



global environmental solutions

Wrotham Quarry Northern Extension

Bronze Age Cremation Cemetery and Later Activity:
Results of a Strip, Map and Sample Investigation 2012
SLR Ref: 403.00177.00063

November 2013
Revised July 2014



CONTENTS

1.0	SUMMARY.....	1
2.0	INTRODUCTION.....	2
3.0	SITE LOCATION AND DESCRIPTION.....	3
4.0	ARCHAEOLOGICAL AND HISTORICAL BACKGROUND.....	5
5.0	STRIP MAP AND SAMPLE AIMS AND METHODOLOGY.....	7
6.0	RESULTS.....	8
7.0	INTERPRETATION.....	34
8.0	CONCLUSIONS.....	35
9.0	CLOSURE.....	37
10.0	APPENDIX A – HARRIS MATRIX.....	38
11.0	APPENDIX B – POTTERY ANALYSIS.....	39
12.0	APPENDIX C – ENVIRONMENTAL SAMPLES.....	50
13.0	APPENDIX D - RADIOCARBON DATING RESULTS.....	60
14.0	APPENDIX E – COPPER ALLOY RING AND FITTING CONSERVATION REPORT.....	71
15.0	APPENDIX E – CONTEXT REGISTER.....	73

FIGURES

Figure 1:	Site location.....	3
Figure 2:	Location of investigation phases.....	4
Figure 3:	General view of site facing east.....	8
Figure 4:	Phase 2 Feature location plan.....	9
Figure 5:	Cremation burial [598] facing north.....	10
Figure 6:	East facing section and plan of cremation pit [598].....	11
Figure 7:	Post excavation shot of Cremation burial [600] facing north.....	11
Figure 8:	South facing section and plan of cremation pit [600].....	12
Figure 9:	Pre-excavation shot of Cremation burial [602] facing north.....	12
Figure 10:	South facing section and plan of cremation pit [602].....	13
Figure 11:	Pre-excavation shot of Cremation burial [604] facing north.....	13
Figure 12:	Pre-excavation view of cremation burials [540] and [542] facing north.....	14
Figure 13:	South facing section and plan of cremation pit [540].....	14
Figure 14:	South west facing section and plan of cremation pit [542].....	15
Figure 15:	South east facing section and plan of gully [517].....	16
Figure 16:	Southern terminus of gully [551] facing north west.....	16
Figure 17:	South east facing section through gully [551].....	17
Figure 18:	South west facing section and plan of ditch [584].....	17
Figure 19:	North east facing section and plan of gully [580].....	18
Figure 20:	North facing section and plan of pit [606].....	20
Figure 21:	Profile and plan of Pit [596].....	20
Figure 22:	West facing section and plan of pit [534].....	21
Figure 23:	South facing section through ditch [511]/ [513]/ [527]/ [548].....	21
Figure 24:	Ditch [511]/ [513]/ [527]/ [548] facing north.....	22
Figure 25:	Plan of ditch [521]/ [523].....	23
Figure 26:	South facing section and plan of ditch [521] (southern end).....	24
Figure 27:	Plan of intersection between ditch [570] and slightly later gully [572].....	24
Figure 28:	Ditch [559]/ [561] facing west.....	25
Figure 29:	Section through pit [530] and ditch [527].....	27
Figure 30:	West facing section and plan of pit [532].....	27
Figure 31:	South facing section and plan of pit [515].....	28
Figure 32:	East facing section and plan of pit [507].....	29
Figure 33:	East facing section and plan of post hole [519].....	29

Figure 34: Culvert (501) facing west	30
Figure 35: South east facing section of ditch [545] facing north west.....	31
Figure 36: South facing section and plan of gully [536].....	32
Figure 37: North facing section and plan of gully [538]	32
Figure 38: South east facing section and plan of ditch [545].....	33
Figure 39 Combined plan of archaeological features from Quarry Phases 1 and 2, 2009-12	36
Figure 40 medieval (Norman) pottery @ ¼ scale.....	47

Status of report: Final

Author	T Wellicome
Date	13/9/13 first draft (version 1)
Reviewed	T Malim/L Hayes
Date	16/10/13
Comments	Introductory and stratigraphic text revised and updated. Comments made on drawings
Revised	13/11/13 second draft (version 2)
Reviewed	T Malim February 2014
Comments	Final amendments to site plans; clarification of stratigraphy and descriptions; emphasis on Norman rather than medieval pottery
Final issued	31/7/14 (version 3)

The SLR staff involved in the preparation of this project were:

Person	Grade	Role
Tim Malim BA FSA MIfA	Technical Director	QA and Project Management
Thomas Wellicome BSc MA AlfA	Senior Archaeologist	Report, Post Excavation Analysis, Feature Drawings
Caroline Malim BA PGCE MPhil	Illustrator	Report Drawings
Laurence Hayes BA MIfA	Associate	QA

The fieldwork was undertaken by Marcus Headifen and Tom Collie of GMA on behalf of SLR. Site surveying services were provided by GWP Consultants.

The following specialists contributed to this report:

- Luke Barber (Medieval Pottery)
- Anna Doherty (Late Iron Age and Roman Pottery)
- Karine le Hégarat (Charred Plant Macrofossils and Charcoal)
- Dawn Elise Mooney (Charred Plant Macrofossils and Charcoal, and Radiocarbon Dating Results)
- Lucy Sibun (Cremated Bone)

SLR is a Registered Organisation with the Institute for Archaeologists (IfA), an audited status which confirms that work is carried out to the highest standards of the profession. SLR operates a quality management system to help ensure all projects are managed in a professional and transparent manner, which enables it to qualify for ISO 9001. SLR is a member of the Federation of Archaeological Managers and Employers.

1.0 SUMMARY

SLR Consulting Ltd undertook a strip, map and sample investigation at Wrotham Quarry, Trottiscliffe, Kent (NGR 564603 159555) for Hanson Aggregates between November 2012 and January 2013. The strip, map and sample investigation revealed a site with activity spanning the Late Bronze Age to medieval periods.

Most notably the investigation located a Late Bronze Age cremation burial cemetery, which predated an Early-Middle Iron Age circular enclosure found previously on the site to the north, a poorly defined phase of late Iron Age to Romano-British activity, and part of a medieval field system.

Potentially associated with activity in any of these periods were frequent pits and linear gullies, whose date was difficult to determine due to poor quantities of datable materials. Defining Iron Age or Romano-British occupation was particularly problematic as the recovered artefactual material was highly abraded and in many cases mixed with Norman material.

The archaeological remains at the site suggests a ritual focus with a cremation cemetery at the end of the Bronze Age, possibly continuing into the Iron Age in the form of the circular enclosure located during previous work. The nature of activity at the site in the Iron Age and Romano-British periods suggest that some occupation was based at, or near the site. During the Norman period the site appears to have initially been used for a defined field system, although other medieval features belonging to a second phase may have indicate occupation.

2.0 INTRODUCTION

This report details the results of an archaeological strip, map and sample investigation undertaken by SLR Consulting Ltd on behalf of Hanson Aggregates. The fieldwork was carried out at Wrotham Quarry (Addington Sand Pit), Trottiscliffe, Kent in advance of the continued northern extension to the pit onto former agricultural land centred at NGR 564603 159555.

The work was required to fulfil a planning condition placed by the Mineral Planning Authority on permission for the northern extension. This stated that:

No development shall take place until the implementation of a programme of archaeological works and a programme of historic landscape survey have been secured in accordance with a written specification and timetable which has been submitted to and approved in writing by the Mineral Planning Authority. (Condition 30)

An approved method statement for the full archaeological programme was prepared by SLR in January 2009 (SLR 2009a). This outlined four phases of work, comprising geophysical survey, historic landscape survey, systematic field walking, and strip, map and sample monitoring of the ground clearance operations.

Previously a strip, map and sample exercise was maintained during groundworks associated with the quarry extension in two separate phases. The first phase was undertaken between October and December 2009 during the topsoil strip for the main extension area. The second phase, comprising stripping of a pipe corridor for electricity and water services, was undertaken in June 2010.

The phase of work detailed in this report is associated with a strip map and sample investigation carried out in November 2012 and January 2013. The area stripped was located immediately to the south of the 2009-10 area (Figure 2).

All site works were undertaken in accordance with the Institute for Archaeologists *Standard and Guidance for an Archaeological Watching Brief* and *Standard and Guidance for Archaeological Excavation* (2008) and Kent County Council's specification for strip map and sample investigation.

3.0 SITE LOCATION AND DESCRIPTION

The northern extension to Wrotham Quarry lies immediately north of the present quarry at NGR TQ 646 595 (Figure 1). It is situated on the boundary between the ancient parishes of Addington and Trottscliffe, to the south of Addington Lane and approximately 0.6km to the southeast of Trottscliffe. It comprises an irregular parcel of land c. 4.2ha in size surrounded by mature hedgerows, formerly with two principal fields divided by a north south aligned boundary with a pond in the southwest corner. The land had been ploughed and used for arable cultivation in recent years (broad beans and rapeseed) though since 2007 the ground had been maintained as rough pasture. The topography within the extension area slopes gradually from c. 65m AOD in the west to 57m AOD in the east, with a rise in level to 68m AOD in the northwest corner.

The solid geology at the site is divided, with cretaceous mudstone of the Gault Formation across the western half, and sandstone of the Folkstone Formation to the east (BGS Geindex). The soil survey of England & Wales (1983) records the drift geology at the site comprising fine (wind-blown) red sands. Overlying this and extending across the immediate area is a veneer of chalk that underlies a clayey soil with flint nodule inclusions, indicative of a chalk-land environment.

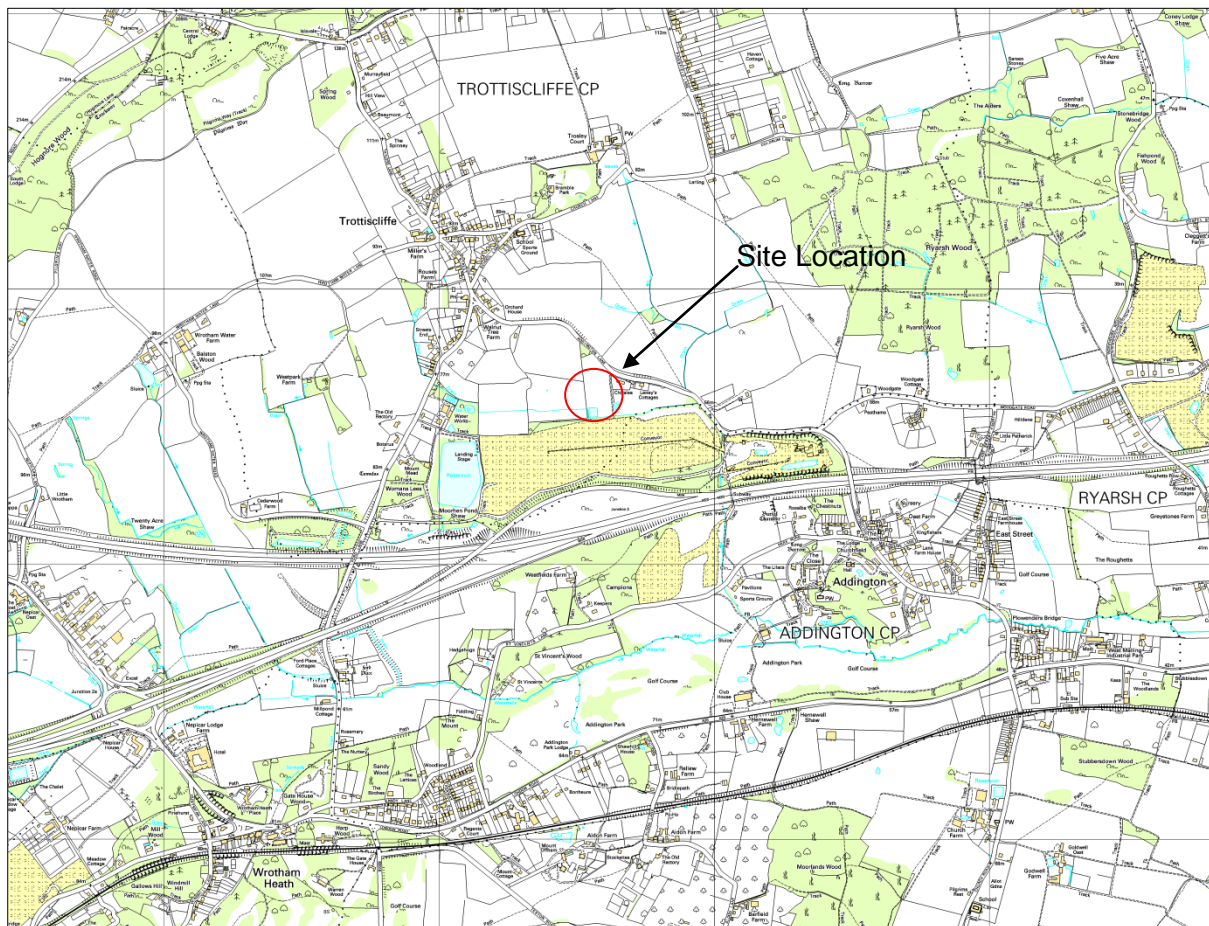


Figure 1: Site location

Reproduced by permission of Ordnance Survey on behalf of HMSO. Crown Copyright. All rights reserved OS Licence Number 100012293

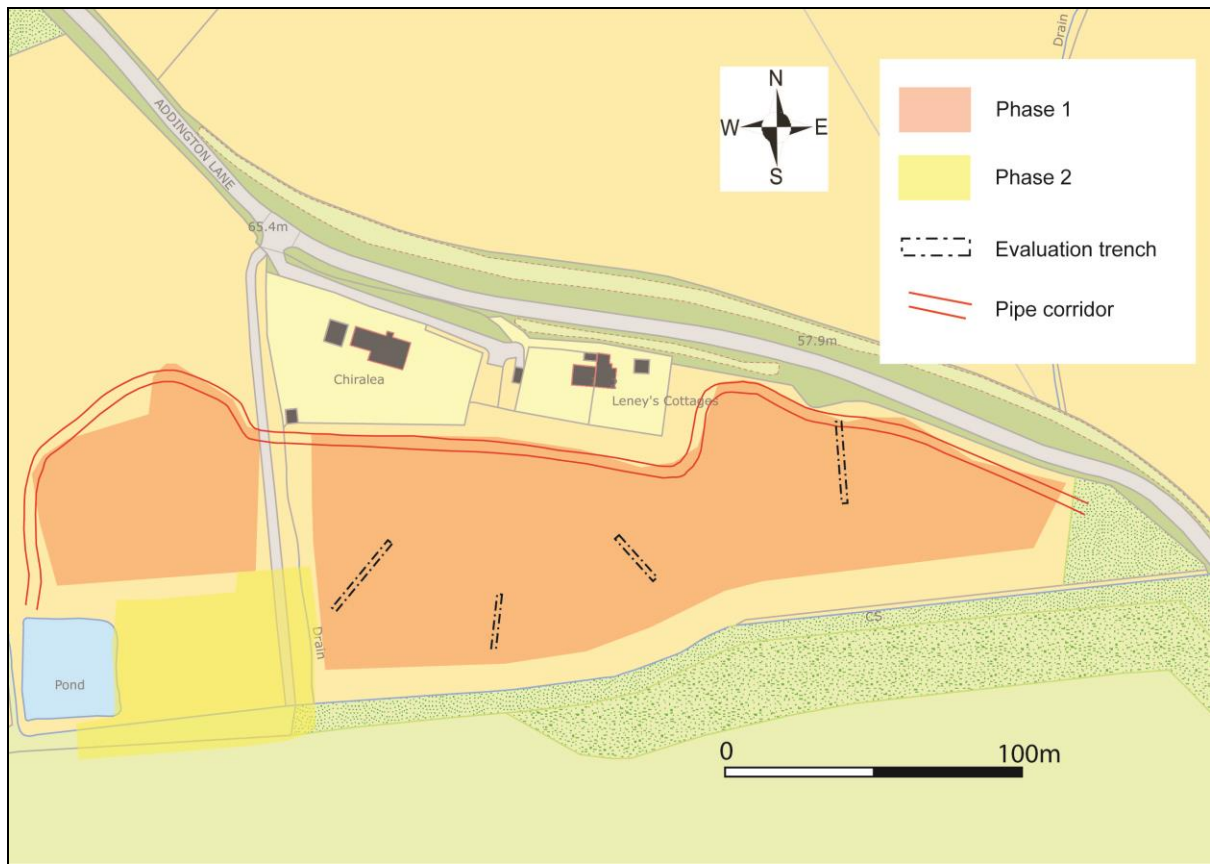


Figure 2: Location of investigation phases

4.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The area around the northern extension possesses a significant cultural heritage which dates to at least the Neolithic period (4000 to 2,000 cal BC). Prior to archaeological work being undertaken within the northern extension site in 2009-10, early prehistoric sites dating to the Palaeolithic (> 10,000 BC) and Mesolithic (10,000 – 4,000 cal BC) periods were unknown.

4.1 Prehistoric

Located within a 500m radius of the northern extension was found a retouched Levalloisian flint knife dated to the Middle Palaeolithic period (c. 250,000-35,000 BC) (Kent HER Number TQ 65 NW 45). A Mesolithic habitation site was also discovered at Addington (Kent HER Number TQ65 NE15). Based on archaeological investigations around the Chestnuts Neolithic burial site a large assemblage of debitage and diagnostic flint (microliths, flakes and cores) was recovered which dates from this period.

By far the most prominent prehistoric presence around the northern extension dates to the Neolithic. There are three stone burial chambered sites: The Chestnuts, the Addington Long Barrow and Coldrum Long Barrow; all forming the western section of the Medway Group with each monument dating to c. 3500 cal. BC. Associated with these monuments is a possible standing stone which also may have an association with later Bronze Age activity in the vicinity (perhaps the Mount Mead bowl barrow). Diagnostic Neolithic flint tools have been found during the construction of the M20. Further flint tools were also recovered within the extension area during the walkover survey in 2007, conducted by SLR Consulting, and during strip map and sample investigations in 2009-10.

Concerning the landscape setting of these Neolithic monuments, the majority are located on the lower sections of the south-facing intermediate slopes of the North Downs, between 50m and 75m AOD and are geographically divided into two main groups: Maidstone/Rochester Group on the eastern side of the Medway and the Snodland/Wrotham Group, located on the western side of the Medway (Philp & Dutto 2005). It has been argued that the former group are all intervisible with each other. However, based on contour-dedicated mapping there is also possible intervisibility with the Snodland/Wrotham Group, a landscape which includes the northern extension.

Immediately outside the northern extension the Bronze Age (2000-900 cal BC) is represented by the remains of a bowl barrow at Mount Mead and the Iron Age (900- 43 cal BC) by two find spots; one of these includes several 'copper' swords and Iron Age coins, the other includes the discovery of a gold coin; an imported Gallo-Belgic stater. Such coins are indicative of an elite presence in the area.

Strip map and sample investigation immediately to the north of the current site in 2009-10 identified a series of Early to Early Middle Iron Age features in the western part of the northern extension. This comprised a pair of coaxial (field?) boundary ditches and a segmental ring ditch thought to have had either a domestic or possible ritual purpose. The pottery and radiocarbon dating of a cremation confirmed a Middle Iron Age date of 365-171 cal BC (at 95% confidence), but also a collection of decorated sherds which were assigned a slightly earlier date. Pottery manufacture might also have occurred on site.

4.2 Romano-British

Romano-British sites (AD 43 – 410) include the remains of several domestic buildings and two urn burials. One of the burials was discovered 1933 to the north-east of Addington in

fields close to East Street. Roman pottery, flue & roof tiles were found during initial quarrying north of Addington reinforcing the notion of a substantial Roman presence in the vicinity of the extension area.

4.3 Early Medieval and Medieval

Much of the present landscape, in particular the enclosed field systems and the woodland mosaic that covers this part of the county originates from the early medieval period. It is probable that the settlements of Addington and Trottiscliffe were established at this time (c. 8th century). West of Trottiscliffe is the remains of a Bishop's palace, further indicating the importance of the area in this period.

During Phase 1 of the strip, map, and sample of the northern extension, two pits with Saxo-Norman pottery were found in the eastern field.

4.4 Post-medieval and Modern

Archaeological evidence for the post medieval period is limited to one site, a brick pit nearby. Despite the lack of local post medieval sites recorded on the regional HER, much of the village characterisation, including Listed Buildings, date from this period. Furthermore, many post-medieval features including physical boundaries such as the hedge-line along the northern side of the extension area, roads and tracks also date from this period.

4.5 Previous Archaeological Work

As part of the archaeological programme for the northern extension of Wrotham Quarry, a geophysical survey (comprising detailed and close-interval magnetometry survey with targeted areas of resistivity survey) was undertaken in June 2009 under favourable conditions. The magnetic survey was inconclusive; weak linear anomalies present in the east field were tested with resistivity but this could not confirm a definite archaeological origin.

A subsequent programme of archaeological trial trenching was carried out in August 2009, with four linear trenches situated in the eastern field. The trenches targeted various types of anomaly: linear and curvilinear positive magnetic anomalies, possible pit features, ferrous responses and magnetic disturbance. The target anomalies in Trenches 1, 2 and 4 were identified as natural features, including striations in the natural geology and bioturbation features (tree boles). A linear feature at the southern end of Trench 3 was interpreted as a boundary ditch, but the absence of artefacts meant the feature could not be dated.

Following this a phase of strip, map and sample investigation was carried out between October and December 2009. This located an Iron Age ring ditch and relic field system and some isolated medieval pits.

5.0 STRIP MAP AND SAMPLE AIMS AND METHODOLOGY

5.1 Aim

The aim of the strip map and sample investigation was to identify and record any archaeological remains present within the remaining area of the northern extension.

The specific objectives were to monitor the removal of topsoil within the extension area under archaeological supervision (Figure 3), to excavate and record archaeological features exposed within the stripped area, and to prepare a full report on the findings.

5.2 Strategy and general approach

The investigation was guided by the Institute for Archaeologists' *Standard and Guidance for Field Evaluation* 2008.

5.3 Fieldwork Recording

The strip, map and sample exercise was undertaken between November 2012 and January 2013 during the overburden removal across the southern part of the northern extension.

An archaeologist was in attendance during all machining work, allowing the machine to be directed and any exposed archaeological deposits to be identified, marked and isolated from the rest of the site prior to detailed excavation and recording. The approach to the work was in accordance with Kent County Council's specification for Strip Map and Sample, as set out in the approved method statement (SLR 2009a).

The sampling strategy employed on site was a continuation of the strategy developed during the previous phases of work in consultation with the County Archaeologist and the English Heritage Regional Science Advisor.

A detailed total station survey was used to tie all hand drawn plans and features to the Ordnance Survey National Grid. All hand drawn plans were annotated with spot heights taken relative to the Ordnance Datum.

The artefacts recovered from the site were packed and stored by context prior to processing. Individual groups of artefacts were then separated by type and issued to the relevant specialists for assessment and analysis.

6.0 RESULTS

6.1 Summary

Five phases of activity have been identified on the site. The initial phase comprises a series of Bronze Age cremation pits which have been radiocarbon dated and represent a distinct group in terms of date and form. The subsequent phases of activity have been grouped in terms of function and tentatively dated through assessment of the artefacts contained within the fills of individual features. Where no artefacts have been recovered, some features have been grouped with others on the basis of similarity of form and location. The 5 phases are as follows:

- Phase 1: Late Bronze Age cremation cemetery;
- Phase 2: Late Iron Age coaxial gullies and post hole
- Phase 3: Late Iron Age-Romano British pits;
- Phase 4a: Medieval boundary ditches
- Phase 4b: Medieval pits and boundary gullies; and
- Phase 5: Post medieval ditches and culverts.

In addition to the identified phases there is also an unassigned group of ditches and gullies.

The location of all features and their phase attribution is illustrated in Figure 4 below.



Figure 3: General view of site facing east

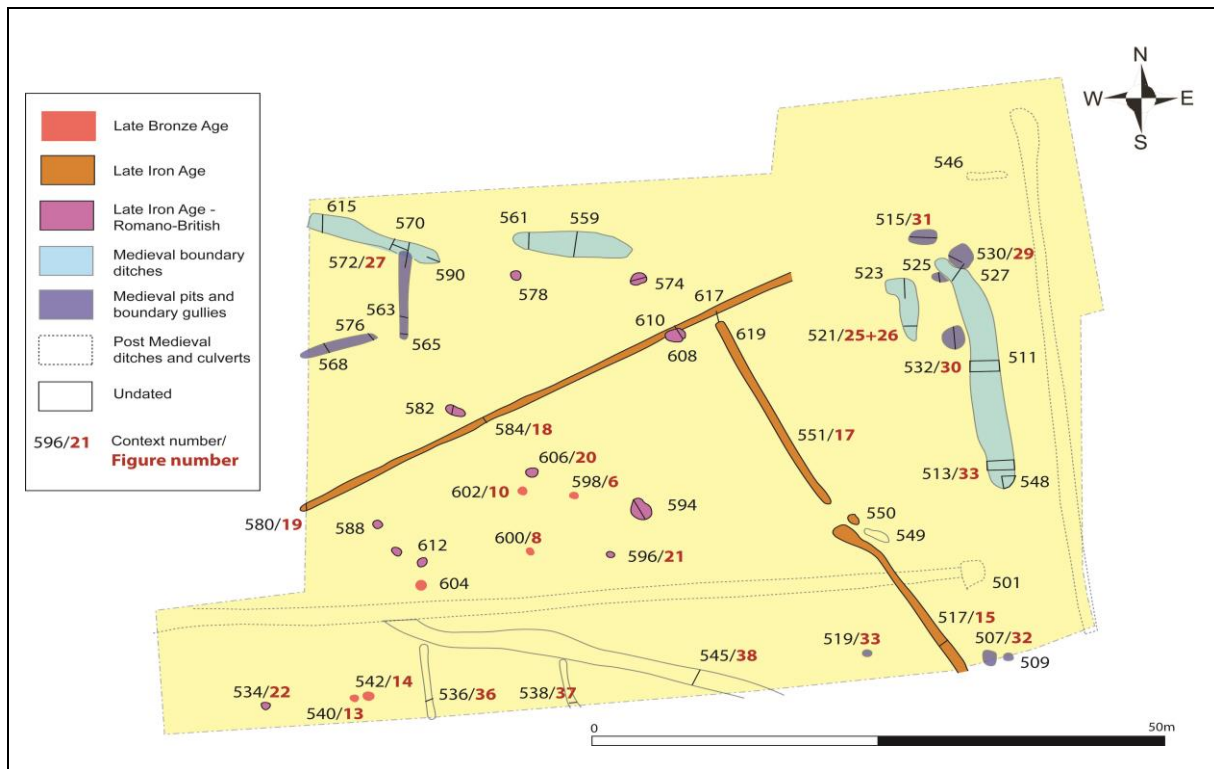


Figure 4: Phase 2 Feature location plan

6.2 Detail

6.2.1 Phase 1: Late Bronze Age Cremation Cemetery 1200BC – 800BC

Six features were located during the investigation which can be ascribed to the Late Bronze Age. All features comprised small pits of around 0.3-0.5m diameter cut into the natural mottled grey to yellow clay soils (505), and sealed by the ploughsoil and subsoil (503) and (504) respectively. The fills contained frequent charcoal staining and in most cases fragments of burnt human bone from which it has been possible to obtain four radiocarbon dates.

Four cremation burial pits were clustered towards the centre of the site: [598], [600], [602] and [604]. A further two cremation burials were located to the southwest of this grouping ([540] and [542]), separated from the central group by a modern ditch but clearly part of the same overall phase of activity.



Figure 5: Cremation burial [598] facing north

Cremation [598] comprised a shallow pit that was circular in plan and measured 0.53m in diameter and 0.15m in depth. Filling the cut was a moderately firm silty clay and charcoal (597). Within this fill were inclusions of sub-angular flints and burnt human bone.

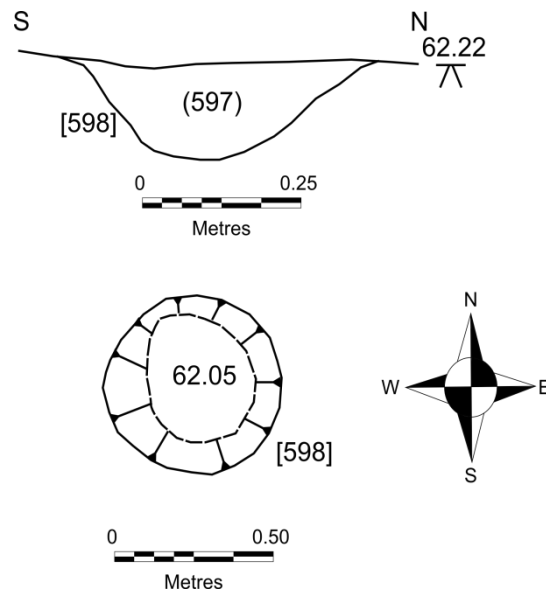


Figure 6: East facing section and plan of cremation pit [598]



Figure 7: Post excavation shot of Cremation burial [600] facing north

Cremation [600] comprised a shallow pit that was circular in plan and measured 0.38m in diameter and 0.14m in depth. Filling cut [600] was a moderately firm silty clay and charcoal (599), containing occasional sub-angular flints and moderate quantities of small fragmentary human bones. The bone fragments comprised the skull of a juvenile or adult individual of indeterminate sex. Two samples of charcoal material from the burial were submitted for radiocarbon dating which produced dates of 2871 ± 29 BP (SUERC-47258) with a 89.2% probability of a date of 970calBC; and 2862 ± 27 BP (SUERC-47259) with a 87.6% probability of a date of 971calBC. This places the cremation firmly during the Late Bronze Age, most probably in the 10th century BC.

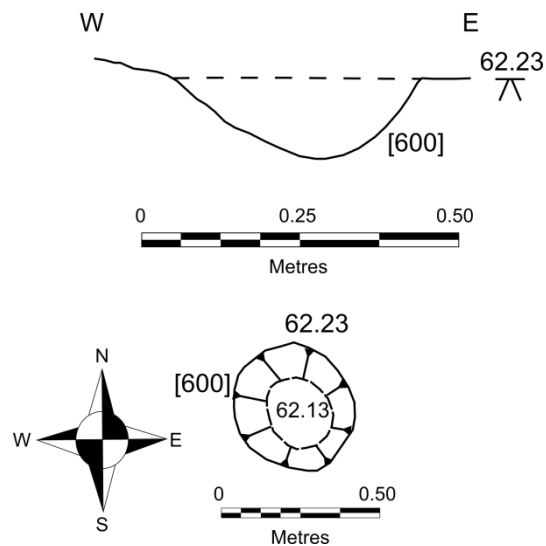


Figure 8: South facing section and plan of cremation pit [600]



Figure 9: Pre-excavation shot of Cremation burial [602] facing north

Cremation [602] comprised a shallow pit, circular in plan measuring 0.36m in diameter and was filled by (601), a moderately compacted silty clay and charcoal, with moderate inclusions of fragmentary human bone. The bones comprised parts of the skull, axial, and upper and lower limbs of a juvenile/ adult. A single radiocarbon date was recovered from the carbonised material within this cremation. This gave an uncalibrated date of 2934 ± 34 BP, with calibration producing a 95.4% probability of a date of 1041calBC (SUERC-47260).

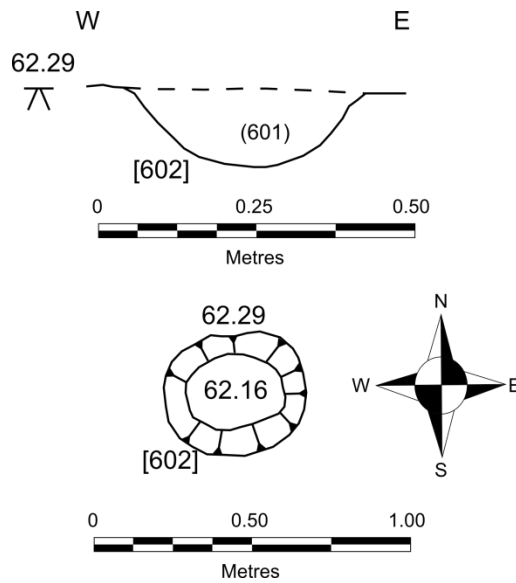


Figure 10: South facing section and plan of cremation pit [602]



Figure 11: Pre-excavation shot of Cremation burial [604] facing north

Cremation [604] comprised a shallow pit that was circular in plan with a diameter of 0.35m and a depth of 0.19m. The fill (603) consisted of moderately compacted clay and charcoal, with moderate inclusions of fragmented human bone and occasional sub-angular flint pebbles. The identifiable bones included small pieces of the skull, axial, and upper and lower limbs of a juvenile/ adult. A single radiocarbon sample was retrieved from the carbonised material within this cremation which produced an uncalibrated date of 2879±29 BP, with a calibrated result of 89.2% probability of 973calBC.



Figure 12: Pre-excavation view of cremation burials [540] and [542] facing north

Cremation [540] comprised a small pit, sub-circular in plan and measuring 0.45 x 0.35m, filled with a dark brownish-grey moderately compacted silty clay with occasional charcoal flecks (541). No obvious skeletal remains were located within the pit, however the similarity in appearance, its size and location suggests it is contemporary with the dated examples in this group.

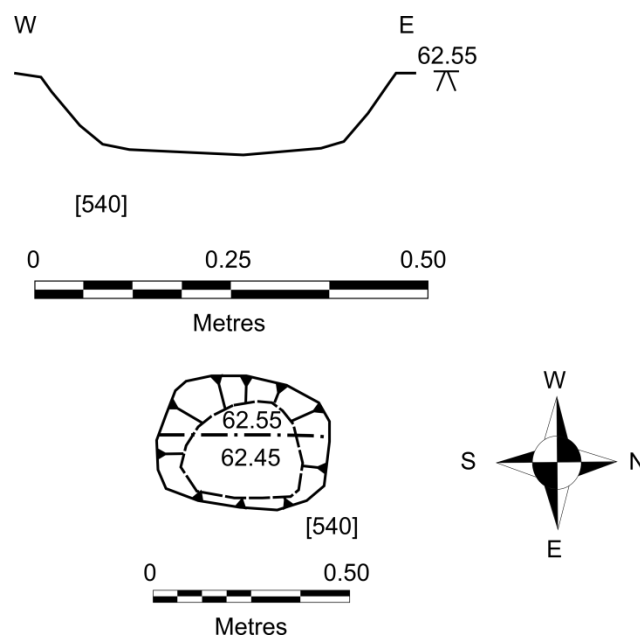


Figure 13: South facing section and plan of cremation pit [540]

Cremation pit [542] was an elongated, sub-oval cut in plan and measured 0.75m in length, 0.44m wide and 0.18m deep. The fill comprised a dark grey/ black compact silty clay with inclusions of very small angular flint pebbles and moderate inclusions of charred,

fragmentary human bone (541). Environmental sampling of this fill determined that the skeletal remains included the skull of a juvenile/ adult of indeterminate age or sex.

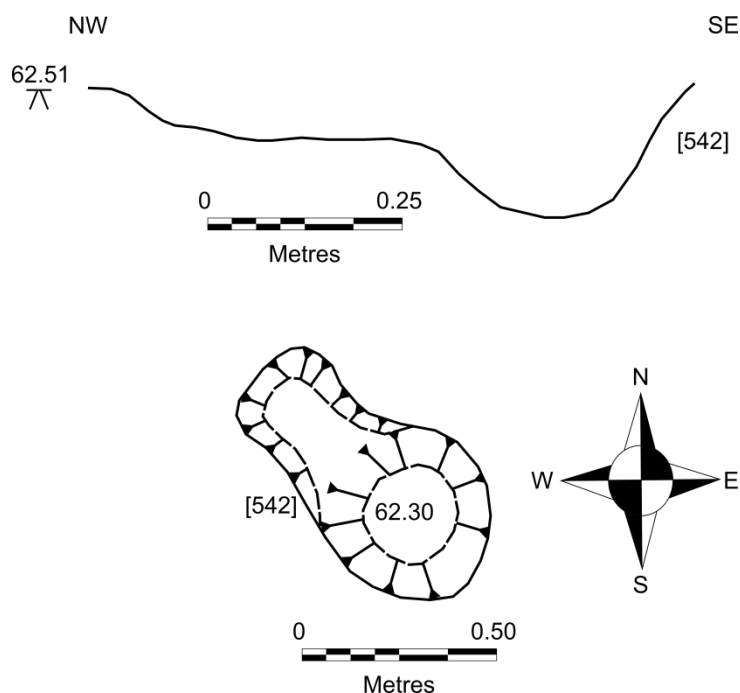


Figure 14: South west facing section and plan of cremation pit [542]

6.2.2 Phase 2: Late Iron Age Coaxial Gullies and Post Hole

The features in this phase comprise a coaxial arrangement of narrow gullies in the centre of the excavation area forming a possible part of a relict field system. The fills of the gullies were for the most part aceramic, though a single sherd of Late Iron Age grog-tempered pottery came from the southernmost gully [517]. In terms of form these gullies are similar to an arrangement of Middle Iron Age gullies thought to represent field boundaries, found a short distance to the north during the 2009-10 investigations at the site, though their alignment differs. The narrow gullies in this phase stand in contrast to more substantial ditches containing medieval pottery alongside earlier ceramics to the east and north (Phase 4a).

The southernmost feature within this phase was a north west to south east aligned linear ditch/ gully [517]. This feature entered the site in the south east corner and terminated to the southeast of a similarly aligned ditch/ gully [551]. It measured c. 17.6m in length, c. 0.68m in width and 0.15 to 0.20m in depth. Filling [517] was a mid-brownish grey clay (516)/ (553) with frequent small angular flints, some of which were burnt, a single sherd of Late Iron Age grog-tempered pottery, and small fragments of bone. Given the alignment of this feature, which represents a continuation of [551]/[619], it seems likely that this ditch forms part of a wider field system, along with [619], [580]/ [584]/[610]/[617].

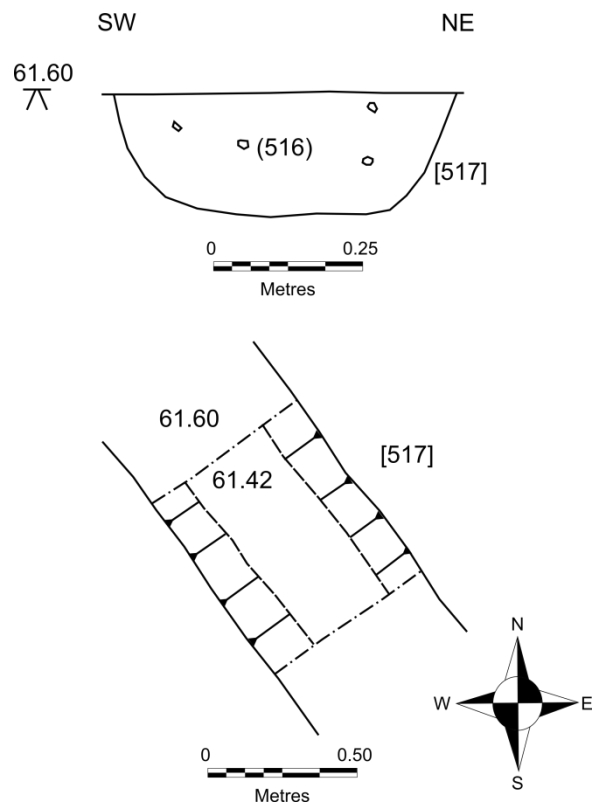


Figure 15: South east facing section and plan of gully [517]



Figure 16: Southern terminus of gully [517] facing north west

To the north west of gully [517], gully [551] continued on a similar north west - south east alignment and measured c. 20.1m in length, 0.8m in width and 0.23m in depth. The fill (552) comprised mid greyish brown clay with occasional small to large angular flints. No datable artefacts were recovered from this feature.

Situated in the break between gullies [517] and [551] and possibly truncating [517] was an oval pit or post hole [550] measuring 1.0m x 0.80m in plan, filled with a primary fill of mid-greyish brown moderately compacted silty clay, with occasional charcoal flecks and sub-rounded flint nodules (554). This fill was overlain by a light greyish brown moderately compacted silty clay with occasional flint pebbles (555). No datable artefacts were recovered from this feature.

The northern end of gully [551] terminated at a perpendicular feature [580]/ [584]/ [610]/ [617] to the north.

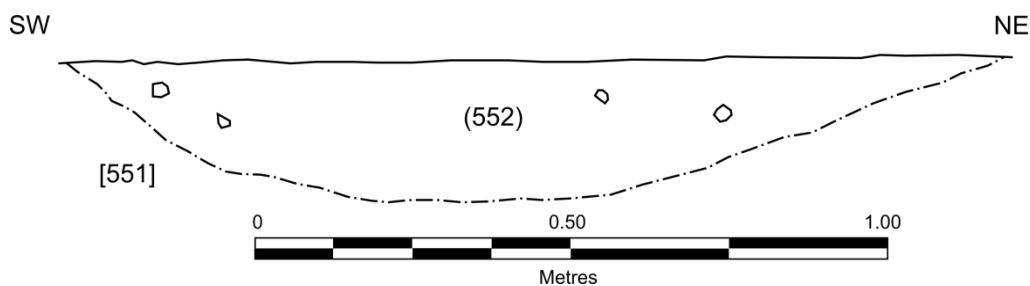


Figure 17: South east facing section through gully [551]

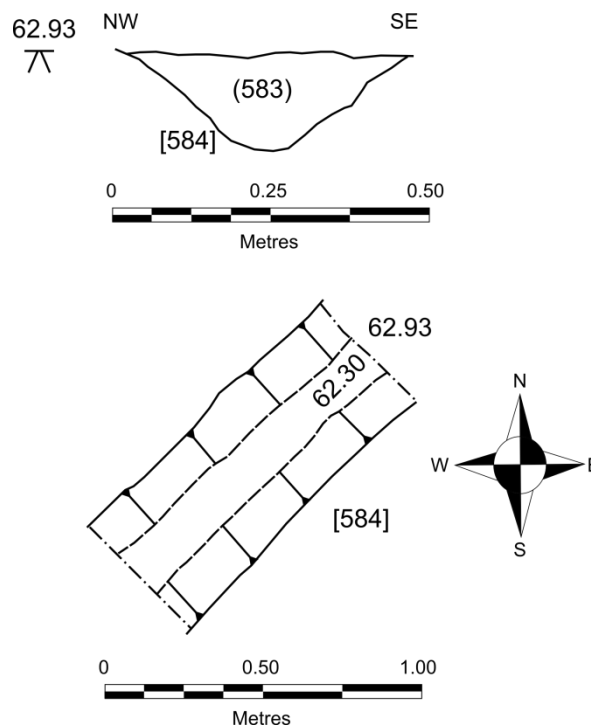


Figure 18: South west facing section and plan of ditch [584]

Gully [580]/[584]/[610]/[617] was a single feature recorded at four separate locations and comprising a north-east – south-west orientated narrow gully measuring approximately 47.8m in length, 0.5m in width and 0.15m deep. The fill of the gully was a uniform light grey silt (579), (583) and (609), with occasional flint inclusions which grew more frequent towards the base of the feature, suggesting possible erosion of the gully sides. No datable material was recovered from the fills of this feature.

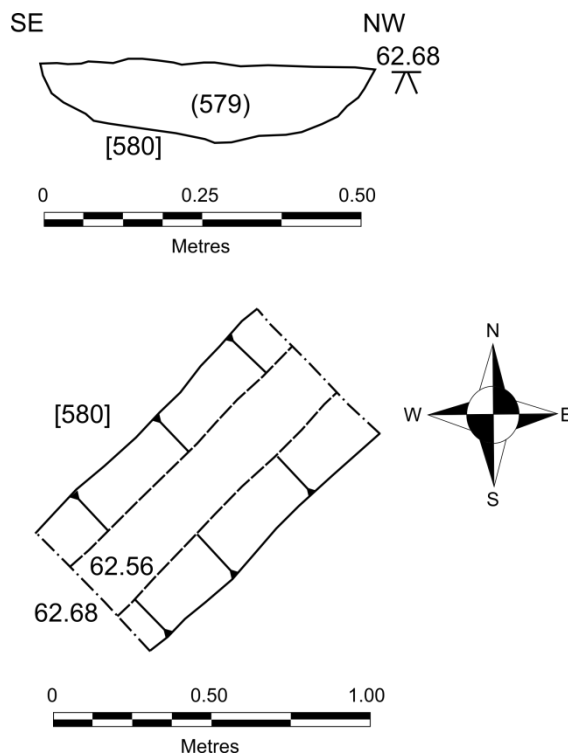


Figure 19: North east facing section and plan of gully [580]

6.2.3 Phase 3: Late Iron Age-Romano British pits

This phase comprises a scatter of 11 large, oval pits in the western half of the investigation area. These features did not contain datable artefacts (though fragments of possible Romano-British pottery are noted on context records for pits [574] and [[578]) but have been grouped on the basis of their similar form. The location is partially coincident with the location of the Bronze Age cremation pits, and surrounds the possible Late Iron Age field boundary gullies in Phase 2, suggesting a possible greater temporal distribution of these features than could be determined by excavation. The presence of frequent scorched and burnt flint in some features may indicate an industrial nature to some of these features.

Table 1: Summary of Late Iron Age-Romano British Pits

Cut	Fill	Diameter (Max)	Finds
534	533	0.84m	Frequent Charcoal
574	573	1.3m	Small pieces Roman pottery noted on context sheet
578	577	0.8m	Occasional charcoal and small fragments of Roman pot noted on context sheet
582	581	1.82m	None. Possible natural origin noted
586	585	0.75m	None
588	587	0.8m	Burnt flint
594	593	1.26m	Frequent scorched earth and burnt flint

Cut	Fill	Diameter (Max)	Finds
596	595	0.9m	Burnt flint and charcoal
606	605	1.06m	None. Possibly water-lain infill of tree hollow
608	607	1.74m	Very frequent scorched/burnt flint and charcoal perhaps indicative of industrial activity
612	611	0.84m	Burnt clay

In the northern part of the excavation were four pits, [574], [578], [582] and [608]. The northernmost of these, [574] and [578] were oval in plan measuring 1.3m and 0.8m in diameter respectively. Pit [574] was 0.17m deep, the fill silty clay (573) containing burnt stone and apparent fragments of Roman pottery (though none were suitable for retention). Pit [578] was 0.12m deep and filled with silty clay (577) which was also noted to contain fragments of Roman pottery.

Pit [582] was located to the north of Phase 2 gully [584]. It was oval in plan and measured 1.82 x 0.73 x 0.28m. Filling the cut were occasional sub-rounded flint pebbles and cobbles with some manganese staining (581). No finds were located within this feature. This feature was probably a tree bowl, but given its proximity to other pits in this portion of the site it cannot be totally discounted as a feature.

A further small pit, [608], containing a dark grey/black moderately compacted silty clay with frequent small flint and charcoal flecks (607) was located adjacent to Phase 2 gully [610]. This feature contained very frequent burnt flint perhaps indicating an industrial purpose, but no datable artefacts were recovered. Palaeoenvironmental analysis of the fill (see sample <07> below) did not yield any pertinent information regarding past local environment or activity.

In the central area of the site and partially coincident with the location of dated Bronze Age cremations were pits [588], [586], [594], [596], [606] and [612]. Pit [588] was circular in plan, and 0.8m in diameter. Roughly 6m to the south east of this pit was a further similarly sized pit [612], measuring 0.84m in diameter. Lying between these two pits was a feature interpreted as an oval post-hole [586], which measured 0.75 x 0.66 x 0.10m. The fills of each of these features were undiagnostic, with no dating evidence located. The fill of pit [612] (sample <8>) was submitted for palaeoenvironmental analysis. The results were negative.

Lying to the north of cremation burial [602] was oval pit [606], filled with a firmly compacted light grey silty clay (605), which was interpreted as probably being of natural origin.

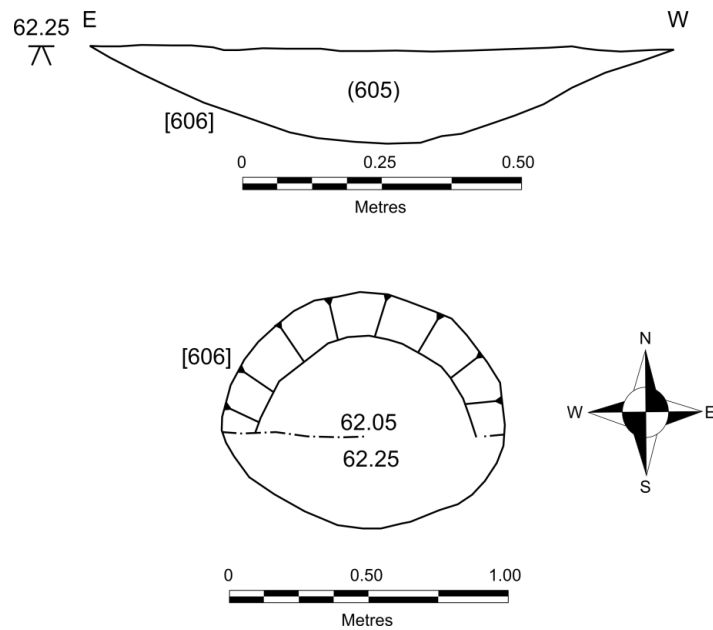


Figure 20: North facing section and plan of pit [606]

Pit [594] was situated immediately to the east of the main group of cremation burials in the centre of the site. The cut was oval in plan and filled a dark grey brown silty clay with frequent scorched earth fragments and burnt flint (593).

To the southwest of [594] was a further small oval pit [596], containing a fill of dark greyish brown firm silty clay with frequent sub-angular pebbles and occasional burnt flint and charcoal flecking (595).

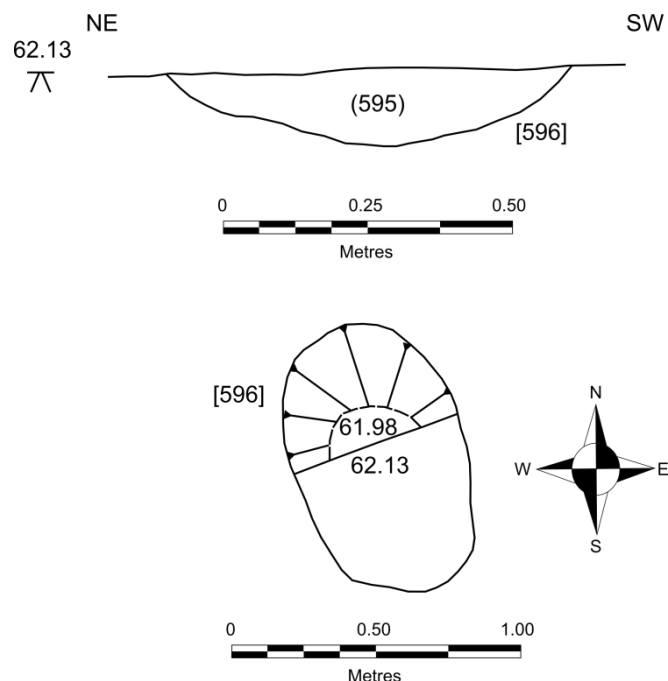


Figure 21: Profile and plan of Pit [596]

Pit [534] was situated in the southwest corner of the site. The cut was roughly circular in plan (0.84m maximum diameter) and filled with a dark brownish black, moderately compacted silty clay (533) which contained burnt sandstone and frequent charcoal/flint.

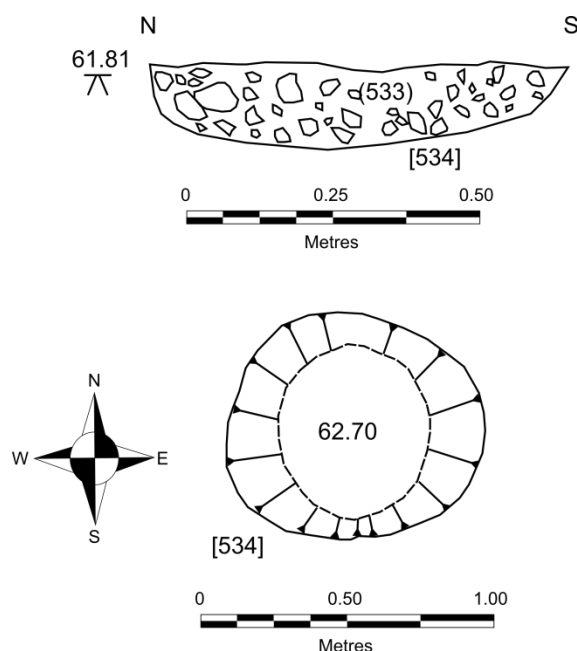


Figure 22: West facing section and plan of pit [534]

6.2.4 Phase 4a: Medieval Boundary Ditches

An initial phase of medieval activity at the site is represented by four ditches on the east and north sides of the investigation area.

Situated to the east of gullies [517] and [551] on the eastern side of the site was a wide ditch ([511]/ [513]/ [527]/ [548] recorded in four interventions). The ditch measured 23.1m in length oriented approximately north-south, and was up to 2.6m wide. The fill of this ditch was quite uniform, consisting of a mid to dark greyish brown firmly compacted silty clay containing frequent flints and occasional charcoal flecking (510), (512), (526) and (547). Towards the southern end of the ditch (within fill (512)) was a copper alloy ring (see Appendix E) that possibly formed a part of decorative edging for a chainmail garment, and a probably un-associated copper alloy small mount or fitting. Finds recovered from fill (510) towards the centre of the ditch included both Late Iron Age grog tempered pottery and Romano-British coarse and fine wares, alongside frequent medieval pottery dated to the late Norman period (12th – 13th century). A similar date range of pottery incorporated within the fill of the ditch was noted in context (526) at the northern end of the feature, while medieval pottery alone was found within the southern terminus (547). This suggests a likely medieval date of infilling, though reworking of Iron Age/Romano-British material from surrounding features (or residual within the ploughsoil) is evident.

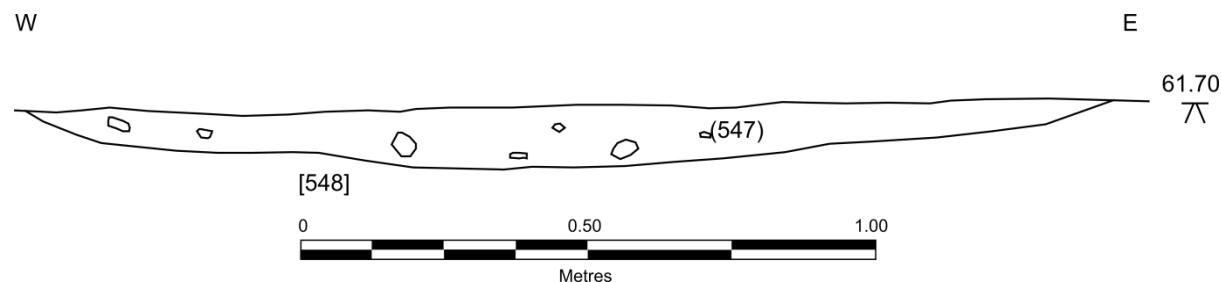


Figure 23: South facing section through ditch [511]/ [513]/ [527]/ [548]



Figure 24: Ditch [511]/ [513]/ [527]/ [548] facing north

Situated to the west of Ditch [511]/ [513]/ [527]/ [548] was an irregular, oval-shaped feature [521]/[523], interpreted as a remnant ditch. The cut was principally north-south aligned, measuring 6.5m in length and up to 1.5m wide, with an east-west aligned return at its northern end. The fill of the ditch was a grey brown clay (520)/ (522), containing occasional Norman (12th – 13th century) pot sherds and frequent small to medium sized angular and sub-angular flints. A small quantity of residual Late Iron Age pottery was also present within this fill.

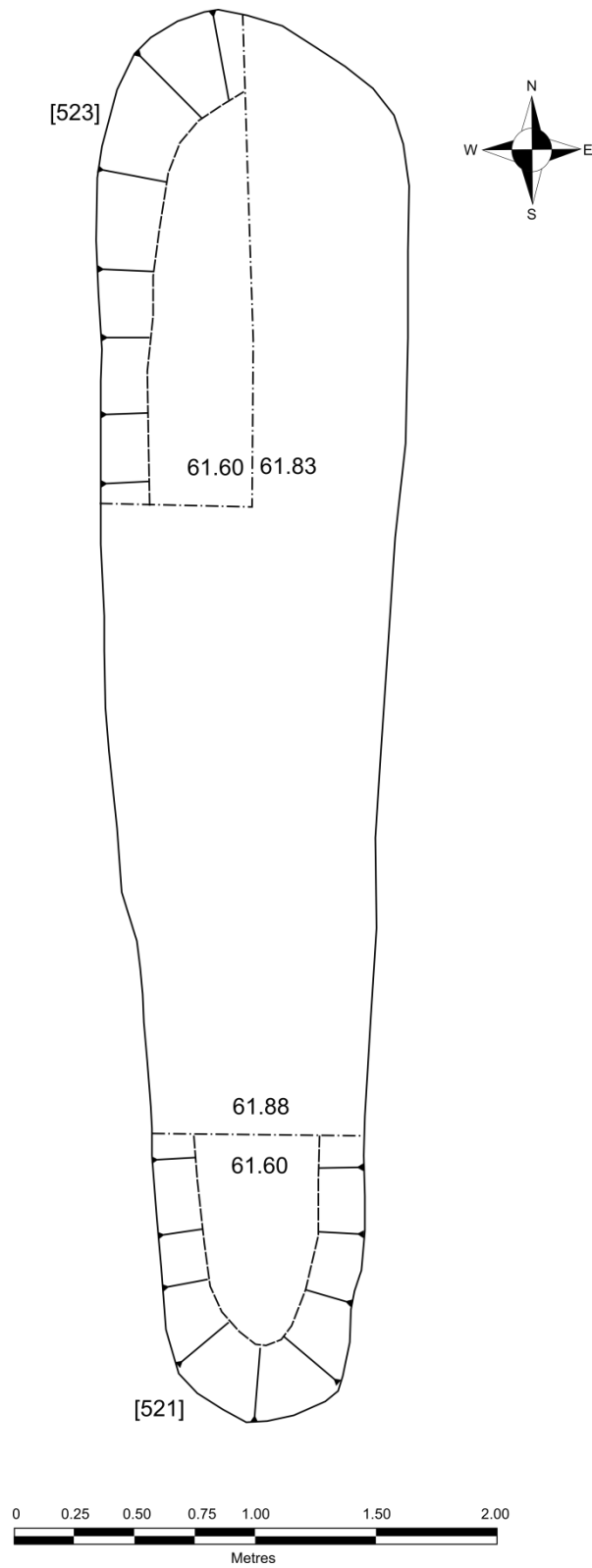


Figure 25: Plan of ditch [521]/ [523]

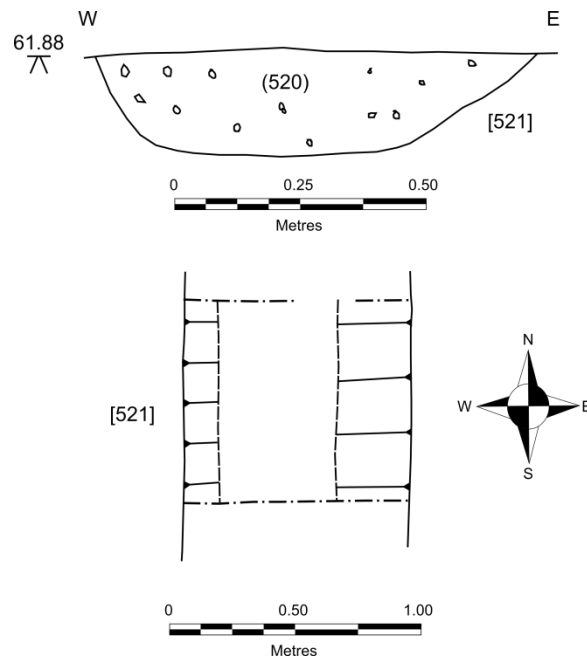


Figure 26: South facing section and plan of ditch [521] (southern end)

In the north-west corner of the investigation area was a roughly west-north-west to east-south-east aligned ditch [570]/ [590]/ [615]. The cut was 12m in length and up to 2m wide, extending beyond the north-west corner of the stripped area. At the western end of the ditch a primary fill of a mid-brownish grey firmly compacted silt (614) was overlain by a uniform brownish grey silty clay fill (569)/ (589)/ (613). A section excavated through the ditch (at [570]) yielded a small quantity of late Norman pottery (12th – 13th century).

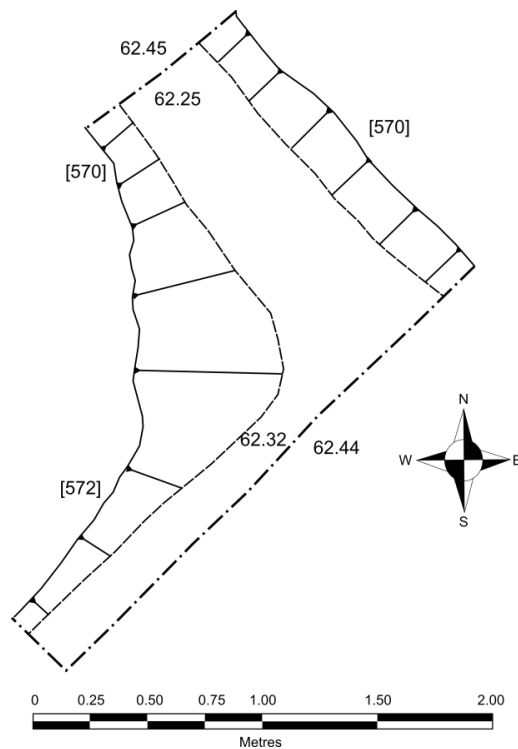


Figure 27: Plan of intersection between ditch [570] and slightly later gully [572]



Figure 28: Ditch [559]/ [561] facing west

To the east of ditch [570]/ [590]/ [615], and on an east-west alignment, was a further section of ditch [559]/ [561]. The linear cut was 10m in length and up to 2m wide, and contained three distinct fills. The earliest fill (558) comprised a dark grey firmly compacted silty clay with occasional small angular flint, which was overlain at the eastern end of the feature by a mid yellowish grey firmly compacted silty clay containing a single sherd of Norman pottery and small flint nodules (557). Overlying (557) was a mid yellowish brown firmly compacted silty clay with occasional medium to large angular and sub-angular flints (556). At the western end the ditch was filled with a uniform fill, (560), comprising firmly compacted yellowish grey silty clay with occasional sherds of Norman (13th century) pottery, and appeared to be part of the same context as (556).

6.2.5 Phase 4b: Medieval Pits and Boundary Gullies

The features within this phase comprise a shallow gully in the north-west corner of the investigation area which appeared to cut the upper fills of Phase 4a ditch [570], and a group of pits on the eastern side of the site which cut into the fills of Phase 4a ditches or contained medieval pottery in their fills.

In the north west corner of the investigation area was a gully comprising an east-west aligned section ([568]/ [576]) 7m in length, with a north-south aligned return at its eastern end ([563]/ [565]/ [590]) 8.5m in length which cut into the fill of ditch [570] at its northern end. Filling [568]/ [576] was a yellowish grey firmly compacted clay (567)/ (575) containing occasional sub-angular pebbles towards its base. Cut [563]/ [565]/ [590] was filled with a dark grey brown moderately compacted silty clay (562)/ (564). No datable finds were recovered from the fills of this feature.

On the eastern side of the site a series of pits had been cut into the backfill of Phase 4a ditch [527]. The northernmost of these comprised [530], an oval pit in plan measuring 2.2m x 2m.

The cut had a concave profile 0.45m deep and was filled with two clay fills (529) and (528), the uppermost of which, (528), contained occasional charcoal flecks. Both fills contained Late Iron age and Romano-British pottery, the upper fill also containing late 12th-13th century (Norman) wares. This pit partially truncated the fills of ditch [527] (see Figure 29 below).

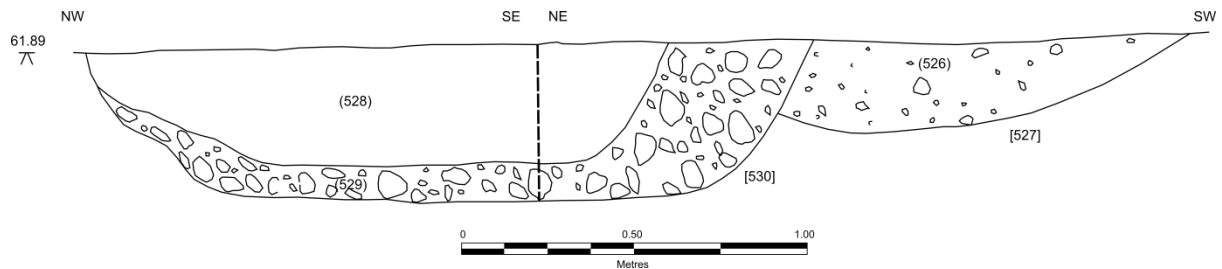


Figure 29: Section through pit [530] and ditch [527]

To the immediate southwest of pit [530], pit [525] was a second oval pit with a concave base measuring 1.25m x 0.78m in plan and 0.22m deep. The fill (524) was a dark greyish brown silty clay with frequent flint nodules and occasional charcoal flecks (524). The fill also contained Late Iron Age, Romano-British and medieval pottery.

The fact that these pits had been cut into the backfill of ditch [570]/ [527] indicates that the ditch had been out of use (possibly deliberately backfilled) prior to the excavation of these features.

To the south of pit [525] was pit [532]. The pit was oval in plan, measuring 2m x 1.8m orientated north - south. The cut profile had steeply sloping sides and a flat base 0.25m deep. Filling the pit was a firm mid-greyish brown silty clay containing occasional burnt flint, occasional charcoal flecking and 13th century medieval pottery. Occasional residual sherds of 1st century pottery were also located within the fill. Although this pit had no stratigraphic associations, it has been placed in this phase alongside pits [525] and [530] on the basis of its proximity to the latter, and the similarity of its shape, inclusions and fill.

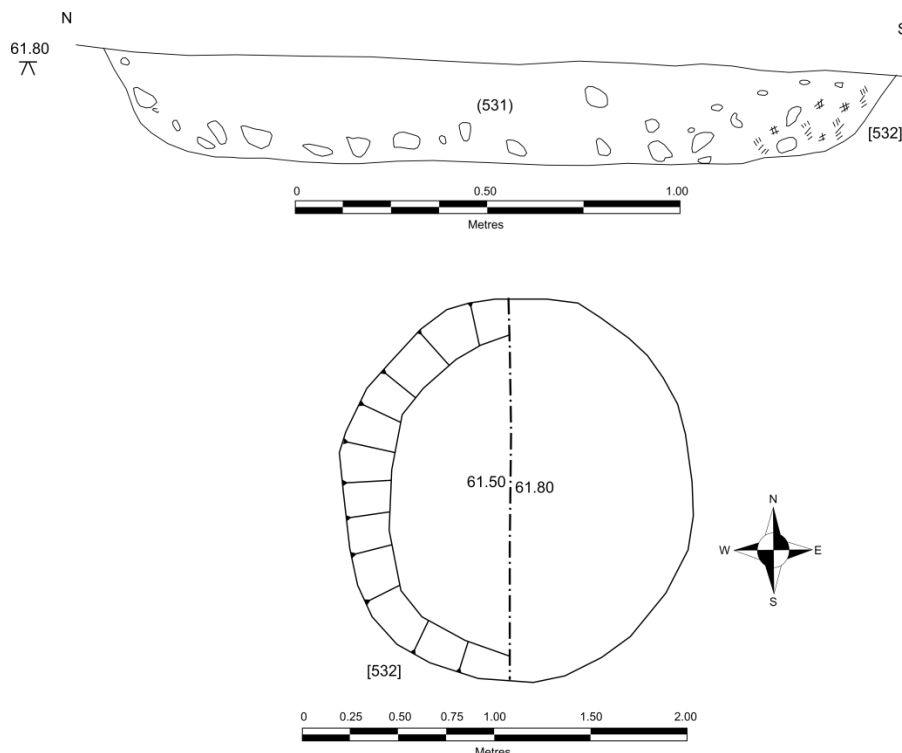


Figure 30: West facing section and plan of pit [532]

Pit [515] was located towards the north eastern corner of the site. The cut was sub-circular/ ovoid in plan, 2.4m in diameter, with a concave profile and filled with a well compacted grey brown clay containing flint and occasional small pottery sherds of Late Iron Age- 1st century AD date (514). This pit has been placed in Phase 4b on the basis of its size, shape and proximity to the group of pits described above.

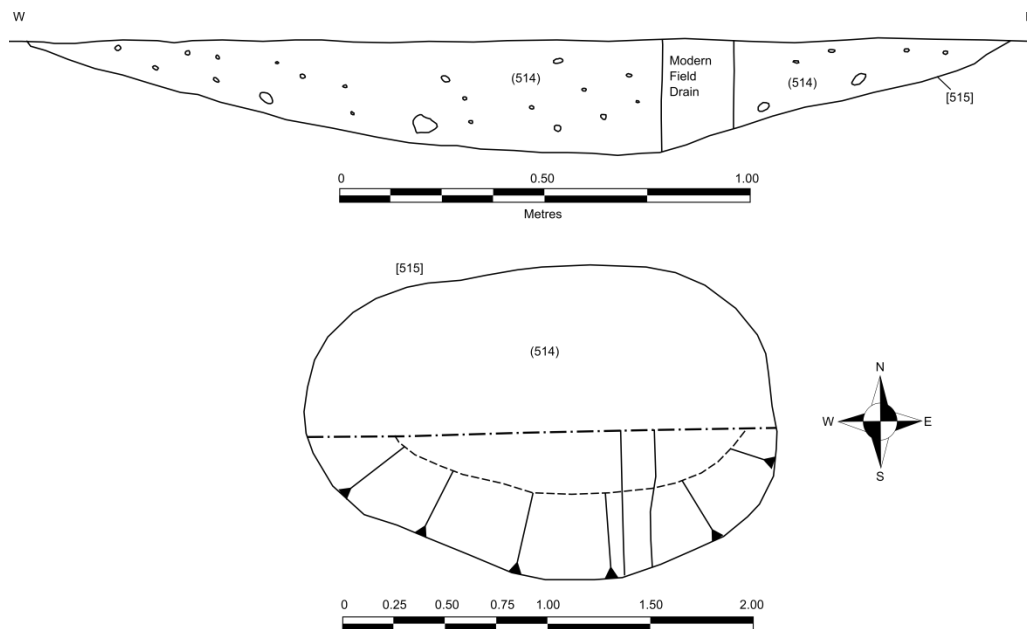


Figure 31: South facing section and plan of pit [515]

In the south east corner of the site was a small group of cut features comprising one small pit and two post holes, [507], [509] and [519].

Post hole [509] was oval in plan and measured 0.96m x 0.66m. The fill (508) contained 5 sherds of Late Iron Age Patch Grove grog tempered ware pottery. Post hole [509] was situated in close proximity to pit [507], an oval cut measuring 1.9 x 1.14m. The fill (506) contained frequent inclusions of charcoal flecks and pebbles, alongside pottery of later Iron Age, Romano-British and medieval date.

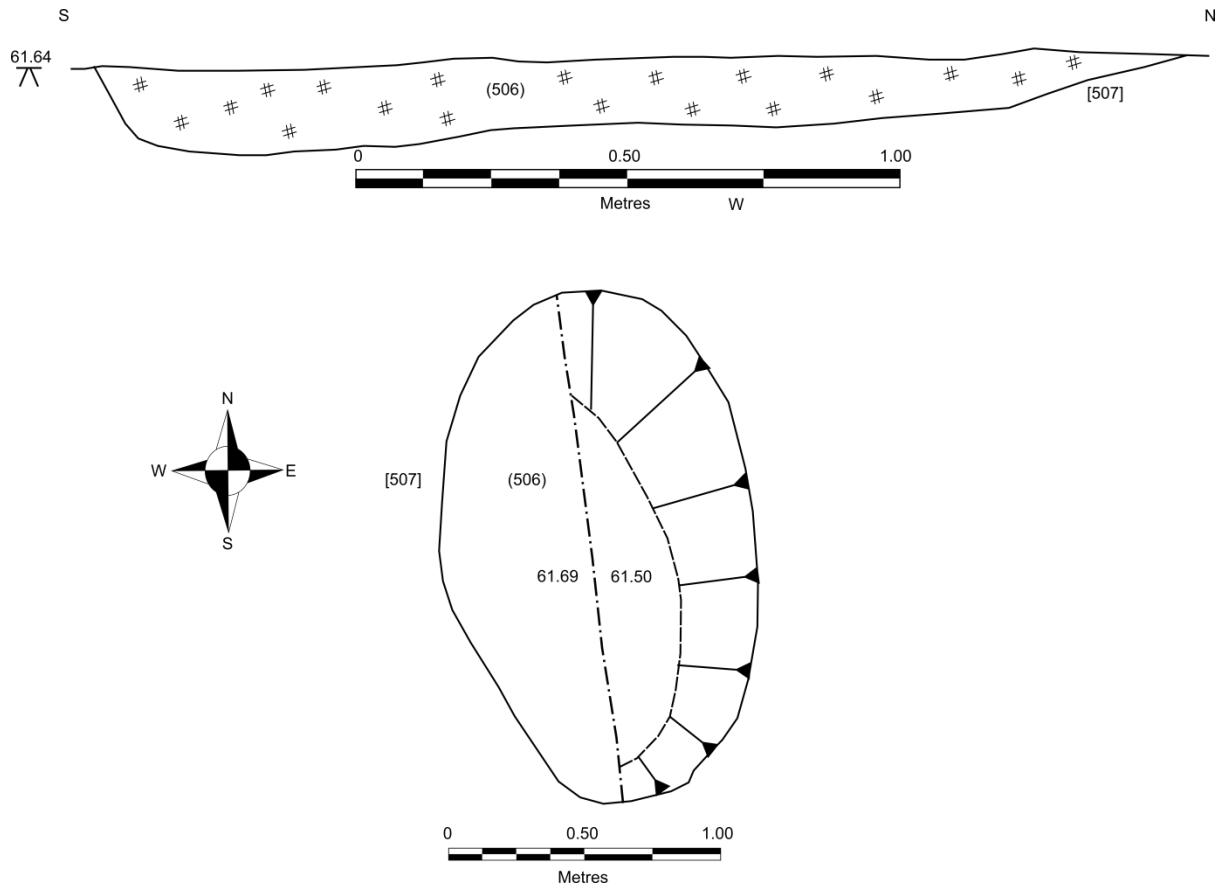


Figure 32: East facing section and plan of pit [507]

To the west of these, and to the west of ditch [517] was a further circular post hole [519], filled with moderately compacted grey clay (518). This feature also contained pottery of medieval date.

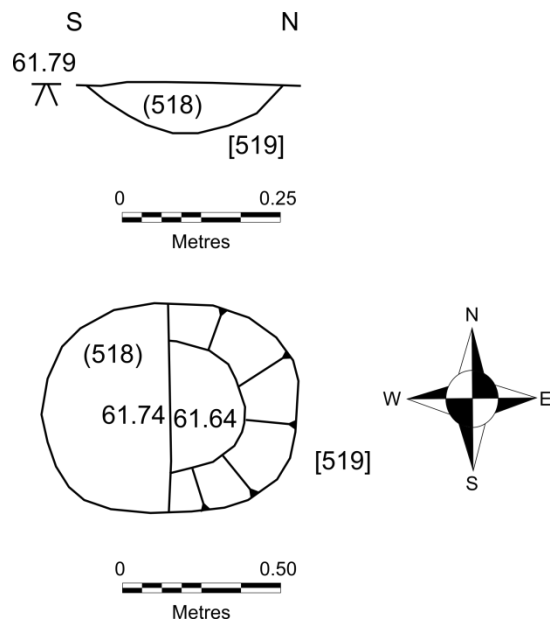


Figure 33: East facing section and plan of post hole [519]

6.2.6 Phase 5: Modern

This phase was characterised by three modern ditches (not numbered), two aligned east to west located at the northern end and towards the southern end of the stripped area, and the third aligned north to south. A gravelled farm track (not numbered) ran to the west of the north-south ditch, crossing the southern east-west ditch over a brick culvert (501) and crossing the northern ditch over a stone culvert (546). This feature overlay the ditch [511].



Figure 34: Culvert (501) facing west

The modern features were cut through the topsoil (503) and subsoil (504), which sealed all the earlier features across the investigation area.

6.2.7 Undated Features

In the southern half of the site, three feature comprising a north west – south east aligned ditch and two north-south aligned gullies respecting the edge of the ditch were identified. The fills of the features contained no datable finds, and their purpose cannot be readily explained in relation to the surrounding archaeological features.



Figure 35: South east facing section of ditch [545] facing north west

To the east of cremations [540] and [542] were gullies [536] and [538], both aligned approximately parallel on a north to south alignment and extending beyond the southern limit of the investigation area. Filling [536] was moderately compacted light grey clay with occasional flint nodules. Gully [538] was filled with similar moderately compacted light grey clay. Given the alignment and similar fills it seems likely that both are contemporary. Both [536] and [538] appeared to terminate adjacent to ditch [545] to the north, with the end termini respecting the ditch cut. No datable artefacts were recovered from these features.

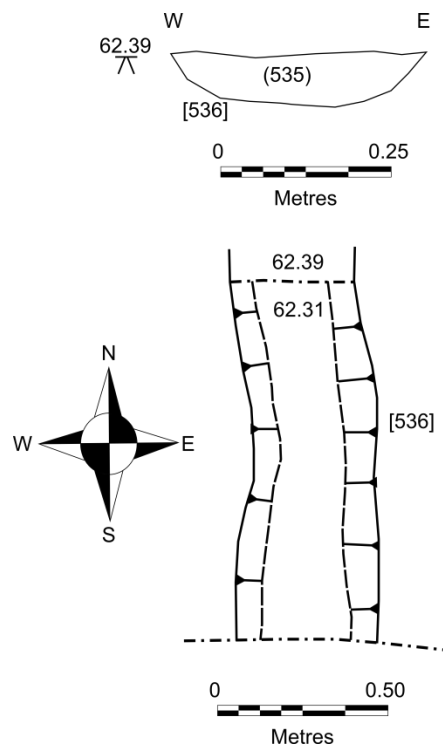


Figure 36: South facing section and plan of gully [536]

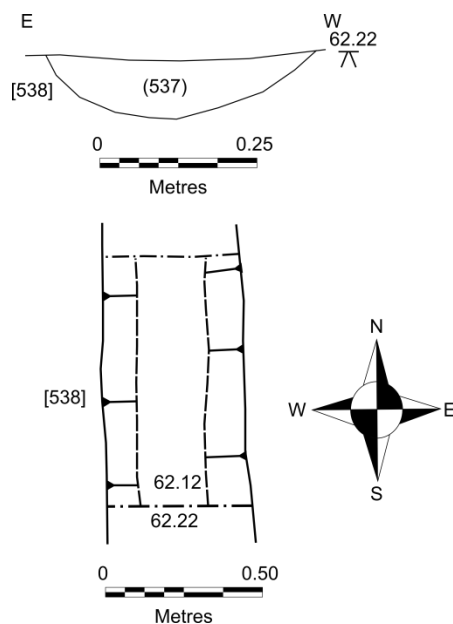


Figure 37: North facing section and plan of gully [538]

Ditch [545] was oriented north west to south east, 1.4m wide and at least 33m in length, with a shallow concave profile. The cut contained two fills: the earliest, (544), comprised a well-compacted, chalk flecked greyish brown silty clay with occasional flint pebbles. It was overlain by (543), an orange brown loosely compacted silty clay with frequent small to medium rounded and sub-rounded pebbles. Again, no datable artefacts were recovered from this feature.

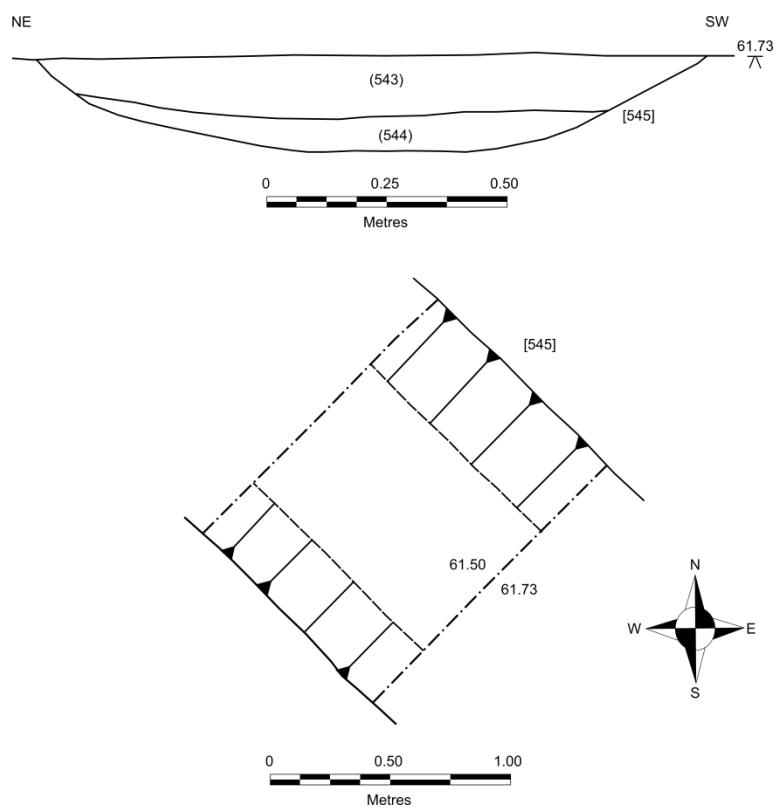


Figure 38: South east facing section and plan of ditch [545]

7.0 INTERPRETATION

The dating evidence from the site would suggest that there are three main historic occupation phases in this part of the site. The first relates to Late Bronze Age mortuary activity, based on the radiocarbon dates obtained from three of the cremations. The small size of the cremation burial ground, even if the cremations from 2009 are of similar date and taken into account, probably relate to a small social or extended family group. This may be supported by the scientific dating, which although limited, suggests an elapse of time between the earliest burial and that of the later two. The cremations located in 2012/3 appear to be fairly isolated in terms of associated features, although some pits located in close proximity to the cremations (with no datable finds) could potentially be contemporary. The cremations when combined with the residual lithic scatters located during the 2009/2010 programme of work confirm that this site was a focus of activity throughout prehistory.

The Early-Middle Iron Age ring ditch located during the 2009-10 investigation to the north (Figure 39) was tentatively interpreted as a possible Iron Age shrine, and the apparent clustering of cremations within a short distance of this enclosure may offer some support for an argument for continued 'ritual' focus at the site during the later Prehistoric period. The number of burials located on the site might be consistent with that of the requirements of an extended family unit over a short duration. This raises questions over the use of such a shrine in this context, because if the site had been purely used as an extended family burial ground the construction of a large shrine in the area seems unlikely. It also raises questions over the dating of the structure itself, which from pottery dating evidence was assigned an Early to Middle-Iron Age date, although if it was used for ritual purposes may well belong to the Late Bronze Age, with the pottery discovered in the surrounding gully having been deposited after the feature fell out of use.

Following the disuse of the cremation cemetery, dateable occupation of the site is difficult to ascertain. When compared with the more closely dated field boundaries and pits in the 2009-10 investigation area, a loosely defined possible (Late?) Iron Age or early Romano-British period of occupation may be reflected by the establishment of a field system (Phase 2) and pitting activity (Phase 3). The lack of datable artefacts from these features is notable, and may indicate that during their period of use and disuse they lay at some distance from domestic activity. An earlier date for the Phase 2 and 3 activity may therefore be preferred, since it is evident from residual pottery appearing in later medieval features that occupation nearby was present between at least AD10 to AD100, but this material was absent from the coaxial gullies and pits. A possible reason for the residual pottery is the gravelled farm track, which may have impacted upon the features located beneath it.

During the Norman period, 12th - 13th centuries (Phases 4a and 4b), drainage or boundary ditches, gullies and pits were excavated across this area, possibly to define ownership or demarcate agricultural strips. The pottery analysis has indicated that the period of occupation is likely to have been relatively short, between 1200 and 1275/1300, with a low or middle status domestic dwelling situated close to the excavation (see Appendix B).

8.0 CONCLUSIONS

The evidence from the strip, map and sample investigation adds significantly to our understanding of this multi-period site. An earlier phase of use as a small, probably extended family orientated burial ground dating to the Late Bronze Age has been established. In the area exposed, burials cease during the 9th century BC, after which in the early Iron Age, a ring ditch is constructed to the north (located in 2009/10 excavations). The ring ditch appeared to be situated within a roughly contemporary coaxial field system, which did not extend into the location of the 2012/2013 excavations. However coaxial gullies in the current area may reflect Late Iron Age or 1st century AD activity, and pottery within later medieval features points to the definite presence of a 1st century settlement, perhaps situated just outside the area of excavation.

A later period of medieval activity is indicated by the presence of substantial boundary ditches which contained domestic pottery of late 12th-13th century date.

The strip map and sample investigation in 2012-13 successfully concluded the archaeological works at the site, allowing detailed recording of all archaeological features ahead of destruction by the northern quarry extension.

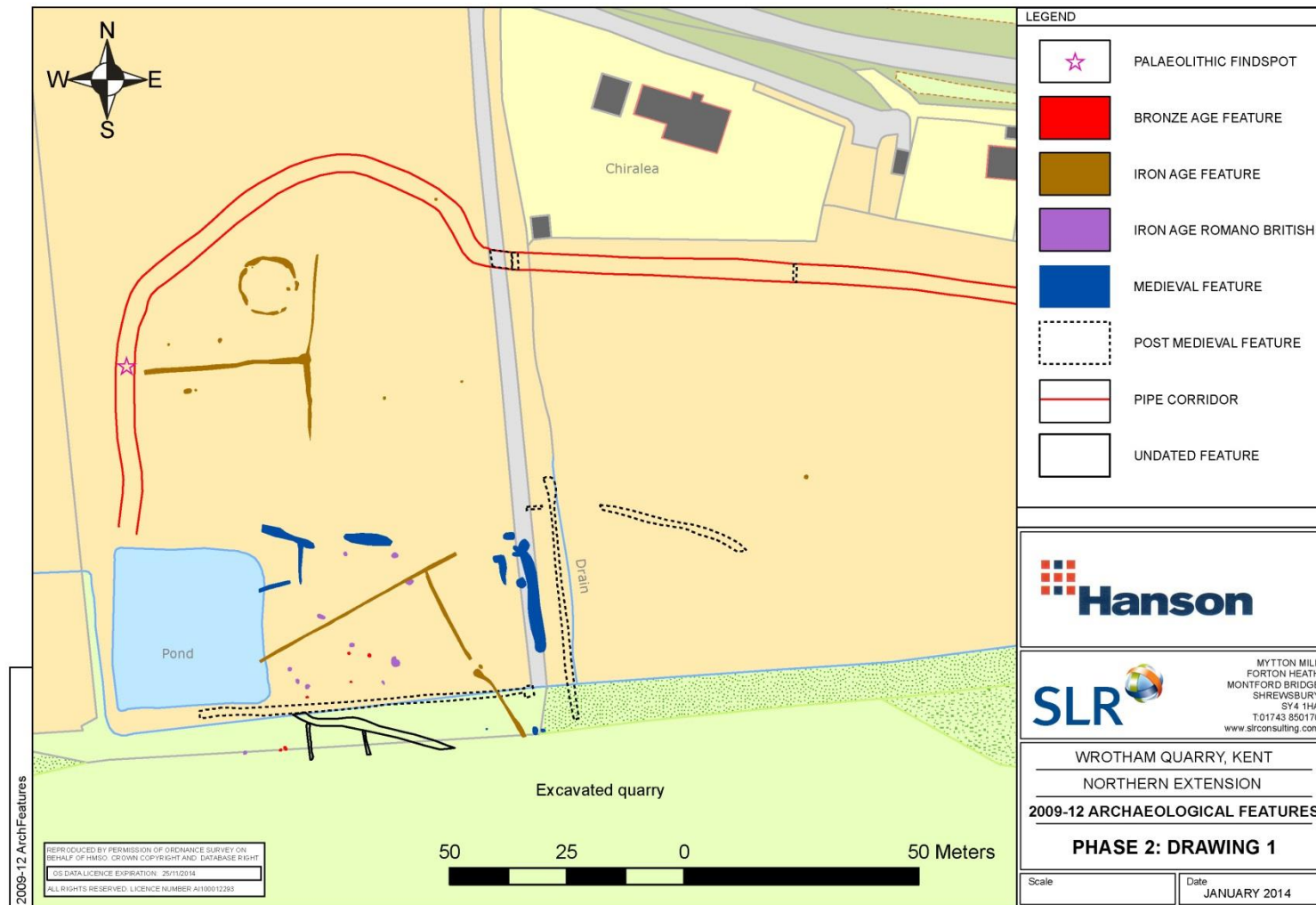


Figure 39 Combined plan of archaeological features from Quarry Phases 1 and 2, 2009-12

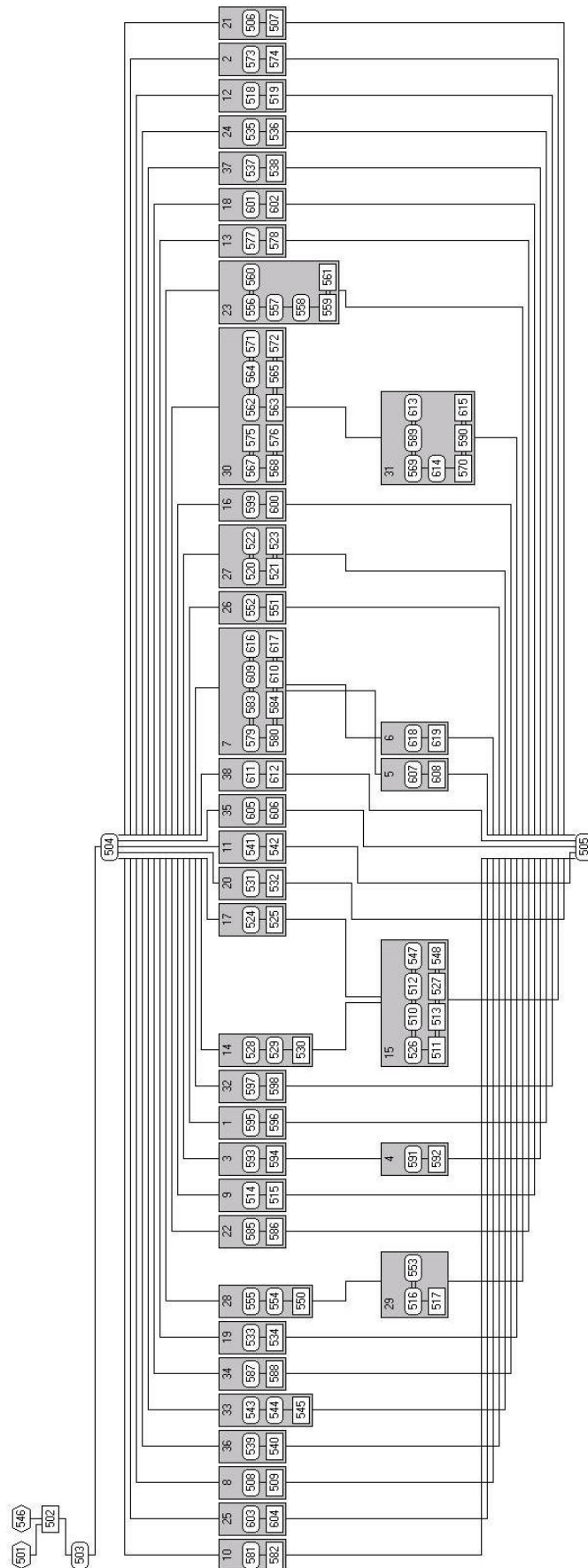
9.0 CLOSURE

This report has been prepared by SLR Consulting Limited with all reasonable skill, care and diligence, and taking account of the manpower and resources devoted to it by agreement with the client. Information reported herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of Hanson Aggregates: Wrotham Quarry; no warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

10.0 APPENDIX A – HARRIS MATRIX



11.0 APPENDIX B – POTTERY ANALYSIS

The Late Iron Age and Roman Pottery by Anna Doherty

Introduction

A small assemblage of Late Iron Age/Roman pottery was recovered during the current fieldwork, predominantly from pits and a ditch located near the eastern limit of current excavations (quantified by fabric type in Table 1).

Methodology

The pottery was examined using a x20 binocular microscope and quantified by sherd count, weight and Estimated Vessel Number (ENV) on pro forma record sheets; data was also entered into an Excel spreadsheet. In the absence of a published type-series for Kent, the pottery was recorded using codes from the Southwark/London type-series (Marsh & Tyers 1979; Davies et al 1994). Expansions of the codes are provided below in Table 1.

Overview of Fabrics and Forms

Roughly half of the assemblage is made up by grog-tempered wares and there are also a few examples of grog-tempered Patch Grove ware. Most of the Roman fabrics probably originate from the local North Kent/Thameside industry. These include coarse grey and oxidised sandy wares, including some examples which contain sparse shell inclusions. Also of local origin are examples of North Kent fine dark surfaced wares (NKFW) and similar fine grey fabrics (NKGW). A few imported sherds were noted, including the 1st century La Graufesenque samian ware fabric and a single sherd of Baetican (Dressel 20) amphora. The latest fabric type in the assemblage is a small sherd of BB1.

Only a few diagnostic feature sherds are present and almost all of these are bead rim jars, some with a ledge rim, possibly for use with a lid. The Patch Grove fabric was associated with two storage jars, including one with stabbed decoration on the shoulder. One of the samian sherds is from a mould decorated bowl, although the sherd is too small to further identify the decoration. A small perforation on the edge of this sherd suggests an attempt at repair. Another of the plain samian sherds is a very small rim fragment from one of the related cup/bowl forms, Dragendorff 35 and 36. One rimsherd, from a black-burnished style rounded-rim bowl appears to be slightly later in date than the rest of the assemblage.

Table 1: Quantification of Late Iron Age/Roman pottery by fabric type

Fabric Code	Expansion	Sherds	Weight (g)	ENV
BAETE	Baetican (Dr20) amphora	1	56	1
BB1	Black burnished ware 1	1	4	1
GROG	Grog-tempered ware	61	542	57
NKFW	North Kent fine ware	1	22	1
NKGW	North Kent fine grey ware	3	6	3
OXID	Local oxidised ware	3	14	3
PATCH	Patch Grove ware	10	188	6

SAMLG	La Graufesenque samian ware	3	8	3
SAND	Local unoxidised sandy ware	30	232	23
SANDSH	Local unoxidised sandy ware with sparse shell inclusions	11	70	7
Total		124	1142	105

Discussion

Although there is a possibility that the tempered wares in the assemblage are of Late Iron Age origin, these were almost always stratified with Roman fabric types. There is therefore no direct evidence that any activity on site pre-dates the Roman conquest. The relatively large quantities of grog-tempered wares suggest that activity on site was largely confined to the 1st century AD as other assemblages from north-west Kent have consistently shown that grog-tempered wares reduced to quite low frequencies by c. AD100-120. For example, at Dartford Football Club, they made up c. one third of fabrics phased to AD43-120 but fewer than 10% of those dated to AD120-170/200 (Stansbie 2011, Tables 13.3 and 13.4). Almost all of the diagnostic sherds in the assemblage would fit within the range c. AD40-100. There are two exceptions to this: a sherd BB1 and another black-burnished influenced bowl form, both found within fill [530] of pit [529]. These types both post-date c.AD120.

None of the individual context groups are large and the sherds themselves are generally relatively small and abraded. Much of the Roman pottery was stratified with post-Roman material, suggesting either that it comes from contemporary features which have suffered later disturbance or that it is largely residual. Having said this, the distribution of Late Iron Age/Roman pottery in features to the west of the current excavations, particularly from ditch [511]/[523]/[527] and surrounding pits [515], [525] and [530], does suggest a concentration of contemporary activity in this area.

Bibliography

- Davies, B.J., Richardson, B. and Tomber, R.S. 1994. *A dated corpus of early Roman pottery from the City of London*. The Archaeology of Roman London Vol 5. CBA Research Report 98
- Marsh, G. and Tyers, P. 1979. *The Roman pottery from Southwark, Southwark Excavations 1972-74*. LAMAS and Surrey Arch reprint
- Stansbie, D, Late Iron Age and Roman pottery, in Devaney, R and Stansbie, D, Excavations on the site of Dartford Football Club, Princes Road, Dartford, in Simmonds, A, Wenban-Smith, F, Bates, M, Powell, K, Sykes, D, Devaney, R, Stansbie, D and Score, D, *Excavations in North-west Kent, 2005-2007*, Oxford Archaeology Monograph 11, 258-264

Site Code	Context	Part of	Description	Fabric	Form	Dec	Sh	Smp	ENV	State	I/R	Comments	RimD	EVE	Wt
WRQ12	351	#N/A	#N/A	PATCH			1		1						6
WRQ12	506	21	Fill of pit [507]. Iron Age or Romano British in date. Fill suggestive of domestic refuse.	SAND			2		2						22
WRQ12	506	21	Fill of pit [507]. Iron Age or Romano British in date. Fill suggestive of domestic refuse.	GROG			1		1						6
WRQ12	508	8	Fill of Iron Age or Romano-British post hole.	PATCH			3		1						22
WRQ12	508	8	Fill of Iron Age or Romano-British post hole.	GROG			2		2						12
WRQ12	510 (surface)	15	Fill of ditch [511]. The fill is quite similar to surrounding natural.	SAMLG			1		1						4
WRQ12	510 (surface)	15	Fill of ditch [511]. The fill is quite similar to surrounding natural.	BAETE			1		1						56
WRQ12	510 (surface)	15	Fill of ditch [511]. The fill is quite similar to surrounding natural.	OXID			1		1			Flagon handle			8
WRQ12	510 (surface)	15	Fill of ditch [511]. The fill is quite similar to surrounding natural.	SAND			3		3						8
WRQ12	510 (surface)	15	Fill of ditch [511]. The fill is quite similar to surrounding natural.	GROG			5		5						60
WRQ12	510	15	Fill of ditch [511]. The fill is quite similar to surrounding natural.	SAND	2A		5		1				160	0.08	38
WRQ12	510	15	Fill of ditch [511]. The fill is quite similar to surrounding natural.	SAND			3		3						28

WRQ12	510	15	Fill of ditch [511]. The fill is quite similar to surrounding natural.	SAND			1		1			Mod. Sand <0.1mm; rare flint 0.2-2mm.	4	
WRQ12	510	15	Fill of ditch [511]. The fill is quite similar to surrounding natural.	PATCH			1		1				56	
WRQ12	510	15	Fill of ditch [511]. The fill is quite similar to surrounding natural.	SANDS H			5		2				16	
WRQ12	514	9	Fill of large Iron Age/ Romano-British oval pit. Probably domestic in origin.	GROG	2A.16		1		1			170	0.0 8	26
WRQ12	514	9	Fill of large Iron Age/ Romano-British oval pit. Probably domestic in origin.	GROG			7		3					58
WRQ12	514	9	Fill of large Iron Age/ Romano-British oval pit. Probably domestic in origin.	SAND			1		1					4
WRQ12	514	9	Fill of large Iron Age/ Romano-British oval pit. Probably domestic in origin.	NKGW			1		1					2
WRQ12	514	9	Fill of large Iron Age/ Romano-British oval pit. Probably domestic in origin.	SANDS H			1		1					4
WRQ12	516	29	Fill of probable linear field boundary/ ditch [517]. Probably of IA or RB date.	GROG			1		1					6
WRQ12	522	27	IA or Roman ditch fill.	GROG			4		4					36
WRQ12	524	17	Fill of Iron Age or Romano- British pit.	GROG	2A.16		1		1			170	0.0 5	14
WRQ12	524	17	Fill of Iron Age or Romano- British pit.	PATCH			3		1					22
WRQ12	524	17	Fill of Iron Age or Romano- British pit.	GROG			9		9					64
WRQ12	524	17	Fill of Iron Age or Romano- British pit.	SANDS H			3		2					26

WRQ12	524	17	Fill of Iron Age or Romano-British pit.	SAND			1		1						4
WRQ12	524	17	Fill of Iron Age or Romano-British pit.	NKGW			1		1						2
WRQ12	526	15	Silting fill of boundary ditch [527].	PATCH	2V		1		1			Partial rim	?	<0.05	40
WRQ12	526	15	Silting fill of boundary ditch [527].	PATCH	2V	STAB	1		1			typical stab decoration and shoulder angle for Patchgrove			42
WRQ12	526	15	Silting fill of boundary ditch [527].	SAND	2A		1		1			quite similar to N. Kent BB2 fabric	?	<0.05	8
WRQ12	526	15	Silting fill of boundary ditch [527].	SAND	2A		1		1				?	<0.05	8
WRQ12	526	15	Silting fill of boundary ditch [527].	NKFW	3		1		1			base			22
WRQ12	526	15	Silting fill of boundary ditch [527].	NKGW			1		1						2
WRQ12	526	15	Silting fill of boundary ditch [527].	OXID			1		1			quite like a fine version of the possible kiln fabric from Isle of Grain site B			2
WRQ12	526	15	Silting fill of boundary ditch [527].	SAND			5		5						40
WRQ12	526	15	Silting fill of boundary ditch [527].	GROG			23		23			all quite sparse grog			190
WRQ12	528	14	Possibly a colluvial silting up fill of pit [530]. Probably Iron Age or Romano- British in origin.	SAMLG		DEC; HOLE	1		1			Drilled hole on small decorated sherd probably from repair attempt			4
WRQ12	528	14	Possibly a colluvial silting up fill of pit [530]. Probably Iron Age or Romano- British in origin.	SAMLG	5DR36/6DR35		1		1			part of flange			<2
WRQ12	528	14	Possibly a colluvial silting up fill of pit [530]. Probably Iron Age or Romano- British in origin.	SAND			6		3						46

WRQ12	528	14	Possibly a colluvial silting up fill of pit [530]. Probably Iron Age or Romano- British in origin.	SANDS H			1		1						20
WRQ12	529	14	Earliest fill of Iron Age or Romano- British pit [530].	SAND	?4H		1		1				170	0.13	22
WRQ12	529	14	Earliest fill of Iron Age or Romano- British pit [530].	BB1			1		1						4
WRQ12	529	14	Earliest fill of Iron Age or Romano- British pit [530].	OXID			1		1						4
WRQ12	529	14	Earliest fill of Iron Age or Romano- British pit [530].	GROG			5		5						54
WRQ12	529	14	Earliest fill of Iron Age or Romano- British pit [530].	GROG	2		1		1	A			?	<0.05	8
WRQ12	549	0	VOID	GROG			1		1						8
WRQ12	618	6	Fill of field boundary cut [619].	SANDS H			1		1						4

The Medieval pottery

by Luke Barber

The archaeological work recovered 88 sherds of medieval pottery, weighing 891g, from 15 individually numbered contexts. An estimated 49 different vessels are represented. The assemblage was recovered from a number of pits and ditches across the excavated area, though there was a marked concentration in the northern and eastern areas. Condition of the pottery is variable: although the tendency is towards small sherds (up to 30mm across), a few medium to large sherds are also present (i.e. to 110mm across). Equally, weathering/abrasion is variable, with both slightly abraded and quite fresh sherds being present. As such it is probable that most of the assemblage has not been notably reworked to any great degree.

The assemblage was divided into different fabric groups based on tempering agent and finish with the aid of a x20 magnification hand-lens. The assemblage was then recorded by fabric and form per context using the mediums of sherd count, weight and estimated number of vessels. This data was recorded on pro forma and duly entered into an excel spreadsheet for the archive. The fabric types and their relative quantities are given in Table 2.

Table 2: Post-Roman pottery assemblage

Code	Fabric	No	Weight	Estimated number of vessels
SS1	Medium/coarse sand with moderate/abundant shell	14	65g	Cooking pots x5
SS2	Medium sand with sparse/common shell	45	526g	Cooking pots x19; Curfew x1
Q1	Medium sand with rare calcareous inclusions	10	79g	Cooking pot x5; Jug x1; unknown x3
Q2	Medium sand with moderate black iron oxide grains	3	40g	Cooking pots x2; Jug x1
Q3	Fine/medium sand with common red iron oxides (Earlswood type)	1	2g	Unknown x1
Q4	Fine/medium sand with rare calcareous inclusions (finer version of Q1)	3	53g	Cooking pots x2; Jug x1
Q5	Fine/medium well-sorted sandy greyware (fine Limpsfield type)	10	113g	Jugs x6; unknown x1
Q6	Ill-sorted fine/medium sand with common black iron oxide grains to 1mm	2	13g	Jug x1

The earliest material appears to be the SS1 sherds, that could be of the later 12th or early 13th centuries. However, considering the chronological spread of the other material these sherds may be later in this range. The assemblage is totally dominated by the SS2 fabric. Although sand and shell tempered wares have a wide chronological range in the Weald, the

sparse nature of the sand in the current vessels, their medium firing and rim forms would suggest a date between c. 1200 and 1275. Cooking pots typically dominate, usually with quite developed flat-topped expanded rims (Cat. Nos 1 and 2). However, at least one curfew also appears to be represented (Cat. 3). Decoration is absent though a couple of vessels have applied thumbed strips. Although sand/shell tempered wares are known to have been produced near Ashford (Grove and Warhurst 1952) their widespread distribution clearly indicates other centres were producing such vessels in Kent, Sussex and Surrey (Cotter 2002; Streeten 1985; Jones 1998).

The remaining sherds fall into one of six sand tempered fabrics (Q1-6, Table 2), most of which are not particularly distinctive of source. Although cooking pots are represented in some of these fabrics, it is quite clear they supplied jugs to complement the contemporary SS2 wares. Many of these jugs are unglazed and quite crude but some decorated vessels are also represented, including one Q6 jug with green glaze (context [557]), one with white slip under a green glaze (Cat. No. 4) and at least three unglazed Q5 vessels with combed decoration (eg Cat. No. 5). All of the sandy wares are of local origin, with the Q3 sherd probably deriving from the 13th- century Earlswood kiln (context [510]. Turner 1974) and the Q5 vessels from the Limpsfield area kilns where combed decoration is quite common (Ketteringham 1989; Hayman 1997).

Context groups are generally small and lacking in feature sherds. The assemblages do not show any marked chronological variation with the sand/shell fabrics virtually always being in association with the sandy types. Taken as a whole the assemblage appears to represent a relatively short-lived period of activity between 1200 and 1275/1300. There is nothing to suggest anything more than a low/middle status domestic household is represented, but the quantities and condition of the pottery would indicate the main occupation to be quite close to the excavated area.

Catalogue (Figure 40)

1. Cooking pot with expanded rim. Light grey core with dark grey surfaces. SS2. (Ditch [521], fill [522]).
2. Cooking pot with expanded rim. Dull orange core with dark grey/black surfaces. SS2. (Ditch [521], fill [522]).
3. Curfew with thickened stabbed rim and oblique applied thumbed strips on its body. Mid grey core, dull red orange margins and dark grey surfaces. Internally sooted. (Ditch [570], fill [569]).
4. Jug with club rim. Mid grey core, orange/grey margins and light grey/buff surfaces. The external white slip has been applied before the handle was attached, the whole then being green glazed. Q4. (Ditch [513], fill [512]).
5. Unglazed jug bodysherd with wavy combing between horizontal combing. Dark grey core with mid grey surfaces. Q5. (Ditch [513], fill [512]).

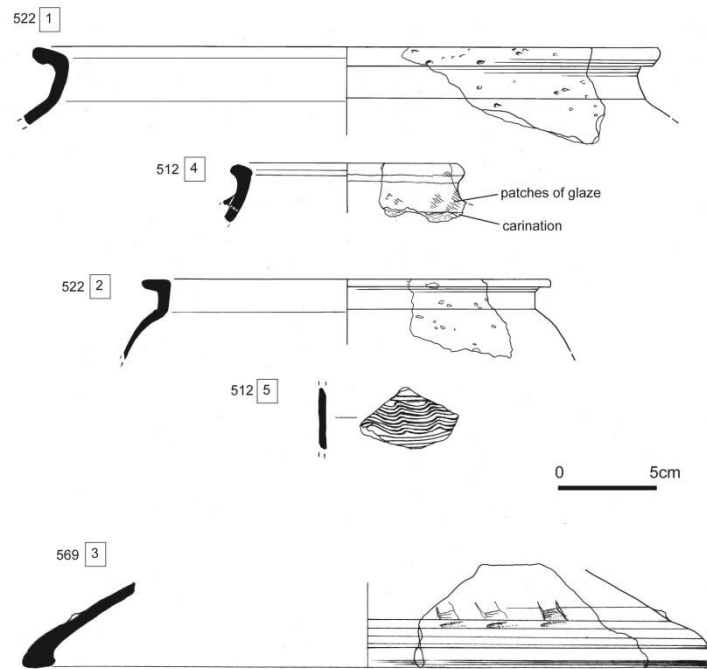


Figure 40 medieval (Norman) pottery @ ¼ scale

Bibliography

- Cotter, J. 2002. 'Medieval Shelly Wares in Kent: a summary of recent research' in *Canterbury's Archaeology 1999-2000*. Canterbury Archaeological Trust, Canterbury. 56-60.
- Grove, L. and Warhurst, A. 1952. 'A 13th century Kiln site at Ashford' *Arch. Cant.* 65, 174-193.
- Hayman, G. 1997. The Excavation of two medieval pottery kiln sites and two sections through the London-Lewes Roman road at Clacket Lane, near Titsey, 1992, *Surrey Archaeological Collections* 84, 1-87.
- Jones, P. 1998. 'Towards a type series of Medieval pottery in Surrey' *Surrey Arch. Coll.* 85, 211-238.
- Ketteringham, L. 1989. 'Two medieval pottery kilns at Limpsfield Chart' in *Surrey Arch. Coll.* 79, 125-145.
- Streeten, A. 1985. 'The Pottery' in J. Hare, *Battle Abbey: the eastern range and excavations of 1978-80*. HBMCE Archaeological Report 2, 103-126.
- Turner, D. J. 1974. Medieval pottery kiln at Bushfield Shaw, Earlswood: interim report, in *Surrey Arch. Collect.* 70, 47-55.

Context	Fabric	Form	Decoration	Rim	No.	Weight	MNV	Comments	Draw
506	SS2	CP		expanded	3	20	1	redu. Fresh	
510 surface	SS1	CP			3	10	1	redu. Worn	
510 surface	SS2	CP		simple	5	25	2	redu. Some worn	
510 surface	Q1	CP			2	35	2	ox bro ba	
510 surface	Q2	CP			2	13	2	bss	
510	SS2	CP		expanded	3	36	1	redu. Fresh	
510	Q1	JUG			1	11	1	redu. Worn	
510	Q2	JUG		squared simple	1	27	1	slashed strap ha. Worn	
510	Q3 EARL	?			1	2	1	ox bro ba	
510	B. CLAY							3/10g silty amorphous	
512	SS2	CP	x1 APTS	expanded	15	126	4	some wear	
512	Q1	?			3	7	2	grey. Worn	
512	Q4	CP		hooked	1	19	1	grey. Worn	
512	Q4	JUG	Gr gl ext over WS	triangular club	1	17	1	buff	1
512	Q5	?			2	14	1	off-white surfaces	
512	Q5	JUG	x1 COMB wavy lines	collared	3	26	2	redu grey	1
518	SS2	CP			1	2	1	worn	
520	SS2	CP			1	12	1	redu bas	
522	SS2	CP		expanded	6	133	3	redu	2
522	Q1	CP			2	7	2	ox. Worn	
522	Q5	JUG	COMB hor & obliq		1	9	1		
524	SS2	CP			2	6	2	worn	
524	Q1	CP			1	15	1	worn	
526	SS1	CP			3	19	1	ox. Low fired. Poss earlier	
526	SS2	CP			1	26	1	ox. Worn	
526	B. CLAY							1/7g amorphous	
529	SS2	CP		hooked	2	21	1		
529	Q5	JUG	x1 reduced stabbed strap ha; x1 rilled (grey), x1 INC dec	upright collared	4	64	3	some poss fine Limpsfield	
531		FCF						4/93g	
531		Tile						intru EPM peg tile 1/6g	

531	SS1	CP			5	20	1	redu	
531	SS2	CP		Expanded	3	30	1		
531	Q1	?			1	4	1	ox	
531	Q4	CP	APTS		1	17	1	worn	
547	SS1	CP			2	11	1	worn	
547	SS2	CP			1	2	1	redu	
547	B. CLAY							1/3g	
557	Q6	JUG	Gr gl ext		1	8	1	ox	
557	B. CLAY							or tile chips 4/5g discarded	
560	Q6	JUG	Gr gl ext		1	5	0	Conjoin [557]	
560	Tile							intru EPM peg tile 1/9g	
569	SS2	CURF?	Stabbed rim, APTS	Thickened	2	87	1	redu. Sooted interior	1
618	SS1	CP			1	5	1	redu	

12.0 APPENDIX C – ENVIRONMENTAL SAMPLES

4782 / WRQ12 Wrotham Quarry, Kent Phase 2

Environmental Samples: Post-Excavation Assessment

Archaeology South-East, Units 1 & 2, 2 Chapel Place, Portslade, East Sussex BN41 1DR

Charred Plant Macrofossils & Charcoal

Karine le Hégarat & Dawn Elise Mooney

Introduction

Bulk soil samples were collected by SLR Consulting Ltd during the second phase of archaeological work at Wrotham Quarry, Addington for the retrieval of environmental indicators such as charred macroplant remains, charcoal, bones and shells. In total, eight samples varying in size from four to twelve litres were submitted to Archaeology South-East for processing and assessment. Six samples were taken from cremation burials ([540], [542], [598], [600], [602] and [604]) and a further two samples came from a pit ([608]) and a burnt clay deposit ([612]). This report characterises these assemblages by providing an overview of the sample contents and by indicating the state of preservation of the remains. It assesses the potential of the botanical remains to provide information relating to the site such as fuel use and local environment, and it assesses their potential to examine aspects of ritual activities. The potential of these remains in obtaining datable material is also considered.

Methods

Samples were processed in a flotation tank, and the residues and flots were retained on 500µm and 250µm meshes and air dried. The residues were passed through graded sieves (8, 4 and 2mm) and each fraction sorted for environmental and artefact remains (Table 1). Flots were measured, weighed and scanned under a stereozoom microscope at x7-45 magnifications. Table 2 documents the content of each flot. Preliminary identifications of macrobotanical remains were made with reference to modern comparative material and with specimens documented in reference manuals (Cappers *et al.* 2006 and NIAB 2004). Nomenclature used follows Stace (1997).

Charred wood remains from 6 samples were analysed from the site. Ten charcoal fragments, or the total number of identifiable fragments if less than 10, recovered from the heavy residue of each sample were fractured along three planes (transverse, radial and tangential) according to standardised procedures (Gale & Cutler 2000). Specimens were viewed under a stereozoom microscope for initial grouping, and an incident light microscope at magnifications up to 400x to facilitate identification of the woody taxa present. Taxonomic identifications were assigned by comparing suites of anatomical characteristics visible with those documented in reference atlases (Hather 2000, Schoch *et al.* 2004), and by comparison with modern reference material held at the Institute of Archaeology, University College London. Identifications have been given to species where possible, however genera, family or group names have been given where anatomical differences between taxa are not significant enough to permit satisfactory identification. Nomenclature used follows Stace (1997). The results of the taxonomic identifications of charcoal fragments are recorded in Table 1.

Results

Cremations [540], [542], [598], [602], [600], [604]

Samples <1, 2, 3, 4, 5 and 6> taken from the fills (539), (541), (597), (601), (599) and (603) of cremation burials [540], [542], [598], [602], [600] and [604] respectively produced relatively small flots which were dominated by uncharred vegetation consisting mainly of modern very fine roots but including also infrequent uncharred weed seeds such as goosefoot (*Chenopodium* sp.), elder (*Sambucus nigra*) and a single seed from the dead-nettle (Lamiaceae) family. A single very small uncharred fruit stone suggestive of wild / sour cherry (*Prunus* cf. *avium* / *cerasus*) was also recorded in sample <06>, cremation burial [604]. These samples contained very few charred macroplant remains. Sample <2>, cremation burial [542] produced two charred large grass (Poaceae) caryopses and two small indeterminate nutshell fragments. A tuber of possible onion couch (cf. *Arrhenatherum elatius* var. *bulbosum*) was present in sample <04>, cremation burial [602], and a single unidentified charred plant remains (CPR) was noted in sample <06>, cremation burial [600].

Very small quantities of charcoal were recovered from the samples taken from cremation deposits. No identifiable fragments were found in sample <1> from cremation [540]. Sample <2> from cremation [542] and sample <4> from cremation [602] contained only oak (*Quercus* sp.) charcoal. The assemblage from sample <3> ([598]) comprised only maple (*Acer campestre*) charcoal, and maple was also present in sample <5> ([600]) along with oak and ash (*Fraxinus excelsior*). Sample <6> from cremation [604] produced a slightly larger charcoal assemblage, comprised entirely of charcoal of the Maloideae subfamily, which includes hawthorn (*Crataegus monogyna*), rowan (*Sorbus aucuparia*), pear (*Pyrus* sp.) and apple (*Malus* sp.) woods.

The samples contained varying quantities of calcined bones. Sample <01> from cremation burial [540] contained no bones at all; and while the residues from samples <02, 03 and 05> produced only occasional fragments which were mainly small-sized, the residues from samples <04>, cremation burial [602] and <06>, cremation burial [604] contained large numbers of calcined bones including fragments over 12mm in size. The cremated bone from these samples is discussed in detail below.

No other biological remains were present in the samples extracted from the cremation burials. A small amount of burnt unworked flint and three flint chips were found in the residues.

Pit [608]

Sample <07> taken from pit [608] fill (607) produced a small flot (22ml) which contained a high proportion of uncharred vegetation (principally fine rootlets) and sediment. No macroplant remains were present in this sample, and charcoal remains were limited to small fragments <2mm in size and flecks. The later were only noted in the flot. A moderate quantity of fragments of burnt unworked flint (2694g) was present in the sample.

Burnt Clay Deposit [612]

Botanical remains were also very scarce in sample <08> taken from the fill (611) of burnt clay deposit [612]. While no charcoal remains were recovered in the residue from sample <8>, the flot contained infrequent fragments of charred wood fragments <2mm in size and flecks. No other biological remains were evident in this deposit. The residue contained a small amount of magnetised material.

Significance and Potential

Macroplant remains

Charred macroplant remains were poorly represented in the features. No remains were evident in pit [608] and burnt clay deposit [612]. The samples extracted from cremation burials contained only two grass (Poaceae) caryopses, a single tuber of possible onion couch (cf. *Arrhenatherum elatius* var. *bulbosum*), two small indeterminate nutshell fragments and a single unidentified charred plant remains. Charred tubers are commonly found on Bronze Age sites, principally in relation with cremation burials. They could have been used as kindling (Hillman 1982; Robinson 1988) or they may represent incidental incorporation from turves burnt in connection with the cremation (Moffett 1991). They could also have been uprooted to create fire breaks (Stevens 2008), or they may simply have been incorporated in the features with the cremation as part of the backfill.

Overall, the data from phase 2 reflects results from the previous investigation for which charred macroplant remains were also very limited (Le Hégarat & Allott 2012). The assemblage of charred macroplant remains are too limited to provide significant information regarding the past local vegetation environment and aspects of ritual activities.

Charcoal

The preservation of the charcoal was generally poor to fair, with only small assemblages of somewhat abraded fragments recovered from the cremation samples. The assemblage comprised oak, maple, ash and Maloideae woods, all of which are known to be effective fuels (Taylor, 1981), and all of which could have grown in the vicinity of the site forming woodland or hedgerows. Oak is frequently a primary component of woodland, and ash is also generally a woodland taxon. Maple is more commonly found in woodland margin or more open environments. The taxa comprising the Maloideae subfamily cannot be distinguished from one another on the basis of their microscopic wood anatomy, however trees in this group (such as hawthorn, rowan and apple) are often fruit-producing trees which prefer hedgerow or scrub environments.

All of the charcoal remains from the cremation samples are likely to derive from fuel burnt in funerary contexts. The range of taxa recorded in these deposits is comparable to other cremation deposits which have been examined from other sites in Kent. A single Iron Age cremation from the first phase of excavation at Wrotham Quarry produced an assemblage composed entirely of oak (Le Hégarat & Allott 2012), while oak and ash have been recorded from Iron Age cremations at Thanet (Challinor 2009), Northfleet (Challinor 2006) and Hothfield (Alldritt 2006a). Maloideae is less common in cremations from this period, although it has been recorded in an Iron Age cremation at Northfleet (Challinor 2006) and also in charcoal from Bronze Age cremations at Hothfield (Alldritt 2006a) and Saltwood Tunnel (Alldritt 2006b). It is likely that the majority of cremation pyres were constructed of oak and ash wood, with other taxa present either as incidental inclusions in kindling material or in burial gifts or offerings. However, the charred wood assemblages from the cremations here are too small to contribute significantly to a discussion of the frequency of different wood types in cremation deposits.

Dating potential

The bulk environmental samples taken during the second phase of work at the site confirmed the presence of modern uncharred macrobotanical remains including mainly modern fine roots and infrequent seeds, which suggest some post-depositional disturbances and potential contamination and movement within the deposits. Their presence may lessen the value of the charred remains within these deposits for further dating work. Fragments of

maple charcoal from cremations [598] and [600] along with Maloideae charcoal from cremation [604] could be submitted for radiocarbon dating. Radiocarbon dating recommendations for the cremated bone from the samples are discussed separately (see Sibun, below).

Further Work

No further work is recommended for the charcoal and charred macroplant remains assemblage from Phase 2 of the excavations at Wrotham Quarry.

Cremated Bone

Lucy Sibun

Introduction

The environmental samples from five contexts produced small quantities of burnt bone ([541], [597], [599], [601], [604]). Unfortunately, the burnt bone recovered from [597] was unidentifiable but human bone was positively identified in the remaining four contexts and these are detailed below.

Methods

Sieve fractions of 0-4mm, 5-8mm and >8mm were presented for analysis. The assessment of this material was undertaken according to standard guidelines (McKinley 2004). The total weight of the cremation deposits was established. The assemblages were then examined to record the degree of fragmentation and fragment colour. The presence and weight of fragments from all skeletal areas (skull, axial skeleton, upper limb, lower limb) was noted. The potential of the assemblage to yield demographic or other information was then considered.

Results

The results of the analysis are summarised in Table 3. The fragment size totals include both the identifiable and unidentifiable material from the assemblage.

From the initial assessment it would appear that the cremation deposits contain the remains of single individuals, with no repeated elements noted.

Due to the high degree of fragmentation and the small size of the assemblage, bone fragments enabling age at death to be confidently established were not present. Age at death assessment is therefore based upon fragment size alone. No sexually diagnostic fragments were present and no evidence of pathology was noted.

The effectiveness of the cremation process was highly efficient in all cases, with between 95-99% of the assemblages calcined either white or blue/grey. No animal bone or other intrusive material was noted in the assemblages.

Significance and Potential

Whilst human bone was identified in four of the cremation deposits, two of the assemblages, ([541] and [599]) are too small to merit further work. The remaining two assemblages from [601] and [604] have potential for further analysis, which will enable the degree of fragmentation to be established. The percentage by weight of the fragments from each skeletal area can also be calculated. It is not, however thought that further examination of the material will result in more accurate age or sex estimates.

Bone from both the larger cremation deposits [601] and [604] would be suitable for radiocarbon dating.

Further Work

The analysis results from [601] and [604] should be studied in detail in order to calculate the degree of fragmentation and the percentages by weight of fragments from each skeletal area. A report will be produced summarising and tabulating the results from these contexts.

The report will include the results from the smaller contexts [541] and [599] and incorporate those from cremation [63], assessed as part of the Phase 1 works.

References

Alldritt, D. 2006. *The wood charcoal from Beechbrook Wood, Hothfield, Kent*. CTRL Specialist Report Series.

Alldritt, D. 2006. *The wood charcoal from Saltwood Tunnel, Kent*. CTRL Specialist Report Series.

Cappers, R.T.J., Bekker R.M. & Jans J.E.A. 2006. *Digital Seed Atlas of the Netherlands. Groningen Archaeological Series 4*. Barkhuis, Netherlands.

Challinor, D. 2006. *The wood charcoal from Pepper Hill, Northfleet, Kent*. CTRL Specialist Report Series.

Challinor, D. 2009. 'Charcoal'. In Dinwiddy, K.E. & Schuster, J. (Eds.) 'Thanet's Longest Excavation: archaeological investigations along the route of the Weatherlees-Margate-Broadstairs wastewater pipeline'. In Andrews, P., Dinwiddy, K.E., Ellis, C., Hutcheson, A., Phillpotts, C., Powell, A.B. & Schuster, J. (Eds.) *Kentish Sites and Sites of Kent: A miscellany of four archaeological excavations*. Salisbury: Wessex Archaeology. P. 143.

Gale, R. & Cutler, D. 2000. *Plants in Archaeology*. Otley/London: Westbury/Royal Botanic Gardens, Kew.

Hather, J. G. 2000. *The Identification of the Northern European Woods: A Guide for archaeologists and conservators*. London: Archetype Publications Ltd.

Hillman, G.C. 1982, 198-200. Appendix 6, Charred plant remains. In W. Britnell The excavation of two round barrows at Trelyston, Powys, *Proceedings of the Prehistoric Society* 48: 133-201.

Le Hégarat, K. & Allott, L. 2012. 'Assessment of Charred Botanical Remains from Environmental Samples'. In Hayes, L. (Ed.) *Wrotham Quarry Northern Extension: An Early/Middle Iron Age Ring Ditch, Possible Shrine, Pits and Field System. Report on a Strip, Map and Sample Exercise*. Shrewsbury: SLR Consulting. SLR Ref: 403.00177.00063. Pp. 46-60.

McKinley, J.I. 2004. 'Compiling a skeletal inventory: disarticulated and co-mingled remains'. In Brickley, M. & McKinley, J.I. (Eds.) *Guidelines to the Standards for Recording Human Remains*. Bradford: Brit. Assoc. Biol. Anthropol. Osteoarchaeol./Inst. Field Archaeol. Pp. 13-16.

Moffett, L. 1991. Pignut tubers from a Bronze Age cremation at Barrow Hills, Oxfordshire, and the importance of vegetable tubers in the prehistoric period, *Journal of Archaeological Science* 18 (2): 187-191.

NIAB 2004. *Seed Identification Handbook: Agriculture, Horticulture and Weeds*. 2nd ed. NIAB, Cambridge.

Robinson, M. 1988. 'The significance of the tubers of *Arrhenatherum elatius* (L.) Beauv. from site 4, Cremation 15/11'. In Lambrick, G. (Ed) *The Rollright Stones; Megaliths, Monuments,*

and Settlements in the Prehistoric Landscape, HBMC Archaeological Report 6, English Heritage, London, 102.

Schoch, W., Heller, I., Schweingruber, F. H., & Kienast, F. 2004. *Wood anatomy of central European Species*. Online version: www.woodanatomy.ch

Stevens, C.J. 2008. 'Cereal agriculture and cremation activities', 296-303. In M.J. Allen, M. Leivers and C. Ellis, Neolithic causewayed enclosures and later prehistoric farming: duality, imposition and the role of predecessors at Kingsborough, Isle of Sheppey, Kent, UK, *Proceedings of the Prehistoric Society* 74: 235-322.

Stace, C. 1997. *New Flora of the British Isles*. Cambridge University Press, Cambridge.

Taylor, M. 1981. *Wood in Archaeology*. Aylesbury: Shire Publications Ltd.

Table 1 Residue quantification (* = 1-10, ** = 11-50, *** = 51-250, **** = >250) and weights (g)

Sample Number	Context	Parent Context	Context / deposit type	Sample Volume litres	Sub-Sample Volume litres	Charcoal >4mm Weight (g)	Charcoal <4mm Weight (g)	Charcoal identifications	Charred botanical remains Weight (g)	Burnt bone >8mm Weight (g)	Burnt bone 4-8mm Weight (g)	Burnt Bone 2-4mm Weight (g)	Other (eg ind, pot, cbm)
1	539	540	Cremation	4	4		*						
2	541	542	Cremation	12	12	*	**	<i>Quercus</i> sp. (2)	* (Nuts shell frag. ind et.)	<2	<2	**	Flint */<2g
3	597	598	Cremation	10	10	*	*	<i>Acer campestre</i> (2)				<2	
4	600	602	Cremation	10	10	*	**	<i>Quercus</i> sp. (10)		* 10	** 2	** 9	** 28
5	599	600	Cremation	10	10	*	**	<i>Quercus</i> sp. (4), <i>Fraxinus excelsior</i> (1), <i>Acer campestre</i> (1)			**	4	4 Flint */<2g -
6	603	604	Cremation	5	5	*	**	Maloideae (10)		* 3	** 2	** 8	18 FCF **/16g
7	607	608	Pit	10	10								FCF ****/2694g
8	611	612	Burnt Clay	5	5								Magnetised material ****/86g

Table 2 Quantification of flots (* = 1-10, ** = 11-50, *** = 51-250, **** = >250) and preservation (+ = poor, ++ = moderate, +++ = good)

Sample Number	Context	Parent Context	Weight g	Flot volume ml	Volume scanned	Uncharred %	Sediment %	Seeds, stones uncharred	Charcoal >4mm	Charcoal <4mm	Charcoal <2mm	Weed seeds charred	Identifications	Preservation	Other botanical charred	Identifications	Preservation
1	539	540	2	4	4	83	2				**						
2	541	542	16	50	50	45	10			**	**	*	cf. Poaceae (2)	++			
3	597	598	4	8	8	95	4				**						
4	601	602	8	12	12	45	10	* <i>Chenopodium</i> sp.			***				*	cf. <i>Arrhenatherum elatius</i> var. <i>bulbosum</i> (1)	+
5	599	600	6	15	15	80	10				**						
6	603	604	8	40	40	85	5	* fruit stone (indet.), <i>Sambucus nigra</i> , Lamiaceae		* (2)	**				*	CPR (1)	++
7	607	608	14	22	22	48	40				*						
8	611	612	2	4	4	99	1				*						

Table 3 Summary results of cremated human bone analysis

Sample	Context	Parent Context	Weight (grams)				Age	Sex	Identifiable				
			Fragment size						Total (g)	Skull	Axial	Upper limb	Lower limb
			(mm)										
			0-4	5-8	8-20	20+							
2	541	542	1.5	1.3	0.5		3.3	Juvenile/Adult	?	✓			
5	599	600	4.2	2.4			6.6	Juvenile/Adult	?	✓			
4	601	602	27.8	92.9	35.9	40.1	226.7	Juvenile/Adult	?	✓	✓	✓	✓
6	603	604	18	88.3	100	33.6	240.1	Juvenile/Adult	?	✓	✓	✓	✓

13.0 APPENDIX D - RADIOCARBON DATING RESULTS

Dawn Elise Mooney

Archaeology South-East, Units 1 & 2, 2 Chapel Place, Portslade, East Sussex BN41 1DR

Introduction and Methods

Four samples were submitted to the Scottish Universities Environmental Research Centre, East Kilbride (SUERC) for radiocarbon analysis from Wrotham Quarry, Kent. The radiocarbon dating programme was designed in order to provide a precise date for a cluster of cremation burials recorded and excavated in the south-western part of the site. Single fragments of cremated human bone recovered from bulk environmental samples <4> and <6> (from cremation features [602] and [604] respectively) were submitted, as these fragments were securely associated with the cremation features and unlikely to be residual. Two fragments of charcoal retrieved from bulk sample <5> (cremation feature [600]), one of ash (*Fraxinus excelsior*) and one of field maple (*Acer campestre*) were also submitted, on the basis that no suitable cremated bone was present in the feature, and the submission of two fragments reduces the possibility of a resulting residual, incorrect date. These samples were submitted on the basis of recommendations made following the assessment of environmental material from the site in June 2013 (Mooney 2013).

Radiocarbon dating of the samples was carried out by SUERC in June 2013, with results delivered on 1st July 2013. The laboratory maintains a continual programme of quality assurance procedures, in addition to participation in international inter-comparisons (Scott 2003). These tests indicate no laboratory offsets and demonstrate the validity of the measurement quoted.

Results

The radiocarbon results are given in Table 1, and are quoted in accordance with the international standard known as the Trondheim convention (Stuiver & Kra 1986). They are conventional radiocarbon ages (Stuiver & Polach 1977). 2 Sigma calibrated dates, obtained using IntCal04 (Reimer *et al.* 2004), are also given at the 95.4% and 68.2% confidence levels.

Discussion

All four radiocarbon dating results indicate a Late Bronze Age date for the cremation cemetery. The two dates from feature [600] are very consistent with one another, suggesting that the charcoal fragments analysed were associated with the primary deposition of the context. Furthermore, these dates are also broadly consistent with the two dates on cremated human bone from features [602] and [604]. This suggests that the site comprises three main phases of activity. The cremation cemetery has no visible stratigraphic relationship with the Romano-British and Medieval features present at the site (dated by artefactual remains), however the consistency of the radiocarbon results is sufficient to confirm a Late Bronze Age date for this activity.

References

Mooney, D.E. 2013. 4782 / WRQ12 Wrotham Quarry, Kent Phase 2: Radiocarbon Dating Recommendations. Unpublished report produced on behalf of SLR Consulting Ltd. Portslade: Archaeology South-East.

Reimer P.J., Baillie M.G.L., Bard E., Bayliss A., Beck J.W., Bertrand C., Blackwell P.G., Buck C.E., Burr G., Cutler K.B., Damon P.E., Edwards R.L., Fairbanks R.G., Friedrich M., Guilderson T.P., Hughen K.A., Kromer B., McCormac F.G., Manning S., Bronk Ramsey C., Reimer R.W., Remmele S., Southon J.R., Stuiver M., Talamo S., Taylor F.W., van der Plicht J. & Weyhenmeyer C.E. 2004. 'IntCal04 terrestrial radiocarbon age calibration, 0-26 cal kyr BP'. *Radiocarbon* 46 (3): 1029-1058.

Scott, E. M. 2003. 'The Third International Radiocarbon Intercomparison (TIRI) and the Fourth International Radiocarbon Intercomparison (FIRI) 1990–2002: results, analysis, and conclusions'. *Radiocarbon* 45: 135–408.

Stuiver, M. & Kra. R. S. 1986. 'Editorial comment'. *Radiocarbon* 28: ii.

Stuiver, M. & Polach, H. A. 1977. 'Reporting of ^{14}C data'. *Radiocarbon* 19: 355–363.



Scottish Universities Environmental Research Centre

Director: Professor R M Ellam
Rankine Avenue, Scottish Enterprise Technology Park,
East Kilbride, Glasgow G75 0QF, Scotland, UK
Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

01 August 2013

Laboratory Code SUERC-47260 (GU31151)

Submitter Dawn Elise Mooney
Archaeology South-East
Units 1 & 2, 2 Chapel Place
Portslade
East Sussex BN41 1DR

Site Reference WRQ12
Context Reference 601
Sample Reference ASE_DS_00183

Material Cremated Bone : Human

$\delta^{13}\text{C}$ relative to VPDB -20.2 ‰

Radiocarbon Age BP 2934 ± 29

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

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- *N.R.M.*

Date :- *1-8-13*

Checked and signed off by :- *B. Lijun*

Date :- *1/8/13*

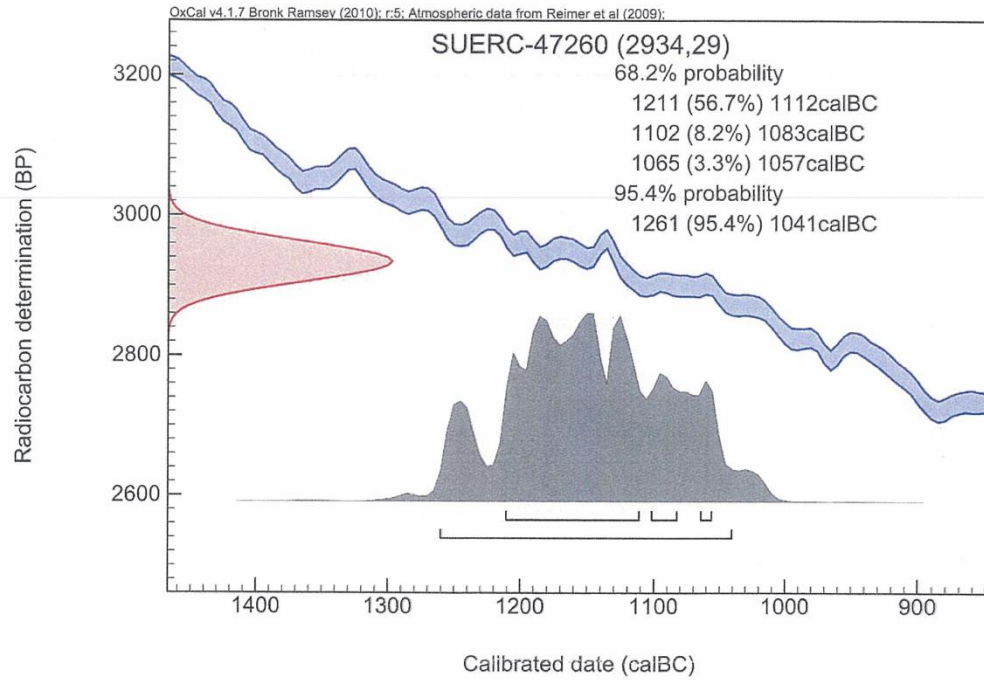


The University of Glasgow, charity number SC004401



The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005238

Calibration Plot





Scottish Universities Environmental Research Centre

Director: Professor R M Ellam
Rankine Avenue, Scottish Enterprise Technology Park,
East Kilbride, Glasgow G75 0QF, Scotland, UK
Tel: +44 (0)1355 223332 Fax: +44 (0)1355 228898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

01 August 2013

Laboratory Code SUERC-47261 (GU31152)

Submitter Dawn Elise Mooney
Archaeology South-East
Units 1 & 2, 2 Chapel Place
Portslade
East Sussex BN41 1DR

Site Reference WRQ12
Context Reference 603
Sample Reference ASE_DS_00184

Material Cremated Bone : Human

$\delta^{13}\text{C}$ relative to VPDB -20.4 ‰

Radiocarbon Age BP 2879 \pm 29

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

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :-

N. R. M.

Date :- 1-8-13

Checked and signed off by :-

B. Taylor

Date :- 19/8/13

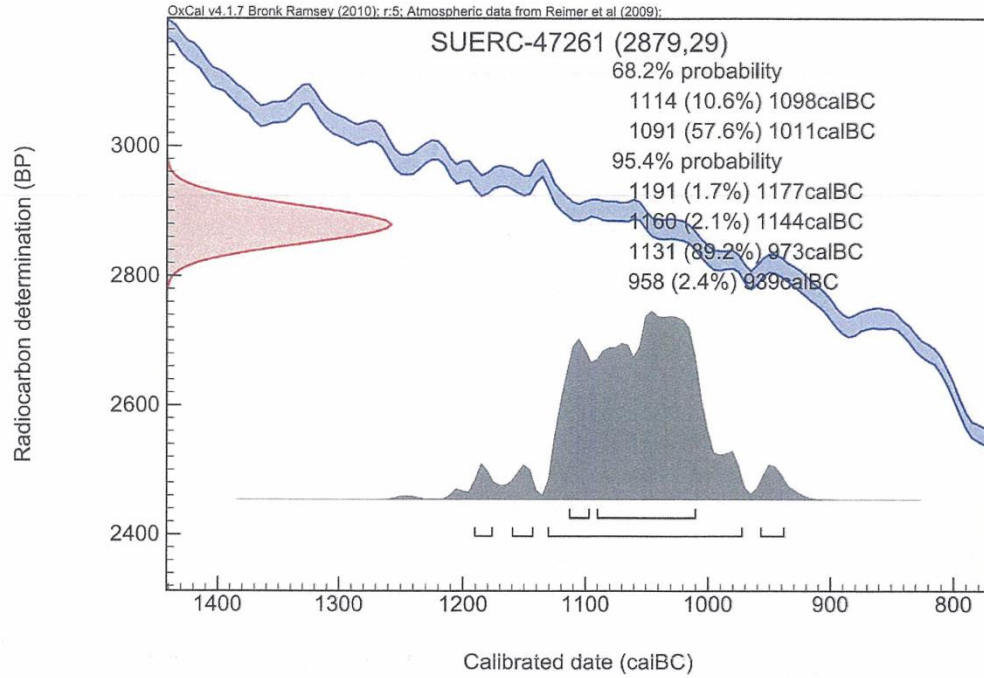


The University of Glasgow, charity number SC0204801



The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC0005336

Calibration Plot





Scottish Universities Environmental Research Centre

Director: Professor R M Ellam
Rankine Avenue, Scottish Enterprise Technology Park,
East Kilbride, Glasgow G75 0QF, Scotland, UK
Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

01 August 2013

Laboratory Code SUERC-47258 (GU31149)

Submitter Dawn Elise Mooney
Archaeology South-East
Units 1 & 2, 2 Chapel Place
Portslade
East Sussex BN41 1DR

Site Reference WRQ12
Context Reference 599
Sample Reference ASE_DS_00181

Material Charcoal : Acer campestre

$\delta^{13}\text{C}$ relative to VPDB -23.6 ‰

Radiocarbon Age BP 2871 ± 29



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

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- *N. Hall*

Date :- 1-8-13

Checked and signed off by :- *B. Gregory*

Date :- 1/8/13

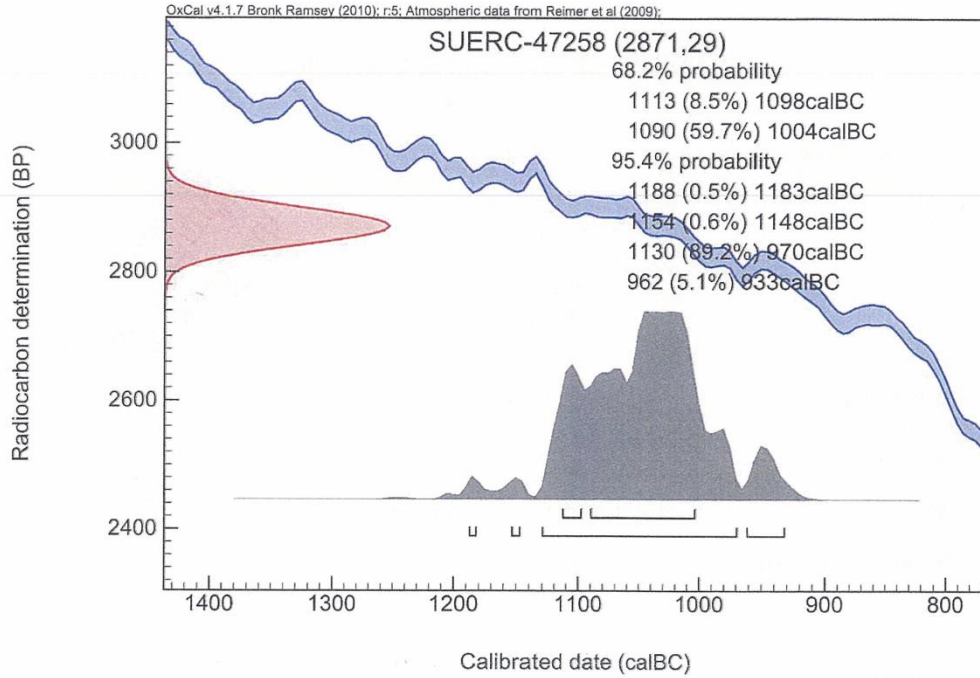


The University of Glasgow, charity number SC004401



The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC000533

Calibration Plot





Scottish Universities Environmental Research Centre

Director: Professor R M Ellam
Rankine Avenue, Scottish Enterprise Technology Park,
East Kilbride, Glasgow G75 0QF, Scotland, UK
Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

01 August 2013

Laboratory Code SUERC-47259 (GU31150)

Submitter Dawn Elise Mooney
Archaeology South-East
Units 1 & 2, 2 Chapel Place
Portslade
East Sussex BN41 1DR

Site Reference WRQ12
Context Reference 599
Sample Reference ASE_DS_00182

Material Charcoal : Fraxinus excelsior

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

Radiocarbon Age BP 2862 \pm 27

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

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :-

NRM

Date :- 1-8-13

Checked and signed off by :-

B. Lippert

Date :- 1/8/13



The University of Glasgow, charity number SC006401



The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005238

Calibration Plot

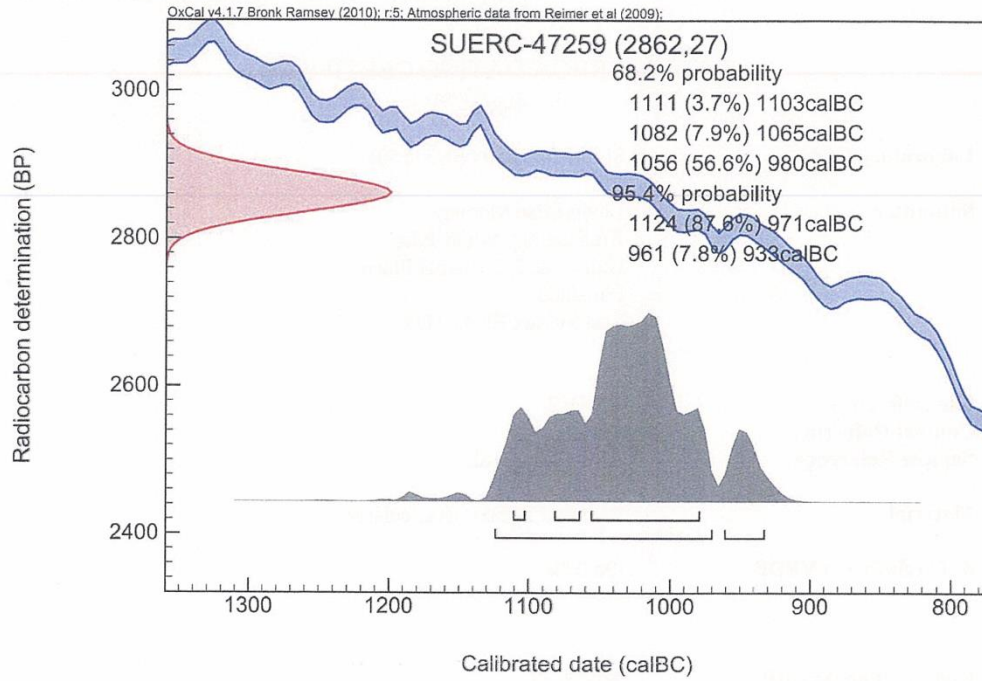





Table 1 Radiocarbon dating results from Wrotham Quarry, Kent, Phase 2

Laboratory Code	Sample ID	Material & context	$\delta^{13}\text{C}$ (‰)	Radiocarbon age (BP)	Calibrated date (95.4% confidence)	Calibrated date (68.2% confidence)
SUERC-47258	ASE_DS_00181	<i>Acer campestre</i> charcoal retrieved from bulk sample <5> from fill [599] of cremation feature [600]	-23.6	2871 ± 29	1188 - 933 cal BC	1113 - 1004 cal BC
SUERC-47259	ASE_DS_00182	<i>Fraxinus excelsior</i> charcoal retrieved from bulk sample <5> from fill [599] of cremation feature [600]	-25	2862 ± 27	1124 - 933 cal BC	1111 - 980 cal BC
SUERC-47260	ASE_DS_00183	Cremated human bone retrieved from bulk sample <4> from fill [601] of cremation feature [602]	-20.2	2934 ± 29	1261 - 1041 cal BC	1211 - 1057 cal BC
SUERC-47261	ASE_DS_00184	Cremated human bone retrieved from bulk sample <6> from fill (603) of cremation feature [604]	-20.4	2879 ± 29	1191 - 939 cal BC	1114 - 1011 cal BC

14.0 APPENDIX E – COPPER ALLOY RING AND FITTING CONSERVATION REPORT

YORK ARCHAEOLOGICAL TRUST CONSERVATION RECORD SHEET			
SITE: WROTHAM QUARRY, KENT		SITE CODE: WRQ 12	
CLIENT: SLR Consulting		SF NUMBER: 1	
SIMPLE NAME: Ring		CONTEXT: 512	
MATERIAL: Copper Alloy		X-RAY: 8217	
WORK REQUIRED: investigative clean and stabilize			
CONSERVATOR: K.Kenward		DATE:	
CARE GUIDE	RH: <35%	LIGHT: 300 lux	TEMP: stable

 <p>before</p>	<p>Condition: The ring has an overlying crust of soil and soft green corrosion products over a black patina. The patina is quite pitted and worn and where it is missing from an area of damage on one side, the inner core can be seen to be totally mineralised. There is a patch of harder green corrosion products in one area. The X-ray shows a fairly evenly mineralised core but with three denser patches around the circumference.</p> <p>The separate object has a similar overlying crust of soil and soft green corrosion products. Most of the original patina is missing leaving a surface of green corrosion products with powdery orange one below. The X-ray shows a very heavily mineralised core with a bright circular spot (rivet) at one end.</p>
	<p>Treatment: The objects were X-rayed using standard YAT procedures and equipment. The overlying corrosion was removed using small hand tools (wooden cocktail stick, ophthalmic scalpel and soft brush) under magnification. The area of shaped corrosion has been left in situ (see notes below) but can be removed if required.</p>
	<p>Investigation: It is difficult to say more than that this is a small, fairly crudely made ring. It is possible that the ring is a link of chain mail. Most mail links are made of iron for strength, copper alloy only being usually used for decorative edging. Chain mail links are usually lapped and riveted. However this kind of join was not found during cleaning and cannot be seen on the X-ray. The denser patches on the X-ray correspond to the denser patches of corrosion. Removal of the overlying soil from the harder patch of green corrosion on the ring revealed this corrosion to have a curved face. It does not appear to be integral to the ring itself but may have come from another similar object passing through it, such as another ring. The corrosion has therefore been left in place for the moment.</p> <p>The separate piece has a shaped point at one end which appears mostly intact. The piece then broadens and there is a round rivet through this broad area, its head being level with the patch of patina which probably equates to the original surface. The piece narrows and the other end is broken and incomplete. The broken end has a semi circular break face as though broken around another rivet. The association between the two objects (if any) is not clear and it is not known by the Conservator if the two were found physically</p>

	<p>touching or joined in any way. The corrosion on the two pieces did not appear to correspond so it would not appear to be the prong of a brooch (the ring being the body). It is most likely an un-associated small mount or fitting.</p> <p>D.Tweddle AY17/8 The Anglian Helmet from Coppergate The Archaeology of York Small Finds AY17/8 1992 The Mail Curtain S.O'Connor p999-1011 http://www.iadb.co.uk/henlys/henlys.php</p>
--	--

15.0 APPENDIX E – CONTEXT REGISTER

Context No.	Type	Dimensions	Colour	Description	Inclusions	Interpretation	Later than	Earlier than	Equal to	Part of
501	Structure	4.40 x 1.70 x 1.0m	NA	Brick culvert/ drain. Brick size 0.23 x 0.11 x 0.07m. Bonded with white/grey concrete mortar, forming a cylindrical drain structure. Aligned E - W.	NA	Modern drain	502			
502	Cut	4.40 x 1.70 x 0.25m	NA	Rectangular in plan. Orientated: E - W. Break of slope top: Sharp. Sides: Vertical. Break of slope base: Sharp. Base: Flat.	NA	Cut for brick culvert (501)	503	501, 546		
503	Deposit	Site wide x c. 0.25m	Dark grey brown	Firm silty clay. Extends across site.	Small unsorted angular and sub-angular flints and occasional modern detritus.	Topsoil.	504	502		
504	Deposit	Site wide x c. 0.15m	Dark brown	Compact silty clay.	Frequent small to medium flint pebbles and nodules.	Subsoil. Interface layer between natural geology and topsoil. Seals all cut features on this site.	506, 508, 514, 516, 518, 520, 522, 524, 528, 531, 533, 535, 537, 539, 541, 543, 552, 555, 556, 560, 562, 567, 573, 577, 579, 581, 583, 585, 587, 593, 595, 597, 599, 601, 603, 605, 611	503		

505	Deposit	Site wide x Unknown	Mid grey brown	Variable across site. Characterised by thick compact mid grey brown clays over most of site, but colour changes to a greyish yellow in west.	Frequent flint nodules, although these decrease to west.	Natural geology.	NA	507, 509, 511, 513, 515, 517, 519, 521, 523, 527, 532, 534, 536, 538, 540, 542, 545, 548, 551, 559, 568, 570, 574, 578, 580, 582, 584, 586, 588, 592, 596, 598, 600, 602, 604, 606, 608, 612, 615, 619		
506	Fill	1.9 x 1.14 x 0.14m	Mid brownish grey	Compact clay. Fills [507].	Abundant charcoal flecks and frequent angular and sub-angular small flint pebbles and fragments	Fill of pit [507].	507	504		21
507	Cut	1.9 x 1.14 x 0.14m	NA	Oval shaped in plan. Orientated: N - S. Break of slope top: Gradual. Sides: Concave. Break of slope base: Gradual. Base: Concave. Filled by (506)	NA	Cut of pit	505	506		21

508	Fill	0.96 x 0.66 x 0.08m	Mid-greyish brown	Compact clay. Fills [509].	Occasional small angular/ sub-angular flint nodules and rare IA/ RB pot.	Fill of post hole [509].	509	504		8
509	Cut	0.96 x 0.66 x 0.08m	NA	Oval shaped in plan. Orientated: N - S. Break of slope top: Gradual. Sides: Shallow and concave. Break of slope base: Gradual. Base: Concave. Filled by (508).	NA	Small post hole, proximity to [507] suggests possible relationship.	505	508		8
510	Fill	2.2 x 1.0 x 0.3m	Dark grey brown	Firmly compacted silty clay. Fills [511]. Truncated by post medieval ploughing.	Occasional charcoal pieces. Frequent sub-angular flint pebbles/ cobbles.	Fill of ditch [511]. The fill is quite similar to surrounding natural.	511		512, 526, 547	15
511	Cut	2.2 x 1.0 x 0.3m	NA	Linear/ rectangular in plan. Orientated: N - S. Break of slope top: Sharp. Sides: Moderately sloping. Break of slope base:	NA	Romano-British or later field boundary.	505	510	513, 527, 548	15
512	Fill	1.84 x 1.0 x 0.20m	Mid-grey brown	Moderately compacted clay. Fills [513]. Moderately truncated by plough scars.	Frequent small pebbles, medium sized 'cobbles' and sub-angular flint nodules. Occasional charcoal.	Fill of shallow ditch possibly demarcating the edge RB or later field boundary.	513		510, 526, 547	15

513	Cut	1.84 x 1.0 x 0.20m	NA	Linear/ sub-rectangular in plan. Orientated: N - S. Break of slope top: Moderate. Moderately sloping sides. Break of slope base: Moderate. Base: Flat. Filled by (512).	NA	Boundary ditch, possibly forming limitation of habitation or cultivation area.	505	512	511, 527, 548	15
514	Fill	2.40 x 1.54 x 0.25m	Mid-grey brown	Compact clay. Fills [515]. Truncated by modern ditching.	Frequent small to medium flint nodules. Rare small IA/ RB pot sherds.	Fill of large oval pit. Probably domestic in origin.	515	504		9
515	Cut	2.40 x 1.54 x 0.25m	NA	Oval in plan. Orientated: E - W. Break of slope top: Gradual. Sides: Gently sloping. Break of slope base: Concave. Base: Flat to concave. Filled by [514]			505	514		9
516	Fill	0.70 x 0.70 x 0.20m	Mid-brownish grey	Compacted clay. Fills [517].	Frequent small angular flints. Rare Iron Age/ Romano-British pot.	Fill of probable linear field boundary/ ditch [517]. Probably of IA or RB date.	517	504	553	29

517	Cut	0.70 x 0.70 x 0.20m	NA	Shape in plan: Linear/Sub-angular. Orientation: NW - SE. Break of slope top Moderate/ Sharp. Sides: Concave. Break of slope base: Moderate/ Sharp. Base: Concave. Filled by: (516).		Cut of RB or later ditch. The orientation suggests it may be associated with similar period features to the west (i.e. cremations and other ditches such as [521]).	505	516, 553		29
518	Fill	0.80 x 0.70 x 0.09m	Grey	Moderately compacted clay. Fills: [519].	Frequent small flint and rare small pottery sherds.	Small post hole of probable similar date to ditch [517] and pit [507]. Purpose however is unclear as feature is fairly isolated.	519	504		12
519	Cut	0.80 x 0.70 x 0.09m	NA	Circular in plan. Orientation: NA. Break of slope top: Gradual. Sides: Gently sloping. Break of slope base: Gradual. Base: Concave. Filled by (518).	NA	Post hole of probable Romano-British date.	505	518		12
520	Fill	0.90 x 0.80 x 0.20m	Medium brown grey	Compact clay. Fills: [521]. Same as (522).	Rare small pottery fragments. Frequent small to medium angular and sub-angular flint nodules.	Fill of shallow ditch [521], probably of Romano-British or later date	521	504	522	27

521	Cut	0.90 x 0.80 x 0.20m	NA	Linear/ Sub-rectangular in plan. Orientated: NE - SW. Break of slope top: Sharp. Sides: Concave. Break of slope base: Sharp. Base: Flat to slightly concave. Filled by: (520).	NA	NE - SW orientated ditch cut of probable Romano-British or later date. May well have originated as a boundary ditch for field systems associated with settlement here.	505	520	523	27
522	Fill	1.96 x >0.20 x 0.25m	Mid-brownish grey	Compact clay. Fills: [523]. Same as (520).	Frequent small to medium sized angular and sub-angular flints. Occasional small RB pottery sherds	Ditch fill.	523	504	520	27
523	Cut	1.96 x >0.20 x 0.25m	NA	Same as [521]	NA	Terminus of ditch [521].	505	522	521	27
524	Fill	1.25 x 0.78 x 0.22m	Dark greyish brown	Firmly compacted silty clay. Fills: [525].	Frequent sub-angular flint pebbles. Occasional charcoal flecks.	Fill of pit.	525	504		17
525	Cut	1.25 x 0.78 x 0.22m	NA	Oval in plan. Orientated: E - W. Break of slope top: Sharp. Sides: Moderately sloping. Break of slope base: Sharp. Base: Concave. Cuts (526).	NA	Pit or large post hole. Truncates boundary ditch [527].	526	524		17

526	Fill	1.74 x >1.20 x 0.26m	Mid greyish brown	Firmly compacted silty clay. Fills [527]. Cut by [525] and [530].	Frequent sub-angular flints and occasional charcoal flecks.	Silting fill of boundary ditch [527].	527	525, 530	510, 512, 547	15
527	Cut	1.74 x >1.20 x 0.26m	NA	Curvi linear in plan. Orientated: N - S. Break of slope top: Moderate. Sides: Moderately sloping. Break of slope base: Moderate. Base: Flat. Filled by (526).	NA	Boundary ditch, most likely Romano-British or later in date.	505	526	511, 513, 548	15
528	Fill	2.0 x 0.55 x 0.29m	Light grey brown	Firmly compacted silty clay. Upper fill of pit [530].	Occasional small sub-rounded flint inclusions.	Possibly a colluvial silting up fill of pit [530]. Probably Iron Age or Romano-British in origin.	529	504		14
529	Fill	2.0 x 0.55 x 0.11m	Dark grey brown	Moderately compacted silty clay. Basal fill of [530].	Frequent sub-angular flint nodules. Occasional charcoal flecking.	Earliest fill of pit [530].	530	528		14
530	Cut	2.2 x 2.0 x 0.45m	NA	Oval/ Sub-circular in plan. Orientated: NA. Break of slope top: Sharp. Sides: Moderate. Break of slope base: Sharp. Base: Flat. Filled by: (528), (529)	NA	Pit situated at terminus of ditch [527]. Possibly Romano-British or later in date. Function unclear.	526	529		14

531	Fill	2.0 x 1.80 x 0.25m	Mid grey brown	Moderately compacted silty clay. Fills: [532].	Frequent flint, including some burnt. Occasional charcoal flecks and pottery.	Pit fill of possible Late Bronze Age or later origin. Probably, based on finds, was domestic in origin.	532	504		20
532	Cut	2.0 x 1.80 x 0.25m	NA	Oval in plan. Orientated: N - S. Break of slope top: Sharp. Sides: Steeply sloping. Break of slope base: Sharp. Base: Flat. Filled by (531).	NA	Iron Age or Romano-British pit of unknown function. Associated with ditch [511].	505	531		20
533	Fill	0.84 x 0.75 x 0.13m	Dark brownish black	Moderately compacted silty clay. Fills [534].	Rare burnt sandstone, frequent charcoal flecking and angular and sub-angular flints.	Fill of small fire pit [534]. The proximity of this feature to cremation burials suggest the material in this pit fill is probably similar or related.	534	504		19

534	Cut	0.84 x 0.75 x 0.13m	NA	Circular in plan. Break of slope top: Moderate to sharp. Sides: Steeply sloping/ Concave. Break of slope base: Moderate to sharp. Base: Flat. Filled by: (533).	NA	Cut of 'fire pit'. The activity in this pit is suggestive of burning taking place in situ, with the surrounding geology partially fired. The pit is probably related to nearby cremation activity.	505	533		19
535	Fill	1.0 x 0.40 x 0.08m	Light grey	Moderately compacted clay. Fills [536].	Occasional small angular/ sub-angular flint nodules.	Fill of shallow N - S gully [536]. Possibly contemporary or earlier than RB or IA features.	536	504		24
536	Cut	1.0 x 0.40 x 0.08m	NA	Linear in plan. Orientated: N - S. Break of slope top: Gradual. Sides: Shallow and concave. Break of slope base: Gradual. Base: Concave. Filled by: (535)	NA	Old field boundary, of unknown date, though may be contemporary with other Bronze Age or RB features on site.	505	535		24
537	Fill	0.80 x 0.45 x 0.10m	Light/mid grey brown	Moderately compacted clay. Fills: [538].	Occasional small angular flints and stone fragments.	Fill of indistinct N/S orientated gully of unknown date, although probably of similar date to other features on site.	538	504		37

538	Cut	0.80 x 0.45 x 0.10m	NA	Linear/ sub-rectangular in plan. Orientated: N - S. Break of slope top: Gradual. Sides: Shallow, gradual and concave. Break of slope base: Gradual. Base: Concave. Filled by (537).	NA	Appears to be a field boundary similar to [536] and probably of the same date. No dating evidence for either of these features.	505	537		37
539	Fill	0.45 x 0.35 x 0.12m	Dark brownish grey	Moderately compacted silty clay.	Occasional charcoal flecks.	Fill of cremation burial cut. This material appears to be the remains of a human cremation. This fill appears lighter and far fewer bones were found in it than the fill of the other cremation burial (541)/ [542].	540	504		36
540	Cut	0.45 x 0.35 x 0.12m	NA	Sub-circular in plan. Break of slope top: Gradual to moderate. Sides: Moderate to steeply sloping/ concave. Break of slope base: Gradual to moderate. Base: Concave. Filled by [539].	NA	Cut of cremation burial. Approximately 1m due west of other cremation burial [542]. Bronze Age in date.	505	539		36

541	Fill	0.75 x 0.44 x 0.18m	Dark grey/black	Firmly compacted silty clay. Fills: [542].	Occasional flint pebble and moderate quantities of charred human bone.	Cremated human remains lying close to similar cremation burial [540]. It seems likely that these two form part of a small cremation cemetery.	542	504		11
542	Cut	0.75 x 0.44 x 0.18m	NA	Oblong/ oval in plan. Orientated: NW - SE. Break of slope top: Sharp. Sides: Steeply sloping. Break of slope base: Concave. Base: Irregular/ Concave. Filled by: (541).	NA	Cut of cremation burial	505	541		11
543	Fill	1.40 x >1.0 x 0.15m	Orange brown	Loosely compacted silty clay. Fills [545].	Frequent small to medium sized rounded and sub-rounded chalk and flint fragments.	Secondary fill of ditch [545].	544	504		33
544	Fill	1.40 x >1.0 x 0.05m	Mid-grey brown	Well compacted silty clay. Fills [545].	Frequent small flecks of sub-rounded chalk and small to medium angular/ sub-angular flint pebbles.	Primary fill of ditch [545]. Material in fill is similar to natural, suggesting this may be bank/side collapse or erosion.	545	543		33

545	Cut	1.40 x >1.0 x 0.20m	NA	Linear in plan. Orientated: NW - SE. Break of slope top: Gradual. Sides: Concave. Break of slope base: Gradual. Base: Concave. Filled by: (543), (544).	NA	Drainage ditch.	505	544		33
546	Structure	4.0 x 0.70 x 0.40m	NA	Ragstone and lime mortar culvert. Orientation: *. Stone partially shaped.		Post medieval drainage culvert.	502			
547	Fill	0.95 x 0.90 x 0.10m	Mid-greyish brown	Moderately compacted silty clay. Fills: [548].	Frequent flint cobbles and pebbles.	Fill of ditch terminus [548].	548		510, 512, 526	15
548	Cut	0.95 x 0.90 x 0.10m	NA	Linear in plan. Orientated: N - S. Break of slope top: Ephemeral. Sides: Steeply sloping. Break of slope base: Moderate. Base: Flat. Filled by (547).	NA	Terminus of shallow boundary ditch.	505	547	511, 513, 527	15
549	Void	Missing No. Void								
550	Cut	1.0 x 0.80 x 0.30m	NA	Oval in plan. Orientation: NE - SW. Break of slope top: Sharp. Sides: Moderate. Break of slope base: Sharp. Base: Concave. Filled by: (554).	NA	Post-hole, probably contemporary in date with ditch [517].	553	554		28
551	Cut	1.50 x >1.10 x 0.23m	NA	Linear/ curved end in plan. Orientation: Break of slope top: Gradual. Sides: Concave/ gradual. Break of slope base: Gradual. Base: Flat to concave. Filled by: 552.	NA	Cut of shallow ditch	505	552		26

552	Fill	1.50 x >1.10 x 0.23m	Mid-greyish brown	Well compacted clay.	Frequent small to large angular and sub-angular flint pebbles/nodules.	Fill of ditch terminus [551]. Possibly related to ditch feature [517].	551	504		26
553	Fill	>1.50 x 0.90 x 0.15m	Mid-greyish brown	Firmly compacted clay. Same as (516). Fills [517].	frequent angular/ sub-angular flints. Occasional small bone and small burnt ang./ sub-angular flint	Fill of northern end of ditch [517]	517	550	516	29
554	Fill	0.68 x 0.30m	Mid-grey brown	Moderately compacted silty clay. Fills [550].	Occasional charcoal flecks and sub-rounded flint nodules.	Fill of pit or post hole [550]. Possibly the charcoal flecking represents remains of timber post, although this would suggest it was burnt in situ.	550	555		28
555	Fill	0.43 x 0.14m	Light greyish brown	Moderately compacted silty clay. Fills [550].	Very occasional flint pebbles.	Final fill of post hole [550].	554	504		28
556	Fill	2.40 x >1.0 x 0.24m	Mid-yellowish grey	Firmly compacted silty clay. Fills [559].	Occasional medium to large angular and sub-angular flint nodules.	Final fill of elongated feature [559].	557	504	560	23

557	Fill	2.65 x >1.0 x 0.29m	Mid-yellowish grey	Firmly compacted silty clay. Fills [559].	Occasional pot (medieval?). Occasional small angular/sub-angular flint nodules.	Secondary fill of 'waterhole' [559], pottery suggests this feature is possibly medieval in origin.	558	556		23
558	Fill	1.13 x >1.0 x 0.10m	Dark grey	Firmly compacted silty clay. Fills [559].	Occasional small angular flint nodules.	Earliest fill of [559]. Appears to be medieval in origin and was interpreted as a watering hole.	559	557		23
559	Cut	2.65 x >1.0 x 0.63m	NA	Rectilinear in plan. Orientated: E - W. Break of slope top: Gradual. Sides: Concave. Break of slope base: Moderately sharp. Base: Flat to Concave. Filled by: (556), (557) and (558).	NA	Undiagnostic feature possibly relating to drainage. Probably medieval in origin.	505	558	561	23
560	Fill	1.90 x >1.50 x 0.25m	Yellowish grey	Firmly compacted silty clay. Fills: [561]/ [559].	Occasional small pot. Possibly medieval.	Fill in terminus of watercourse [561].		504	556	23
561	Cut	1.90 x >1.50 x 0.25m	NA	Terminus (plan). Orientation: E - W. Break of slope top: Gradual. Sides: Gradual and concave. Break of slope base: Gradual. Base: Concave. Filled with (560). Same as [559].	NA	Terminus of 'water-hole' [559]/ [561].			559	23

562	Fill	>1.0 x 0.50 x 0.12m	Dark greyish brown	Firmly compacted silty clay.	Occasional small sub-rounded and rounded flint pebbles.	Fill of gully [563]. No datable finds.	563	504	564, 571	30
563	Cut	>1.0 x 0.50 x 0.12m	NA	Linear in plan. Orientated N - S. Break of slope top: Moderate to sharp. Sides: Shallow to concave. Break of slope base: Moderate to sharp. Base: Concave. Filled by (564). Same as [565].	NA	Same as gully [565].		562	565, 572	30
564	Fill	>1.0 x 0.45 x 0.15m	Dark grey brown	Moderately compacted silty clay. Fills [565].	Occasional small angular and sub-angular flint nodules.	Fill of gully [565].	565		562, 571	30
565	Cut	>1.0 x 0.45 x 0.15m	NA	Linear in plan. Orientated N - S. Break of slope top: Moderate to sharp. Sides: Shallow to concave. Break of slope base: Moderate to sharp. Base: Concave. Filled by: (564).	NA	Terminus of N - S orientated gully.		564	563, 572	30
566	Void	Missing No. Void								
567	Fill	>1.0 x 0.63 x 0.09m	Yellowy grey	Firmly compacted silty clay. Fills: [568].	Occasional sub-angular pebbles towards base of fill.	Fill of shallow field boundary.	568	504	575	30

568	Cut	>1.0 x 0.63 x 0.09m	NA	Linear in plan. Orientation: ENE - WSW. Break of slope top: Moderate. Sides: Concave. Break of slope base: Moderate. Base: Slightly concave. Filled by (567). Same as: [576].	NA	Shallow field boundary associated with [572] et al. Unknown date.	505	567	576	30
569	Fill	1.04 x >1.00 x 0.16m	Mid-greyish brown	Firm silty clay. Fills: [570].	Rare Roman pottery fragments and occasional small to medium angular and sub-angular flint.	Romano-British/ Iron Age date.	570	572	589, 613	31
570	Cut	1.04 x >1.00 x 0.16m	NA	Linear in plan. Orientation: E - W. Break of slope top: Moderate - Sharp. Sides: Concave/ Moderate. Break of slope base: Gradual. Base: concave. Filled by: (569).	NA	Romano-British or later field boundary and/ or drainage ditch.	505	569	590, 615	31
571	Fill	>1.70 x 0.25 x 0.10m	Dark grey brown	Moderately compacted silty clay.	Occasional small angular and sub-angular flint nodules.	Same as (563) and (565). Fill of gully.			562, 564	30
572	Cut	>1.70 x 0.25 x 0.10m		Linear in plan. Orientated N - S. Break of slope top: Moderate to sharp. Sides: Shallow to concave. Break of slope base: Moderate to sharp. Base: Concave. Filled by: (571).	NA	Cut of Romano-British or later gully.	569		563, 565	30

573	Fill	1.30 x 1.04 x 0.17m	Mid-brown and orange	Moderately compacted silty clay. Fills [574].	Rare small burnt/ heated angular flint and small pieces of Roman pottery. Common charcoal flecking.	Material in this pit fills formation may be linked to cremation activity to the south.	574	504		2
574	Cut	1.30 x 1.04 x 0.17m	NA	Oval in plan. Orientated: E - W. Break of slope top: Moderate to sharp. Sides: Moderately steep and concave. Break of slope base: Gradual. Base: Concave.	NA	Slot through Bronze age/ Romano-British or Iron Age 'Fire pit'.	505	573		2
575	Fill	>0.75 x 0.69 x 0.09m	Yellowish grey	Firmly compacted silty clay. Fills: [568].	Occasional sub-angular pebbles towards base of fill.	Fill of terminus of shallow field gully or boundary.			567	30
576	Cut	>0.75 x 0.69 x 0.09m	NA	Linear in plan. Orientation: ENE - WSW. Break of slope top: Moderate. Sides: Moderate. Break of slope base: Moderate. Base: Slightly concave. Filled by (575). Same as: [568].	NA	Undated field boundary terminus.			568	30

577	Fill	0.80 x 0.74 x 0.12m	Dark grey brown	Firmly compacted silty clay. Fills: [578].	Rare small Romano-British pot, occasional charcoal flecks and small to medium ang./ sub ang. flints	Fill of 'fire pit'	578	504		13
578	Cut	0.80 x 0.74 x 0.12m	NA	Circular in plan. Orientation: NA. Break of slope top: Gradual to moderate. Sides: Concave and moderately shallow. Break of slope base: Gradual to moderate. Base: Concave. Filled by: (577)	NA	Possible 'fire pit'. Pottery points to a Romano-British or Iron Age origin.	505	577		13
579	Fill	1.25 x 0.50 x 0.13m	Light grey brown	Moderately compacted silty clay. Fills: [580].	Occasional sub-angular flint pebbles and cobbles, increasing to base of feature.	Fill of undated field boundary [580].	580	504	583, 609, 616	7
580	Cut	1.25 x 0.50 x 0.13m	NA	Linear in plan. Orientated: ENE - WSW. Break of slope top: Moderate. Sides: Gentle to moderately sloping. Break of slope base: Moderate. Base: Concave. Filled by: [579].	NA	Slot through field boundary/ shallow gully.	505	579	584, 610, 617	7
581	Fill	1.82 x 0.73 x 0.28m	Mid-grey brown	Firmly compacted silty clay. Fills: [582].	Occasional sub-rounded flint pebbles and cobbles. Manganese staining.	Single fill of pit [582]. No dating evidence.	582	504		10

582	Cut	1.82 x 0.73 0.28m	NA	Oval in plan. Orientated: NW - SE. Break of slope top: Sharp. Sides: Steeply sloping. Break of slope base: Moderate. Base: Slightly concave. Filled by: (581).	NA	Cut of pit or tree bowl of unknown function or date. Lies adjacent to field boundary [584].	505	581		10
583	Fill	>1.3 x 0.50 x 0.14m	Light grey brown	Moderately compacted silty clay. Fills: [584].	Occasional sub-angular flint pebbles and cobbles.	Single fill of field boundary [584].	584	504	579, 609, 616	7
584	Cut	>1.3 x 0.50 x 0.14m	NA	Linear in plan. Orientated: ENE - WSW. Break of slope top: Moderate. Sides: Gentle. Break of slope base: Moderate. Base: Concave. Filled by [583].	NA	Cut of field boundary of unknown date	505	583	580, 610, 617	7
585	Fill	0.75 x 0.66 x 0.10m	Light grey brown	Firm silty clay with manganese staining. Fills [586].	Frequent sub-angular flint pebbles	Shallow post hole/ pit fill	586	504		22
586	Cut	0.75 x 0.66 x 0.10m	NA	Oval in plan on N - S alignment. Moderate break of slope top and moderate break of slope base. Base - Flat. Filled by (585).	NA	Cut of shallow post hole or pit	505	585		22

587	Fill	0.8m (diameter) x 0.10m	Mid-reddish brown	Firmly compacted silty clay. Fill of Pit [588].	Very frequent sub-angular and angular flint pebbles. Very occasional burnt flint.	Fill is burnt heated clay with mixed slumping and subsidence. The fill does not seem to be domestic due to an absence of pot/bone/carbon residue etc. Similar to (611).	588	504		34
588	Cut	0.8m (diameter) x 0.10m	NA	Circular in plan with moderate break of slope top, moderately sloping sides and a moderate break of slope base. Base - Flat. Filled by (587).	NA	Shallow pit of unknown function.	505	587		34
589	Fill	>1.30 x 1.12 x 0.20m	Mid-greyish brown	Firm silty clay. Fills: [590].	occasional small to medium angular and sub-angular flint.	Slot into terminus of ditch. Although no finds were located in this slot, Romano-British pottery elsewhere in this feature points to a Roman date of origin.			569, 613	31
590	Cut	>1.30 x 1.12 x 0.20m	NA	Linear in plan. Orientation: E - W. Break of slope top: Shallow/ Gradual. Sides: Concave. Break of slope base: Shallow/ gradual. Base: Concave.	NA	Terminus of Romano-British/ medieval field boundary/ drainage ditch.			570, 615	31

591	Fill	1.64 x 1.55 x 0.20m	Mid-grey brown	Firm silty clay. Fills: [592]	Occasional medium to large angular flint nodules	Fill of pit [592]. Possibly related to Bronze Age cremations.	592	594		4
592	Cut	1.64 x 1.55 x 0.20m	NA	Oval shaped in plan. Orientated: NW - SE. Break of slope top: Gradual. Sides: Concave. Break of slope base: Gradual. Base: Flat/ Irregular. Filled by (591)	NA	Small pit of unknown function. Possibly natural in origin, although its proximity to cremation burials could be suggestive of a relationship.	505	591		4
593	Fill	1.26 x 0.84 x 0.17m	Dark grey brown	Firm silty clay. Fills [594]. Similar to (573), (578), (595) and (607).	Frequent scorched earth and burnt flint fragments. Occasional sub-angular flint cobbles.	Fill of pit [594]. Possibly related to cremation cemetery.	594	504		3
594	Cut	1.26 x 0.84 x 0.17m	NA	Oval in plan. Orientation: NNW - SSE. Break of slope top. Moderate. Sides: Moderately sloping. Break of slope base: Moderate. Base: Concave. Filled by: (592). Truncates [591].	NA	Shallow pit possibly relating to cremation burials.	591	593		3
595	Fill	0.90 x 0.60 x 0.15m	Dark grey brown	Firm silty clay. Fills [596].	Frequent sub-angular pebbles. Occasional burnt flint and charcoal flecking.	Fill of pit [596], probably waste materials from industrial process or cremation burial burning.	596	504		1

596	Cut	0.90 x 0.60 x 0.15m	NA	Oval in plan. Orientated: N - S. Break of slope top: Sharp. Sides: moderately sloping. Break of slope base: Moderate. Base: Concave. Filled by (595). Similar to [594] etc.	NA	Shallow pit of possible industrial function.	505	595		1
597	Fill	0.53 (diameter) x 0.15m	Black	Moderately firm silty clay and charcoal. Fill of [598].	Burnt human bone, with occasional sub-angular flint pebbles.	This fill contains the remnants human cremation. The cremation was not within in an urn or pottery, suggesting cremation was local to this proximity.	598	504		32
598	Cut	0.53 (diameter) x 0.15m	NA	Circular in plan. Break of slope top: Sharp. Sides: moderately sloping. Break of slope base: Sharp. Base: Concave. Filled by: (597).	NA	Cremation burial pit. Part of a probably small cemetery probably representing a small family unit. Cemetery does not extend north of [598] and [602].	505	597		32
599	Fill	0.38 (diameter) x 0.14m	Black	Moderately firm silty clay and charcoal. Fills: [600].	Moderate amounts of human bone. Occasional sub-angular flint pebbles	Fill of cremation scoop [600].	600	504		16

600	Cut	0.38 (diameter) x 0.14m	NA	Circular in plan. Break of slope top: Sharp. Sides: Moderately sloping. Break of slope base: Sharp. Base: Concave. Filled by: (599).	NA	Shallow cremation scoop, part of small cemetery on site including [540], [542], [598], [602] and [604].	505	599		16
601	Fill	0.36 (diameter) x 0.12m	Black	Moderately compacted silty clay and charcoal. Fills: [602].	Moderate human bone. Occasional sub-angular flint pebbles.	Fill of cremation pit or scoop [602]. Probably, based on contemporary pits, Bronze age in origin.	602	504		18
602	Cut	0.36 (diameter) x 0.12m	NA	Circular in plan. Orientation: NA. Break of slope top: Sharp. Sides: Moderately sloping. Break of slope base: Sharp. Base: Concave. Filled by: (601).	NA	Cremation pit/ scoop. Part of small cemetery including [540], [542], [598], [602] and [604].	505	601		18
603	Fill	0.35 (diameter) x 0.19m	Black	Moderately compacted clay and charcoal. Fills: [604].	Moderate human bone. Occasional: Sub-angular flint pebbles.	Fill of cremation pit/ scoop [604].	604	504		25
604	Cut	0.35 (diameter) x 0.19m	NA	Circular in plan. Orientation: NA. Break of slope top: Sharp. Sides: Moderate. Break of slope base: Sharp. Base: Concave. Filled by: (603).	NA	Cut of shallow cremation pit or scoop. Part of a small cemetery of probable Bronze Age date.	505	603		25

605	Fill	1.06 x 0.84 x 0.16m	Light grey	Firmly compacted silty clay. Fills: [606].	Occasional sub-angular flint pebbles.	Fill of pit [606] water lain in origin. The fill of this feature may suggest it is natural in origin, possibly a solution or tree hollow.	606	504		35
606	Cut	1.06 x 0.84 x 0.16m	NA	Oval in plan. Orientated: E - W. Break of slope top: Moderate. Sides: Gently to moderately sloping. Break of slope base: Moderate. Base: Flat. Filled by: [606].	NA	Cut of shallow pit or tree bowl. Filled by water lain silts.	505	605		35
607	Fill	1.74 x 0.86 x 0.27m	Dark grey black	Moderately compacted silty clay.	Very frequent scorched and burnt flint and charcoal flecks.	Fill of pit [608]. The large quantity of burnt flint suggest the pit may be associated with industrial activity or possibly with nearby cremations.	608	610		5
608	Cut	1.74 x 0.86 x 0.27m	NA	Oval in plan. Orientation: ENE - WSW. Break of slope top: Moderate. Sides: Gradual slope. Break of slope base: Moderate. Base: Concave. Filled by: (607).	NA	Pit of unknown function, possible industrial function or related to cremation burials.	505	607		5

609	Fill	>0.70 x 0.50 x 0.19m	Light grey brown	Moderately compacted silty clay. Fills: [610]. Same as (579), (581).	Occasional sub-angular flint pebbles and cobbles, increasing to base of feature.	Single fill of field boundary [610] et al.	610		579, 583, 616	7
610	Cut	>0.70 x 0.50 x 0.19m	NA	Linear in plan. Orientated: ENE - WSW. Break of slope top: Moderate. Sides: Gentle. Break of slope base: Moderate. Base: Concave. Filled by [609]. Same as: [580], [584], [616]. Truncates [608].	NA	Part of field boundary.	607	609	580, 584, 617	7
611	Fill	0.84 (diameter) x 0.15m	Mid-red	Firmly compacted silty clay. Fills: [612].	Occasional inclusions of burnt/heated clay. and frequent sub-angular flint pebbles.	Fill of pit [612], and part of a formation process that is likely to be similar to that of (587). It therefore may have been formed through some sort of industrial process or relate to the cremation burials.	612	504		38
612	Cut	0.84 (diameter) x 0.15m	NA	Circular in plan. Orientated: NA. Break of slope top: Moderate. Sides: Gentle to moderate. Break of slope base: Moderate. Base: Concave. Filled by: (611).	NA	Pit of possible industrial function or related to cremation burials.	505	611		38

613	Fill	1.70 x >1.0 x 0.16m	Mid-grey brown	Firmly compacted silty clay. Fills [615].	Rare small pottery fragments. Occasional small to medium angular flint nodules.	Fill of Iron Age/ Romano-British/ medieval boundary or drainage ditch.	614		569, 589	31
614	Fill	1.45 x >1.0 x 0.12m	Mid-brown grey	Firmly compacted silty clay. Fills: [615]. Similar to (613).	No	Primary fill of Iron Age or Romano-British/ medieval ditch.	615	613		31
615	Cut	1.70 x >1.0 x 0.28m	NA	Linear in plan. Orientation E - W. Break of slope top: Moderate to sharp. Sides: Moderate to steep. Break of slope base: Moderate to sharp. Base: Concave.	NA	Slot into E - W ditch of Iron Age or Romano-British/ medieval origin.	505	614	570, 590	31
616	Fill	>10.0 x 0.6 x 0.23m	Light grey brown	Moderately compacted silty clay. Fills: [617]. Same as (579), (581), (609).	One piece of metal. Occasional sub-angular flint pebbles and cobbles, increasing to base of feature.	Fill of field boundary [617].	617		579, 583, 609	7
617	Cut	>10.0 x 0.6 x 0.23m		Linear in plan. Orientated: ENE - WSW. Break of slope top: Moderate. Sides: Gentle. Break of slope base: Moderate. Base: Concave. Filled by [616]. Same as: [580], [584], [619].	NA	Slot into field boundary.	618	616	580, 584, 610	7

618	Fill	>0.75 x 0.48 x 0.09m	Light grey brown	Firmly compacted silty clay. Fills: [619]. Cut by [617].	Occasional sub-angular flint pebbles and cobbles.	Fill of field boundary cut [619].	619	617		6
619	Cut	>0.75 x 0.48 x 0.09m	NA	Linear in plan. Orientation: N - S. Break of slope top: Moderate. Sides: Gently sloping. Break of slope base: Moderate. Base: Flat. Filled by: (618).	NA	Field boundary cut, appears to be part of same cut as [551].	505	618		6



global environmental solutions

AYLESBURY

7 Wormal Park, Menmarsh Road,
Worminghall, Aylesbury,
Buckinghamshire HP18 9PH
T: +44 (0)1844 337380

BELFAST

24 Ballynahinch Street, Hillsborough,
Co. Down, BT26 6AW Northern Ireland
T: +44 (0)28 9268 9036

BRADFORD-ON-AVON

Treenwood House, Rowden Lane,
Bradford-on-Avon, Wiltshire BA15 2AU
T: +44 (0)1225 309400

BRISTOL

Langford Lodge, 109 Pembroke Road,
Clifton, Bristol BS8 3EU
T: +44 (0)117 9064280

CAMBRIDGE

8 Stow Court, Stow-cum-Quy,
Cambridge CB25 9AS
T: + 44 (0)1223 813805

CARDIFF

Fulmar House, Beignon Close, Ocean
Way, Cardiff CF24 5HF
T: +44 (0)29 20491010

CHELMSFORD

Unit 77, Waterhouse Business Centre,
2 Cromar Way, Chelmsford, Essex
CM1 2QE
T: +44 (0)1245 392170

DUBLIN

7 Dundrum Business Park, Windy
Arbour, Dundrum, Dublin 14 Ireland
T: + 353 (0)1 2964667

EDINBURGH

No. 4 The Roundal, Roddinglaw
Business Park, Gogar, Edinburgh
EH12 9DB
T: +44 (0)131 3356830

EXETER

69 Polsloe Road, Exeter EX1 2NF
T: + 44 (0)1392 490152

FARNBOROUGH

The Pavilion, 2 Sherborne Road, South
Farnborough, Hampshire GU14 6JT
T: +44 (0)1252 515682

GLASGOW

4 Woodside Place, Charing Cross,
Glasgow G3 7QF
T: +44 (0)141 3535037

HUDDERSFIELD

Westleigh House, Wakefield Road,
Denby Dale, Huddersfield HD8 8QJ
T: +44 (0)1484 860521

LEEDS

Suite 1, Jason House, Kerry Hill,
Horsforth, Leeds LS18 4JR
T: +44 (0)113 2580650

MAIDSTONE

19 Hollingworth Court, Turkey Mill,
Maidstone, Kent ME14 5PP
T: +44 (0)1622 609242

NEWCASTLE UPON TYNE

Sailors Bethel, Horatio Street,
Newcastle-upon-Tyne NE1 2PE
T: +44 (0)191 2611966

NOTTINGHAM

Aspect House, Aspect Business Park,
Bennerley Road, Nottingham NG6 8WR
T: +44 (0)115 9647280

ST. ALBAN'S

White House Farm Barns, Gaddesden
Row, Hertfordshire HP2 6HG
T: +44 (0)1582 840471

SHEFFIELD

STEP Business Centre, Wortley Road,
Deepcar, Sheffield S36 2UH
T: +44 (0)114 2903628

SHREWSBURY

Mytton Mill, Forton Heath, Montford
Bridge, Shrewsbury SY4 1HA
T: +44 (0)1743 850170

STAFFORD

8 Parker Court, Staffordshire Technology
Park, Beaconside, Stafford ST18 0WP
T: +44 (0)1785 253331

WARRINGTON

Suite 9 Beech House, Padgate Business
Park, Green Lane, Warrington WA1 4JN
T: +44 (0)1925 827218

WORCESTER

Suite 5, Brindley Court, Gresley Road,
Shire Business Park, Worcester
WR4 9FD
T: +44 (0)1905 751310



Energy



Waste
Management



Planning &
Development



Industry



Mining
& Minerals



Infrastructure