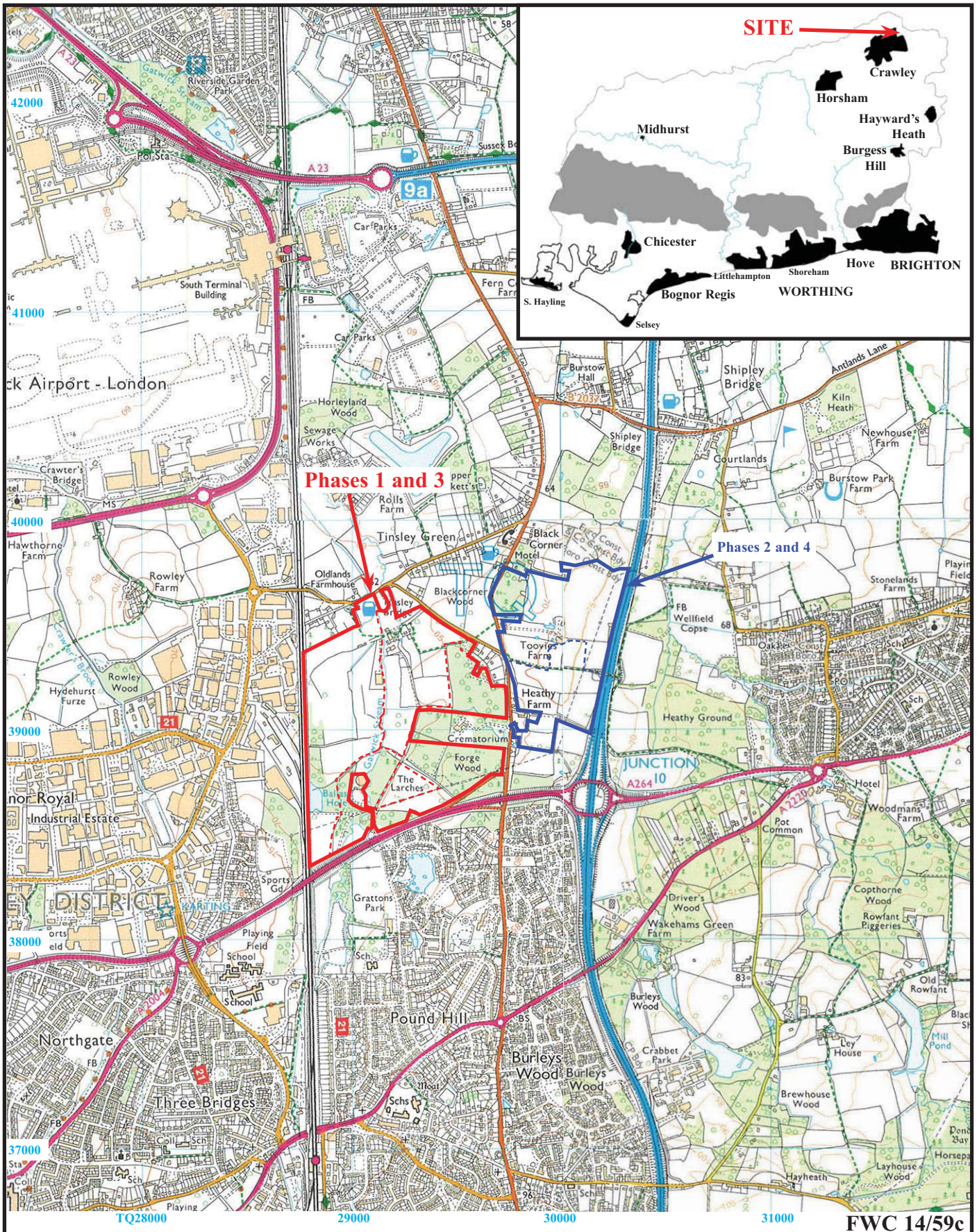
Appendix 4a: Charcoal (flots) - Complete list of taxa recovered from excavations at Forge Wood, Tinsley Green, Cawley, West Sussex (FWC 14/59) Taxonomy and nomenclature follow Schweingruber (1978). Numbers are identified charcoal fragment for each sample.

Sample Number	101	104	107	109	110	111	113	114
Feature Number	409	414	424	444	509	518	439	438
Context Number	464	469	482	555	578	587	550	499
No. frags.	30+	10+	3	10+	30+	3	10+	40+
Max. size (mm)	9	9	15	14	12	10	10	18
Latin								
Vernacular								
<i>Corylus avellana</i>			2					
<i>Salix / Populus</i>	2			1	2	4		1
<i>Quercus</i>				4	4	2	1	3
	28	8	2	2	4	24	2	6
								26

Sample Number	115	117	119	121	122	123
Feature Number	440	422	512	528	531	533
Context Number	551	479	581	650	653	655
No. frags.	50+	40+	20+	50+	3000+	200+
Max. size (mm)	10	8	23	15	40	21
Latin						
Vernacular						
<i>Corylus avellana</i>					4	
<i>Salix / Populus</i>	5	2				
<i>Quercus</i>		2	8	10	100	47
	45	36	12	36		53

Appendix 4b: Charcoal (hand selected) - Complete list of taxa recovered from excavations at Forge Wood, Tinsley Green, Cawley, West Sussex (FWC 14/59)
 Taxonomy and nomenclature follow Schweingruber (1978). Numbers are identified charcoal fragment for each sample.

Sample Number	101	110	119	121	123
Feature Number	409	509	512	528	533
Context Number	464	578	581	650	655
No. fgts.	7	40	22	21	200+
Max. size (mm)	20	21	25	14	20
Latin					
Vernacular					
<i>Corylus avellana</i>					
Hazel			2		
<i>Salix / Populus</i>			14		
Willow / Poplar	3				
<i>Quercus</i>					
Oak	3	11	19	17	100
Indeterminate	2	13	3	4	



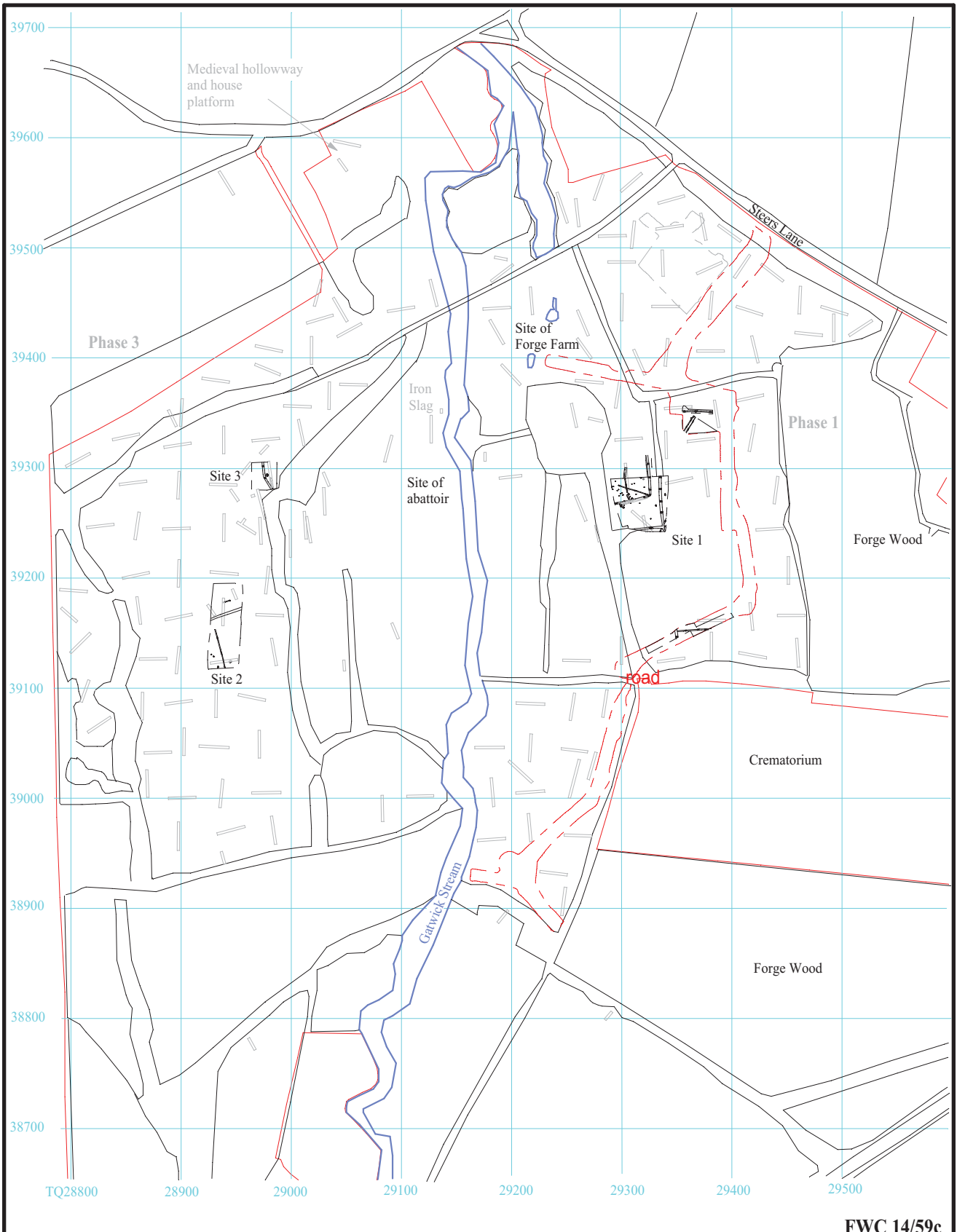
**Land at Forge Wood, Tinsley Green,
Crawley, West Sussex, 2014**

Archaeological Excavation and Watching Brief

Figure 1. Location of site within north east Crawley and West Sussex.

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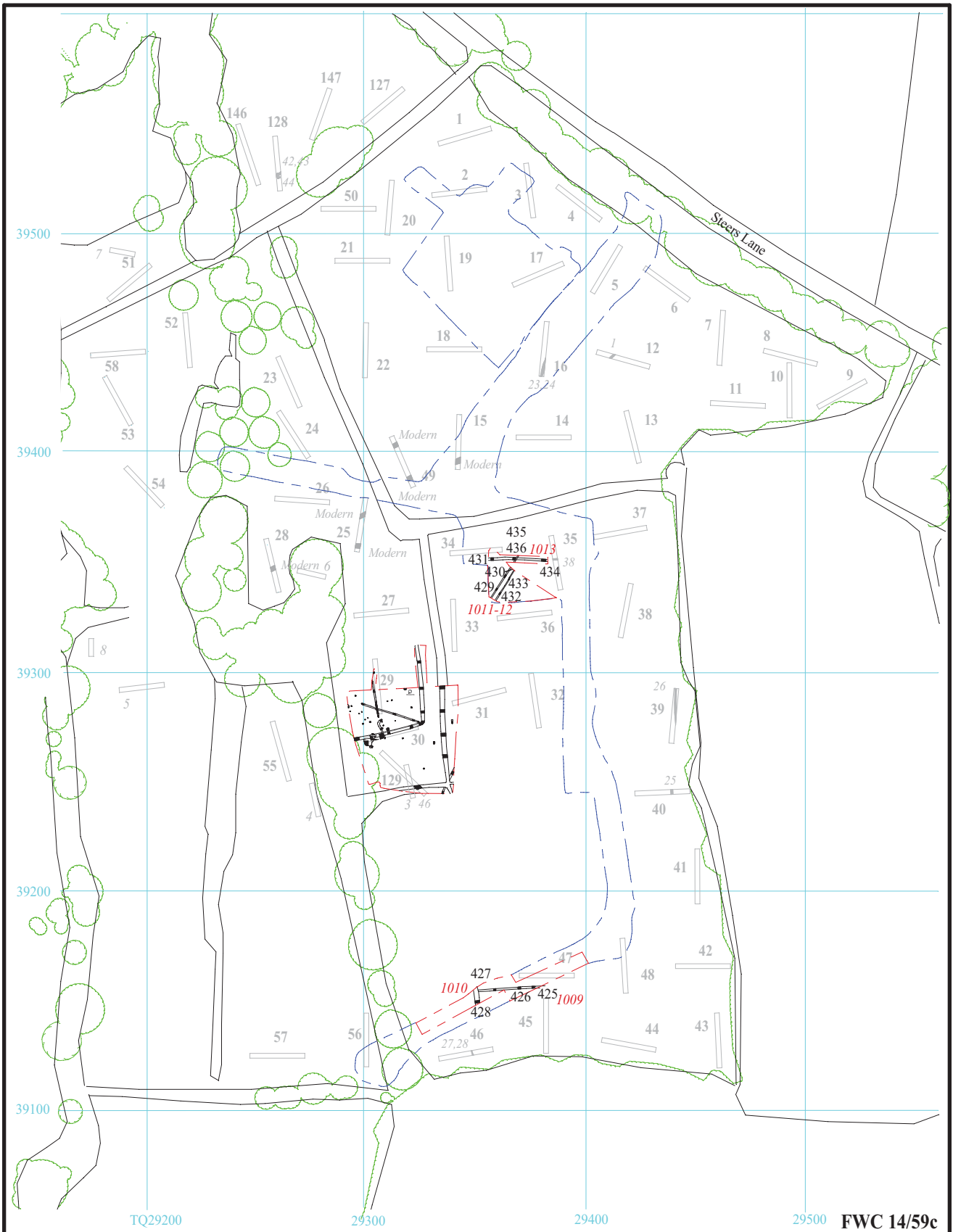


**Land at Forge Wood, Tinsley Green,
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Archaeological Excavation**

Figure 2. Location of excavation areas and evaluation trenches (in grey)



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**Land at Forge Wood, Tinsley Green,
Crawley, West Sussex, 2014
Archaeological Excavation Phase 1**

Figure 3. Areas Investigated including watching brief (Phase 1).



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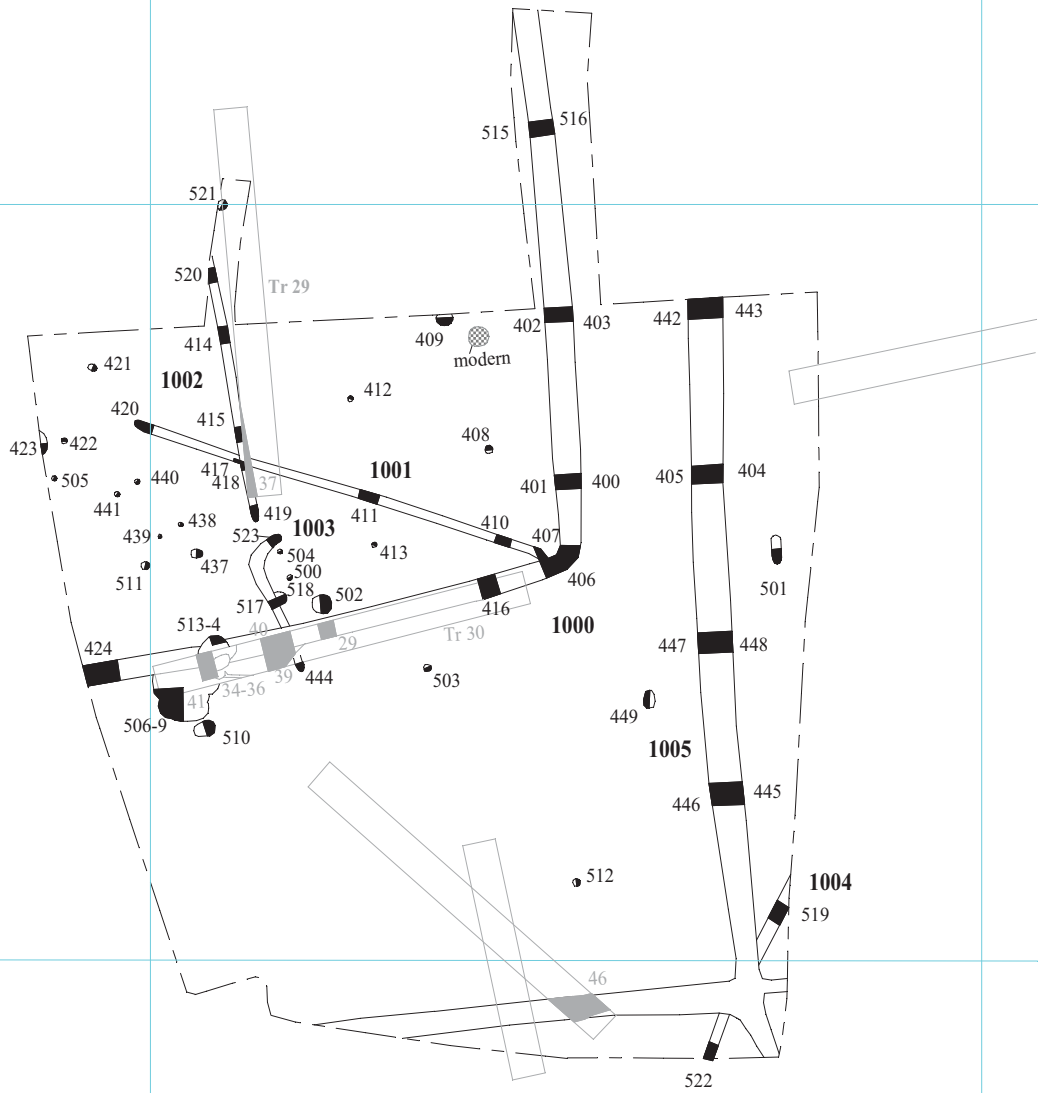
39300

39250

TQ29300

29350

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Archaeological Excavation**

Figure 4. Phase 1 - Site 1 Excavated features

0 50m



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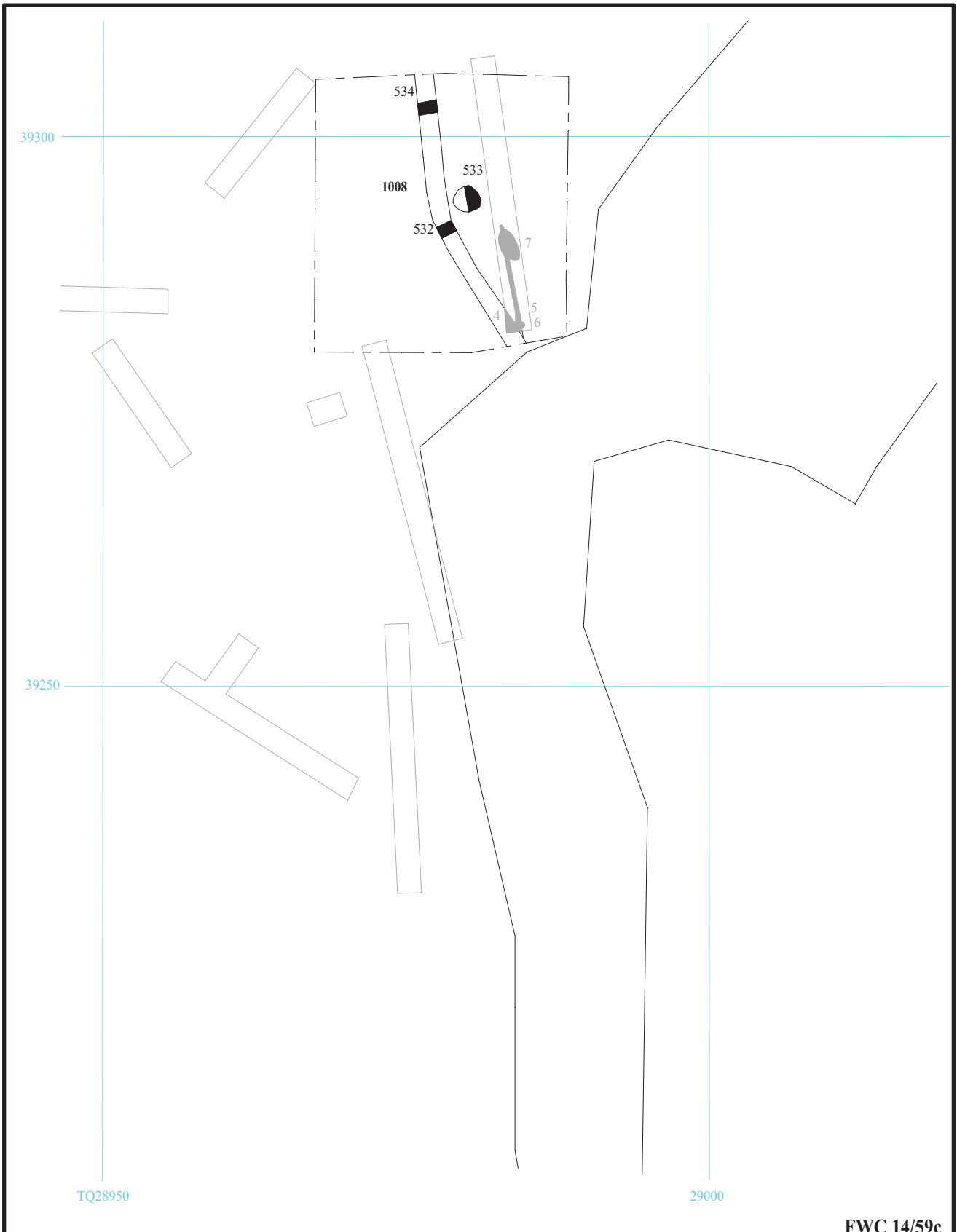
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Figure 5. Phase 3 - Site 2 Excavated features





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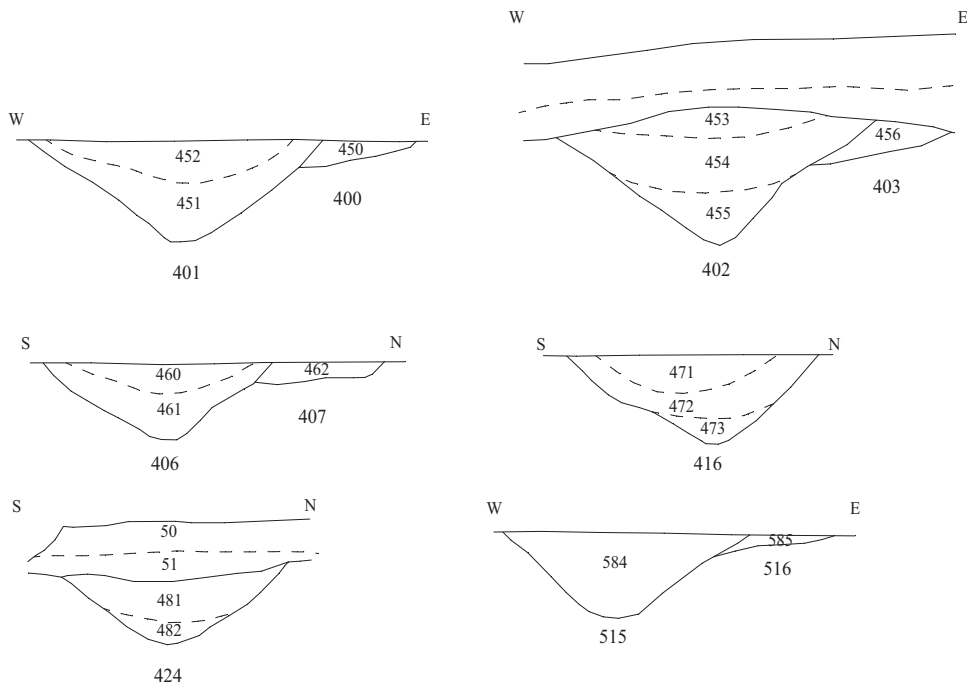
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Archaeological Excavation**

Figure 6. Phase 3 - Site 3 Excavated Features

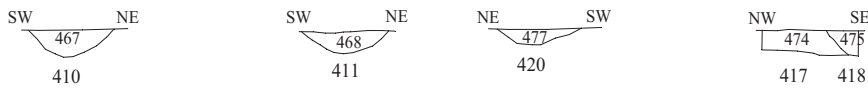


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Ditch 1000



Gully 1001



Gully 1002



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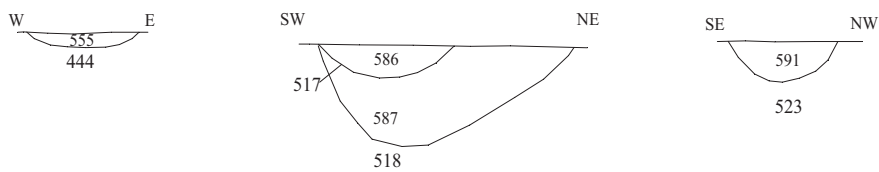
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Crawley, West Sussex, 2014
Archaeological Excavation**

Figure 7. Area 1 ditch sections

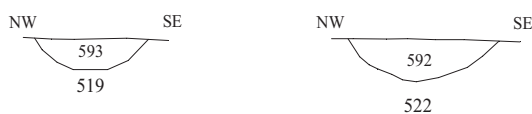


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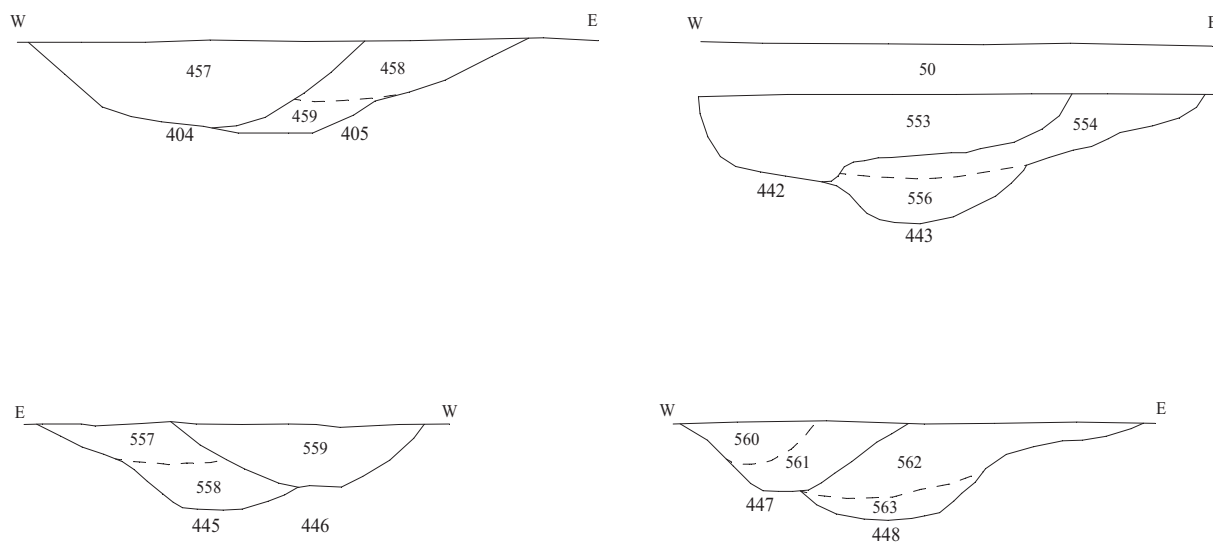
Gully 1003



Gully 1004



Ditch 1005



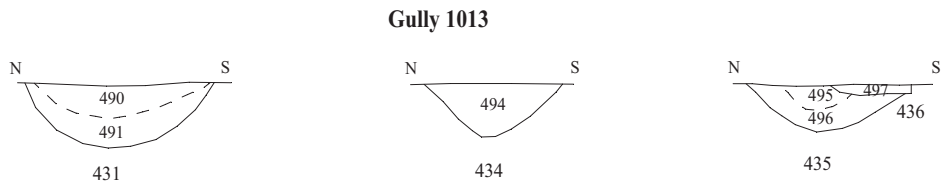
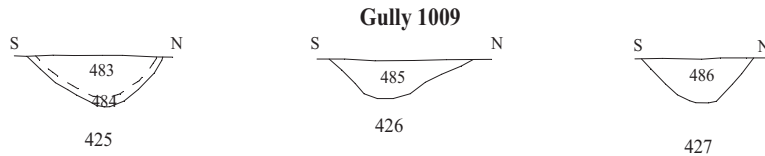
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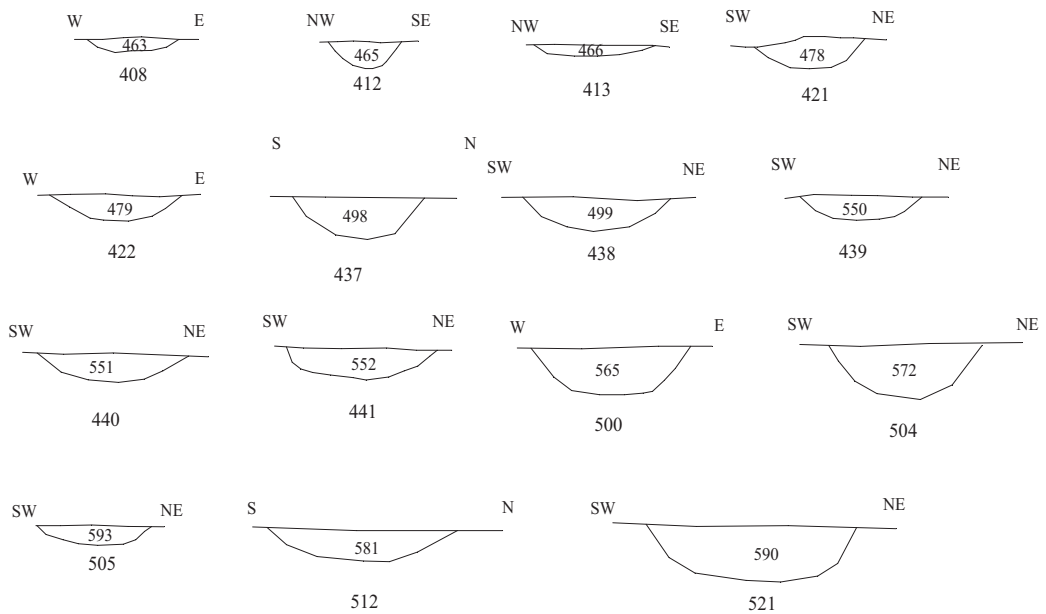
Figure 8. Area 1 ditch sections



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Postholes

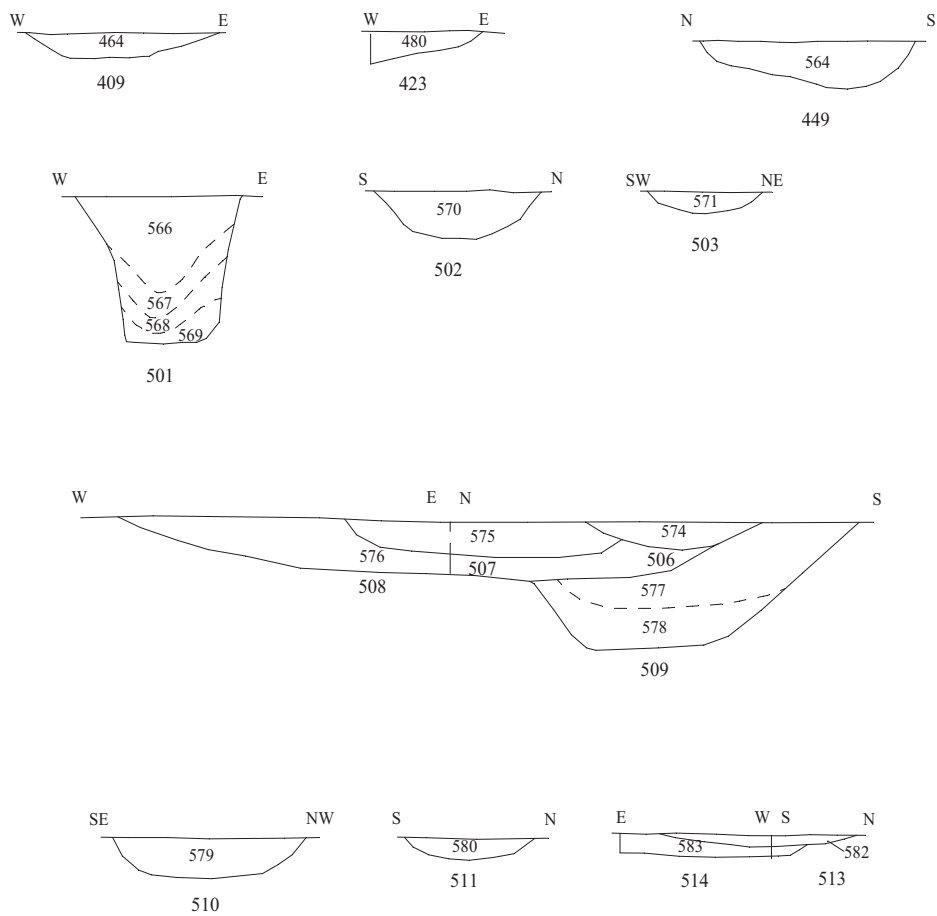


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Figure 9. Watching brief and posthole sections

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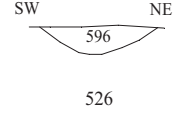
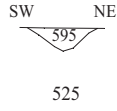
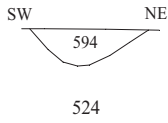
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Figure 10. Pit sections

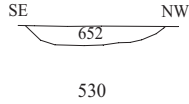


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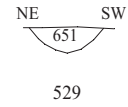
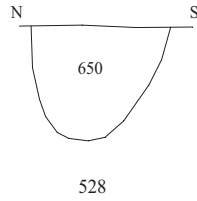
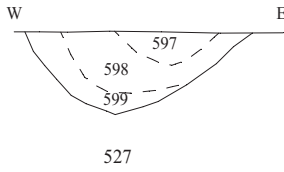
Gully 1006



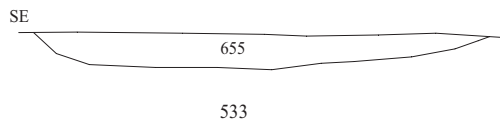
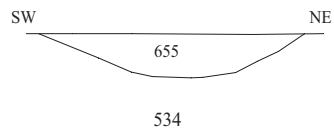
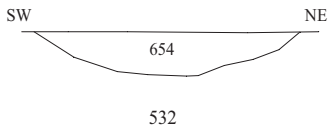
Gully 1007



Pits



Ditch 1008



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Figure 11. Areas 2 and 3 sections.



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Plate 1. Pit [409], looking N, Scales: 1m and 0.1m.



Plate 2. Ditch [424], looking W, Scales: 1m and 0.5m.

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Plates 1 - 2.

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Plate 3. Pits [506-509], looking E, Scales: 2m and 0.5m.



Plate 4. Ditch [515] and [516], looking N, Scales: 2m and 0.2m.

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Plates 3 - 4.

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Plate 5. Gully Terminus [419], looking NW, Scales: 0.2m and 0.1m.



Plate 6. Pit [501], looking N, Scales: 1m and 0.5m.

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Plates 5 - 6.

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Plate 7. Gully [525], looking NW, Scales: 0.5m and 0.1m.



Plate 8. Pit [527], looking S, Scales: 0.5m and 0.2m.

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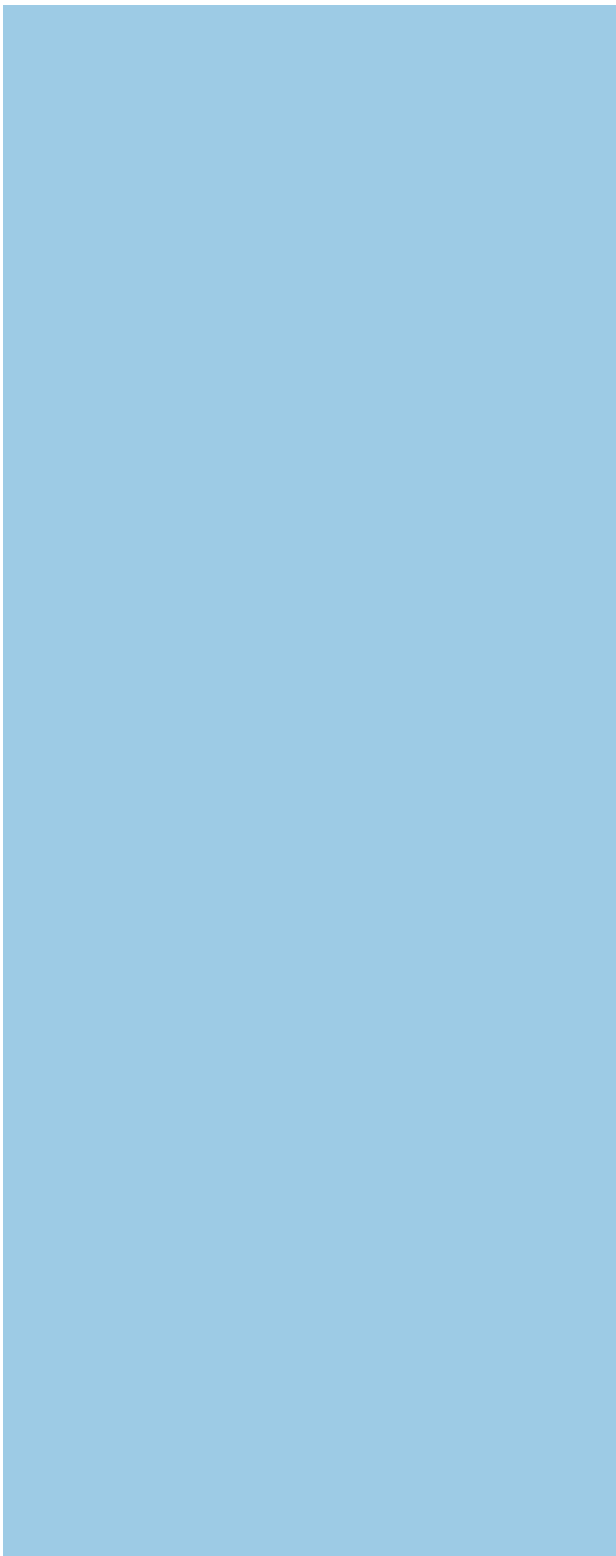
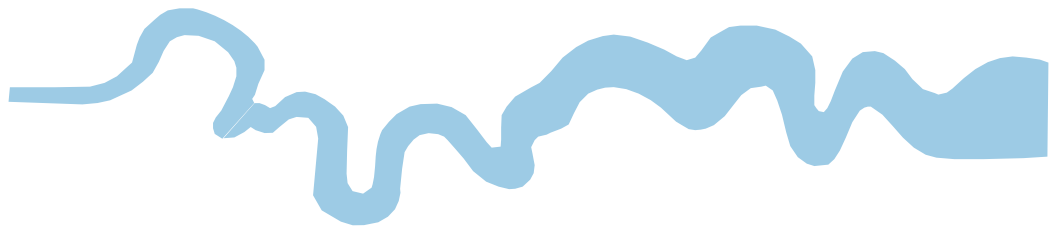
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Plates 7 - 8.

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TIME CHART

	Calendar Years
Modern _____	AD 1901
Victorian _____	AD 1837
Post Medieval _____	AD 1500
Medieval _____	AD 1066
Saxon _____	AD 410
Roman _____	AD 43
Iron Age _____	BC/AD 750 BC
Bronze Age: Late -----	1300 BC
Bronze Age: Middle -----	1700 BC
Bronze Age: Early -----	2100 BC
Neolithic: Late	3300 BC
Neolithic: Early	4300 BC
Mesolithic: Late	6000 BC
Mesolithic: Early	10000 BC
Palaeolithic: Upper	30000 BC
Palaeolithic: Middle	70000 BC
Palaeolithic: Lower	2,000,000 BC





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