# **COLESHALL FARM, IWADE, KENT**

Report of an Archaeological Excavation

Prepared for: Frontier Estates Ltd

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### APPENDICES

Appendix 1: Specialist Reports Appendix 2: Written Scheme of Investigation



# **1.0** Introduction

### **1.1** This report

SLR was commissioned by Frontier Estates Ltd to conduct an archaeological excavation of a parcel of land off Sheppey Way at Coleshall Farm, Iwade, Kent. This document provides a Full Archive Report of the findings of the excavation and concludes that no further analysis is required.

The site is centred on NGR: 589988, 167061 / TQ 89988 67061 and the excavated areas occupied approximately 0.4 ha.

### **1.2** Planning Background

Swale Borough Council granted Outline planning permission (Application No. 16/505299/OUT) on 7th December 2017 for the erection of a 60-bed care home with amenity space, car and cycle parking, associated development, landscaping and access.

The location and extent of the permitted new development are shown in Figures 1, 2 and attached A3 Drawings.

Condition 13 imposed on the planning permission is worded as follows:

No development shall take place until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written specification and timetable which has been submitted to and approved by the Local Planning Authority.

*Reason:* To ensure that features of archaeological interest are properly examined and recorded and to ensure that such matters are dealt with before development commences.

Frontier Estates Ltd (the Client) appointed SLR Consulting Limited to design and implement the programme of archaeological work referred to in the condition and accompany the reserved matters planning application. The fieldwork and reporting comply with the CIFA *Standard and Guidance for Archaeological Excavation* December 2014.

The programme of work is required by NPPF<sup>1</sup> Section 16 paragraph 199 and Footnote 64:

"Local planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible."

And appended Footnote 64:

"Copies of evidence should be deposited with the relevant historic environment record, and any archives with a local museum or other public depository."

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<sup>&</sup>lt;sup>1</sup> Ministry of Housing, Communities and Local Government February 2019: National Planning Policy Framework

### **1.3** Non-Technical Summary

The excavation was a 'strip, map and sample' procedure completed in accordance with the project's Written Scheme of Investigation<sup>2</sup> ('WSI'), which required in total the following stages of work:

- Stage 1: soil strip and initial survey;
- Stage 2: archaeological investigation;
- Stage 3: initial post-excavation tasks;
- Stage 4: post-excavation assessment report; and
- Stage 5: analysis and report / publication.

This document forms Stage 5: the Full Archive Report, which provides detailed reporting of the features identified and the finds and samples recovered. The specialists recommended no further analytical work on finds or palaeoenvironmental samples. The archive will be offered to the destination museum and a note to a published journal.

The features discovered comprised part of a twin-ditched enclosure, with a further boundary ditch to the west and thin scatters of small pits around each. There were no clear patterns indicating structures. The enclosure and boundary ditch and a number of the discrete features were dated to the Iron Age. Around thirty features were discovered, indicating a low level of activity on the site. Though it is limited in area and findings, the excavation adds to the body of evidence for Iron Age settlement around the Swale, and to local pottery forms.

The excavation provided:

- limited evidence of Neolithic activity on the site, through possibly residual flints identified in feature fills;
- evidence of Iron Age low-level agricultural occupation on site through a field boundary ditch and enclosures;
- no definitive evidence of Romano-British or Anglo-Saxon occupation on the site;
- residual evidence of Medieval occupation through a Medieval sherd of pottery; and
- evidence of post-Medieval occupation through animal bone depositions.

Further analysis has focussed on:

- establishing the nature of Iron Age activity on the site through environmental sample analysis and study of pottery and bone; and
- identifying any evidence of Bronze age and Mesolithic settlement suggested in prior work; and
- identifying any other phases of occupation, possibly through scientific dating.

Remaining steps to complete the project are as follows:

- deposit the archive including the approved version of this report with a local repository if possible;
- upload the approved version of this Full Archive Report in the OASIS on-line archaeological database; and

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<sup>&</sup>lt;sup>2</sup> SLR Consulting October 2019: Coleshall Farm, Iwade, Kent: Written Scheme of Investigation for Archaeological Mitigation: Strip, Map and Sample (SLR reference 402.06594.00006)

• offer a note on the findings based on the approved version of this report to the county journal *Archaeologia Cantiana*.

No additional analysis or reporting is considered necessary.



# 2.0 Site location and background

### 2.1 Site Location

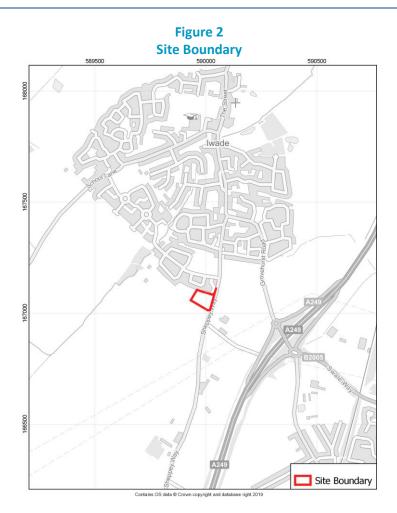
The site is situated to the south of a recent development located off Sheppey Way with proposed commercial units to the west, housing to the north, and open countryside to the east and south. The larger development site which has so far been developed by Hillreed is located to the south and west of lwade. This is a 327-home development which will have three large public open space areas across the site. The excavation area is the care home development.

The development has two access roads from Sheppey Way: one for the housing development and one for the commercial units. The care home site is accessed from the latter. The site, at approximately 17m above Ordnance Datum (AOD), lies on Head Gravels and London Clay (British Geological Survey 1:50,000 series, England and Wales Sheet 272, Chatham).



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### 2.2 Archaeological and Historical Background

Archaeological work carried out to date as part of the wider development of Coleshall Farm has identified significant archaeological remains dating from as early as the Neolithic period (c.5000 years old) through to the Medieval era (c.1500-500 years ago). Coleshall Farm itself is of Post-Medieval origin, being first referenced in 18<sup>th</sup> Century maps.

The site was subject to a DBA in 2008<sup>3</sup>, which confirmed it as having significant archaeological potential. An evaluation<sup>4</sup> and excavation<sup>5</sup> were conducted by SWAT in 2011 and2012. The evaluation covered the site and the surrounding field, as well as a larger area to the north and west now occupied by housing. The 2012 excavation revealed an archaeologically dense landscape with remains and features dating from the Neolithic to the Medieval period. Field 1 consisted of Areas 2b, 4 and 5 while Field 2 to the west contained Areas 3, 2a and 1. The area of the mitigation works in 2012 was spread over roughly 700m, with Area 1 in the northwest covering a strip similar in size to the area excavated by SLR. Areas 2a and 2b were formed by a narrow excavation connecting Area 1 to Sheppey Way 100m north of the SLR excavation, which was listed by SWAT as potential Area 5.

<sup>4</sup> Swat Archaeology 2013 Archaeological Excavations on Land Adjacent to Coleshall Farm, Iwade, Kent (Areas 1 & 2) 2011–2012. <u>http://www.swatarchaeology.co.uk/pdf/2013/21.%20Iwade%20EX%20final%20first%20phase%20report.pdf</u>

<sup>5</sup> Swat Archaeology 2012 Archaeological Evaluations on Land Adjacent to Coleshall Farm/ Sheppey Way/School Lane, Iwade, Kent. <u>http://www.swatarchaeology.co.uk/pdf/2011/24.%20iwade.pdf</u>



<sup>&</sup>lt;sup>3</sup> Archaeological Desk-Based Assessment (CgMs Consulting 2008)

### 2.2.1 SWAT Key Findings

#### Area 1

The most significant feature group in this area was an Early Medieval enclosure with tangential ditches. It was considered likely that these represented livestock pens, with a large discrete feature interpreted as a wallowing pit. Most other features were undated, though a Neolithic gully and ditch as well as an isolated Roman posthole were found, as well as a likely Romano-British cremation.

#### Area 2a

The features in the northwestern part of this Area consisted mostly of linear ditches tangentially related on NE/SW and NW/SE axes, with the exception of a large curvilinear ditch. Another NW/SE ditch cut through an alluvial layer. The dates of the ditches varied greatly, dating from the mid-late Iron age to the Early Medieval period. As such there is evidence of consistent occupation across the area with field systems remaining in use for a millennium.

In the central part of the Area, a segment of a ditch dating to the Late Iron Age was identified that probably formed part of an enclosure. Various undated pits as well as a Roman ditch were also present.

To the southeast of 2a, a deposit of alluvium was cut by a large Middle Iron Age ditch and a later curvilinear Early Medieval ditch. Both were noted as following natural contours and likely enclosing settlements on higher ground. Undated features included a Romano-British gully and two isolated postholes.

#### Area 2b

2b is the area closest to the excavations detailed in this report, and so spatially has the most relevance. It was around 300m long and 24m wide.

An Early Medieval linear feature was the largest ditch, though others were identified dating from the Neolithic and other Early Medieval field systems were present. Some of the Early Medieval ditches identified were arranged in V-shapes, and thus likely for the purpose of funnelling livestock. An Iron Age track or hollow way was identified in the central part of the area, oriented NE/SW which possibly formed a routeway to the Swale.

### 2.3 Archaeological Potential

Trenches 1, 2, 3, 4, 14, 15 and 24 of the 2011 evaluation were located within or adjacent to the proposed development site. These trenches revealed evidence for human activity with trenches 14 and 15 yielding evidence for later prehistoric activity, the rest undated thus far.

The wider body of evidence, in particular the features in Area 2b of SWAT's mitigation excavation, meant that the land west of Sheppey Way including the site had a very high likelihood of containing further archaeological remains.



# 3.0 Archaeological Strip, Map and Sample

The fieldwork followed the methodology set out in the WSI, which is contained in Appendix 2.

### **3.1** Aims and Scope

### 3.1.1 Aims

The aims of the work were to:

- investigate and record archaeological remains within the development site;
- assess significance and analyse the results of the investigation, interpret, report and disseminate the results at a standard proportional to their heritage significance; and
- address as appropriate research questions from SERF (South East Research Framework).

#### **Research Questions**

The following aims and questions of the SERF<sup>6</sup> have been considered to be of particular relevance to this excavation:

#### Bronze Age and Iron Age

- 'There is enormous potential for research into past land use by exploiting the resources of the modern coastal zone of the Thames Estuary and the estuaries of the smaller rivers, such as the Medway, Stour, Rother, Adur and Arun, which may all contain surviving evidence for previous episodes of human activity';
- 'We also need to pay particular attention to the diversity of evidence for settlement activity, especially in the recognition of small-scale and low-density activity, and to document the full range of settlement forms in the various periods.';
- 'There is a similar need for the recovery and analysis of charred plant remains to document the history of crop husbandry, including tillage methods and intensive versus extensive regimes.';

#### Roman Period

- '5: What building types are used on rural settlements? How common are roundhouses and how late do they remain in use? ';
- '8: Field systems, and their relationship to preceding and succeeding systems, need to be better understood. Areas of widespread development present an opportunity to collate evidence of the scale of systems, both via re-examination of excavated evidence and through future targeted intervention. A consideration of areas that were not utilised for arable production should also be approached, with attention given to areas of pasture and of woodland that could be identified through targeted environmental analyses. There is a need to examine the evidence of crop assemblages collectively, both in terms of types of crop grown and practices of processing and storage. Regional patterning may exist within this data. Likely circumstances for preservation need to be identified so as to permit targeted investigation to be included in specifications for developer funded excavations. Environmental evidence in general needs to feature more prominently in such work, and to be subjected to synthesis.';



<sup>&</sup>lt;sup>6</sup> https://www.kent.gov.uk/leisure-and-community/history-and-heritage/south-east-research-framework

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#### Anglo-Saxon

• 'Environmental archaeology holds the potential to inform on intra- and inter-site dynamics, through examination of use of space, waste disposal, trade and supply links (e.g. Sandtun, Lyminge and Bishopstone).'

#### 3.1.2 Scope

The scope of the work was:

- establish a site plan through GPS survey and related detailed manual planning as appropriate;
- sample investigation and recording of archaeological features and deposits;
- record and retain artefactual evidence as appropriate to their heritage significance;
- undertake assessment of the field results, identify samples that would benefit from analysis and scientific dating;
- establish the heritage significance and potential value for further analysis of all datasets; and
- to report and interpret the results of the archaeological work and disseminate knowledge as appropriate to their heritage significance

### 3.2 Monitoring and Key Personnel

Initial consultation SLR and Kent County Council's Principal Archaeological Officer (the 'Planning Archaeologist') in 2017, identified the general scope of the excavation to be adopted. Planning archaeologist was kept informed of progress and conducted site visits to examine and sign off areas.

Kent County Council's Principal Archaeological Officer is:

Simon Mason Principal Archaeological Officer Heritage Conservation Environment, Planning & Enforcement Kent County Council, Invicta House, County Hall Maidstone Kent ME14 1XX Telephone 03000 413415 Email: <u>simon.mason@kent.gov.uk</u>

The recipient Museum is:

Maidstone Museum and Bentlif Art Gallery, St Faith's St, Maidstone, Kent ME14 1LH, England. This museum has been contacted regarding deposition, but no reply has been received at the current time (8<sup>th</sup> July 2020).



### 3.2.1 Fieldwork and Reporting

The archaeological consultant was:

Guy Kendall Associate Archaeologist SLR Consulting Ltd 69 Polsloe Road, Exeter, EX1 2NF Tel: 01392 490152

Email: gkendall@slrconsulting.com

Fieldwork was conducted by staff from SLR Consulting and Formation Archaeology:

- Richard Woolley, Formation Archaeology (Site Supervisor)
- Harry Towers, SLR (Project Archaeologist, Site Surveyor)
- Verity Landrock (SLR, Site Assistant)

Reporting was conducted by:

- Richard Woolley- detailed feature descriptions;
- Harry Towers GIS drawings and other report text;
- Caroline Malim-digitally illustrated field drawings;
- Specialist analyses:
  - Flintwork: George Nash, SLR;
  - Animal remains Kris Poole (TPA<sup>7</sup>)
  - Pottery: Sarah Percival (independent, through TPA)
  - Palaeoenvironmental: Stacey Adams (TPA); and
- Guy Kendall (Associate) and Gavin Kinsley (Principal), SLR Consulting-QA editor.

### **3.3 Quality Assurance**

All archaeologists deployed to work on the project were suitably qualified to complete the tasks required. All archaeological work adhered to the Chartered Institute for Archaeologists' (CIfA) Standard and Guidance for *Archaeological Excavation* (2014) (for the SMS exercise). SLR is a CIfA Registered Organisation which means that best practice was followed.

### 3.4 Timetable

#### Stages 1-3 Fieldwork

Topsoil stripping and excavation were undertaken from the 18th November 2019 to the 11th December 2019.

#### Stage 4 Analysis and Report/Publication

Submission for publication of a synthesis in a local journal, pending approval of this report.



<sup>&</sup>lt;sup>7</sup> Trent & Peak Archaeology, Nottingham

### Stage 5: Dissemination and Archive Deposition

Pending approval of this report and museum accepting archive.



# 4.0 Detailed Methodology

### 4.1 **Topsoil strip**

A mechanical excavator with toothless ditching bucket was used to carefully remove topsoil across the site to a level indicated by the monitoring archaeologist on site, the top of the natural brickearth. Machine excavation towards the base of the topsoil took place in thin spits to ensure that deposits and features were not over-excavated and that any artefacts/biological evidence in the soil were recorded.

Weather conditions meant that stripping took longer than anticipated, and the provision of wheeled dumpers meant that some damage to the natural ground level did occur as a result of wheel rutting through the overburden. No archaeological features were damaged.

### 4.2 Excavation of features

A number of man-made features were identified. These were hand-cleaned and recorded, and then partor fully-excavated and further recorded in accordance with the WSI. A water-deposited layer in the north of the site (1077) was part-excavated by machine under archaeological control.

Overall environmental sampling was in accordance with Historic England Guidance<sup>8</sup>. The specific strategy was determined on site via in consultation with the Planning Archaeologist: samples were taken from the main linear features and a selection of the discrete features (with each fill of multiple filled features being sampled) designed to address the range of feature types and any spatial variation across the site. 40l samples were taken where fills were substantial enough, otherwise entire fills were recovered up to a limit of 40l.

The environmental samples all came from dry deposits and were processed by flotation following completion of the archaeological fieldwork and the residues sorted to retrieve any ecofacts, small finds and charcoal that has not floated.

### 4.3 Fieldwork Recording

Cut features were recorded in plan and minimum of one section cut across each one.

As appropriate feature outlines, artefacts and samples were recorded in the field using digital proformas and survey grade GPS. Spot heights, feature outlines and baselines for hand drawing were recorded in GPS<sup>9</sup>, the two records being combined and continually updated in GIS. This permitted regular cross-checking of records and the development of site plans, the development of the excavation and sampling strategy and facilitating cross-checking. Daily downloads to the SLR office server provided data security.

The hand-drawn record comprised plans of the site at a suitable scale, typically plans at scale of 1:50 or 1:20 for detail of features, and sections at scale 1:20 (or at 1:10 dependent on their size or complexity).

The site was surveyed using a Leica GS08 GPS Rover concurrently with the excavation. An overall site plan of remains at the site was maintained in daily or bi-daily updates through exporting survey and catalogue data to office-based staff.

An overall plan of the stripped site was prepared and provided to the planning archaeologist within one week of the completion of machine stripping.



<sup>&</sup>lt;sup>8</sup> Historic England 2002: Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to postexcavation

 $<sup>^{9}</sup>$  a Leica GS08 GPS Rover providing data accurate to at least +- 20mm

All artefacts not obviously modern were collected during excavation and the presence of any modern material was noted in the written record. Artefacts/ecofacts and samples were collected and recorded stratigraphically in accordance with Chartered Institute for Archaeologists (2014) *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*.

The revealed features were excavated and recorded in accordance with the agreed excavation sampling strategy. The sampling strategy continued to be developed throughout the investigation period in consultation with the planning archaeologist in the light of the results of the field work.

The KCC *Manual of Specifications Part B: Strip, Map and Sample Requirements* set out the scope of field investigation<sup>10</sup>:

- 'The investigation of the intersections of features of archaeological date to obtain a phasing of the site;
- A robust spatial framework of excavation to provide an understanding of the spatial distribution of past activities across the investigation area including any 'special' deposits and any patterning in artefact distribution. Such a framework will take into account the inter-relationship of major features.
- Structural remains and other areas of significant and specific activity (domestic, industrial, religious, hearths, 'special'/ patterned deposits etc) will be fully excavated and recorded.
- Where appropriate, for instance where the stratigraphy is complex, single context planning will be used.
- Non-structural linear cut features will be sample excavated and recorded with a sufficient number of sections to establish the feature's character, date and morphology and to provide information on activities taking place in close proximity to the feature. All terminal ends will be investigated. Sections will normally be at least 1m wide.
- Non-structural pits will be half-sectioned unless the character, number or size of the pits makes this unpractical. For instance, if a pit contains several intersections and re-cuts, it would not always be appropriate to half-section it. In this situation, the Archaeological Contractor will consider 'quadranting' or single context planning. Equally if 'special' deposits are expected pits may need to be excavated in plan rather than being half-sectioned. The strategy will need to be agreed with the (KCCPA).
- Non-structural post and stake-holes will be half-sectioned sufficiently to clarify character, relationships and chronology.
- All burial deposits and associated remains will be fully excavated and recorded in accordance with an agreed methodology.'

Following the excavation of the features the planning archaeologist confirmed that the fieldwork stage had been satisfactorily completed.

All finds were collected and recorded in accordance with local authority, ClfA and Historic England guidance and best practice was followed at all times.



<sup>&</sup>lt;sup>10</sup> KENT COUNTY COUNCIL MANUAL OF SPECIFICATIONS PART B MITIGATION – STRIP, MAP AND SAMPLE REQUIREMENTS

# 5.0 Results

### 5.1 **Overview**

Excavated features consisted of four linear features and a number of isolated discrete features. The linear features comprised a double ditched enclosure with a small gully oriented north/south terminating in the inner enclosure ditch, and a larger ditch to the west oriented southwest/northeast. The discrete features were pits dispersed across the whole site, with a slight suggestion of three groups: west, east and south.

### 5.2 Enclosure

In the south corner of site there were two concentric L-shaped ditches (outer ditch D1085, and D1086). These were interpreted as enclosure ditches. The outer D1085 was cut into by a small pit [1017] which was in turn truncated by the inner ditch D1086.

Both ditches were generally filled with compacted dark brownish-grey or greyish-brown silty clay with moderate sub-angular pebbles (20-50mm) and moderate sub-rounded charcoal flecks and fragments up to 10mm (Fill 1008, 1020, 1022 & 1030). The terminus of D1086 [Cut 1053] was filled with a weakly compacted mid yellowish-brown sandy silt (Fill 1054), though it was also less distinct in terms of cut definition which may have meant the fill was disturbed.

### 5.2.1 Outer Enclosure Ditch D1085

The outer of the two enclosure ditches (D1085) in the south corner of the site extended 19.5m westnorth-west from the southeast corner of site before turning southwest and continuing a further 7m before exiting the limit of the excavation area. Four sample excavation slots were cut into the ditch [1006, 1016, 1027 & 1048], showing it to be generally U-shaped with an initially steep slope but shallow base.

A number of finds were recovered, including oyster shell, pot (Late Iron Age and Romano-British transition), and bone. While it is the earlier of the two enclosure ditches, the features have contemporary pottery dates within a fairly narrow date range of c.75BC to c.40AD, which indicates they may have been contemporary and filled in via natural processes.



#### Figure 3 East Facing Section [1015], [1017], [1019]



### 5.2.2 Inner Enclosure Ditch D1086

The inner enclosure ditch D1086 followed the same alignment of D1085 but terminated inside the southwest edge of site. Its total exposed length was 24m.

Five sample excavation slots were cut into this ditch [1007, 1019, 1021, 1029 & 1053]. It was for the most part larger and deeper than the outer ditch, with a wide, flattish base and steeply inclined sides, though this was not the case across its whole length.

A number of finds were recovered from this ditch such as bone, a flint scraper and cortex, and pot dating to the Late Iron Age/Romano-British transition.

This enclosure ditch was cut by the north terminus of linear feature D1087 (see Figure 4).



#### Figure 4 East facing Section [1021], [1023]



### 5.2.3 Linear Feature D1087

To the south of D1086, a short linear feature was observed [D1087] (see fig. 5). This feature was orientated north-south and was approximately 2.3m long. The two termini were excavated and were around 0.4m wide and 0.2m deep. The north terminus was U-shaped and filled with a compacted mid blueish-grey clay (Fill (1024) within [1023]- Photo 3234). The southern terminus was V-shaped and filled with a firm light greyish-brown sandy silt ((1032) in [1031]). The northern terminus of this feature cut into D1086. Flint was recovered from the southern terminus.

It was postulated that this feature was natural due to its uncharacteristic nature, but its clear stratigraphic relationship with [1021] makes this impossible. The enclosure with a tangentially related linear feature has many similarities with the features recorded in SWAT's excavation in 2012, particularly those in Area 1.

Its small size makes it possible that it was structural, possibly linked to pit 1033 to the south.

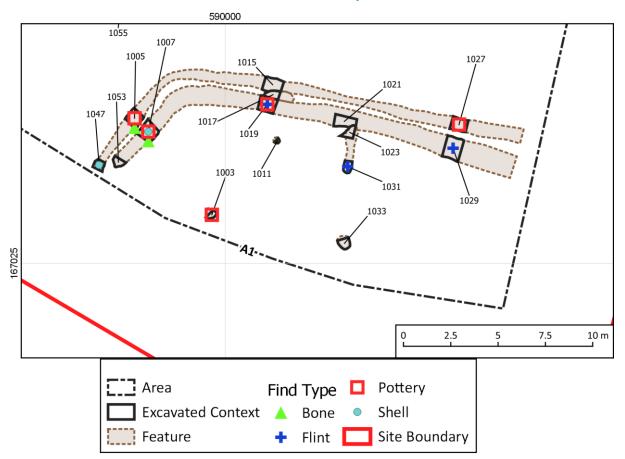


### Figure 5 Plan of [1087]





#### Figure 6 Enclosure Ditches and Adjacent Pits



### 5.3 Western Ditch D1084

Ditch 1084 lay in the western side of the site. It was orientated approximately east to west with a terminus at its eastern end [1066]. The ditch was increasingly shallow towards the northeast, and the possible terminus was difficult to identify as a result. This may be a result of greater truncation in the northwestern part of site, where features were generally shallower. The feature extended over 35m, passing beyond the west limit of the excavation area.

Four further sample excavation slots were cut into the length this feature [1049, 1057, 1059 & 1063]. The profile of the feature was U-shaped in the west but was more irregular in the east.

This feature could have been a field or enclosure boundary. A number of finds were recovered from this ditch- bone, pot (one Late iron Age sherd and a residual Post-medieval sherd near the surface of (1058) and flint, including a possible scraper.

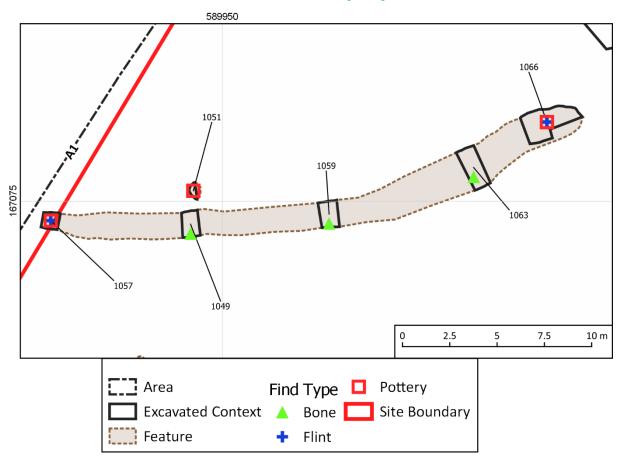


### Figure 7 Southwest facing Section [1049]





#### Figure 8 Finds Distribution [1084]



### 5.4 Pits

A number of the pits were small enough to have been post-holes but in the absence of clear post-pipes they are all referred to as pits in this description.

A number of other features were observed across the site (see Drawing 01). These consisted of 20 widely dispersed pits/postholes [1003, 1009, 1011, 1013, 1033, 1035, 1037, 1041, 1043, 1045, 1051, 1061, 1068, 1070, 1074, 1079, 1081 & 1082 & Pit group 1088 made up of 1025 & 1055], 3 findspots (1046, 1065 & 1072) and a spread (1073/1077). They seemed to lie within two slightly separate groups, a western grouping and an eastern group mainly focussed around the southeast, though not clearly associated with the enclosure. Two smaller scatters were present in the northwest and northeast. No patterns could be discerned within these features, so they are described below by area of site. Dating evidence for the discrete features follows a similar pattern to the ditches, with sparse pottery recovered from some features with the exception of [1025] and [1055], which together contained over three quarters of the pottery assemblage.



### 5.4.1 Western Group

Pit [1051] lay close to the northern edge of D1084; it was shallow, oval in plan, with a flattish/slightly concave base Pot fragments were recovered from this fill. Although shallow the charcoal, and burnt clay observed in this pit suggest that it may have been ultimately used for waste disposal.

Two small pits lay southeast of Ditch 1084: [1045] and [1013].

Pits [1045] and [1013] lay southeast of D1084. Pit [1045] was oval, orientated north-south with a U-shaped profile It is uncertain whether this feature was a waste pit or posthole.

Larger oval pit [1013] was orientated northeast-southwest with irregular sides and an uneven base. Despite the small amount of burnt clay within the fill of this feature it is uncertain whether it was an archaeological or natural feature.

The fills of these features were generally mid brown silty clay, with moderate small charcoal inclusions and occasional burnt clay.

Three possible postholes/small pits were observed in the northwest corner of site [Cut 1074, 1079 & 1081]. A findspot of pot was observed (Deposit 1065); as was a findspot of bone (Deposit 1072). A large spread was also recorded (Spread 1073/1077).

[Cut 1081], approximately 8m from the northern edge of site, was oval in shape and orientated northwest-southeast with uneven sides and a flattish base, and filled by (1080).

Approximately 13.5m east southeast from pit [1081] another small pit was observed [Cut 1079]. This feature was oval in shape, orientated north-south with steep and a concave base.

16.5m further east another small pit was observed [Cut 1074]. This pit was oval in shape, orientated northeast-southwest with a U-shaped cut.

The fills of these features were mid-dark brownish grey silty clay with charcoal content varying from sparse to moderate.



#### Figure 9 East facing Section [1074}





A small number of pot sherds were recovered from a spot close to the northwest limit of excavation (Deposit 1065). No feature associated with this pot was observed and it is interpreted as a loose find within the topsoil.

### 5.4.2 Southern Group

Within the area defined by the enclosure ditches lay two pits [1003 &1011], and a further possible pit [1033]. However, there was no dating evidence from these pits, and it is not clear if they were contemporary with either the outer or inner enclosure ditch. Fills were generally silty with varying quantities of clay or sand, and hues ranging from greyish to reddish brown, and mostly firmly compacted though some contexts were looser. The function of these pits remains unclear, though sampled pits did contain charred plant remains.

Small oval pit [1011] was located approximately 1.5m south of the long arm of D1086.

Larger pit [1003] had an irregular shape with irregular sides and a flattish base. The fill contained two sherds of pottery dating to the Late Iron Age.

Circular pit [1033] lay near the southern edge of site. It was uncertain if this was a natural feature or not. Originally it had been thought that it was the terminus of D1087, but targetted cleaning revealed this to not be the case.

Small pit [1017] (see fig. 3) cut D1085 and was cut by the inner enclosure ditch, D1086.



Figure 10 Southeast Facing Section Pit [1003]

North of the enclosure ditches, two intercutting pits [Pit Group 1088] and five pits/postholes [Cut 1009, 1035, 1037, 1041 & 1043] were observed to the north and west of Ditch 1. A findspot of bone and pot was also observed (Deposit 1046).

Pit Group [1088] consisted of two intercutting pits [Cut 1025 & 1055]. These pits were truncated by a French Drain which made it impossible to define any sequence. The eastern pit was the larger [1025]: circular in shape with steep sides and a concave base. 51 sherds totalling 348g of pottery were recovered dating to the Late Iron Age, over half the total pottery assemblage from the entire site.



#### Figure 11 Northeast facing Section [1055]



The smaller western pit was oval in shape and orientated east-west (Photo 3263). Bone and 64g of pottery were recovered.

The large amount of pot and charcoal recovered from these pits as well as bone suggest that both were utilised as waste pits.

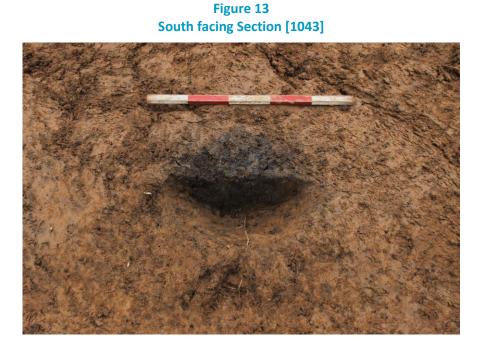
Approximately 7m northeast of Pit Group [1088] was a large pit [Cut 1037]. There were two fills in this feature, the main one comprising a lower fill of compacted mid brownish-grey silty clay (Fill 1038). This fill was on the northeast side of the pit and appears to have been dumped. Possible worked flint, two Iron Age pot sherds and a horn core were recovered. The upper fill in the southwest was firm dark brownish red clay with burnt clay fragments (Fill 1039). Even though no finds other than burnt clay were present, it could also have been a dump of waste material.





Figure 12 Southeast facing Section [1037]

A small pit was located just northwest of [1037], pit [Cut 1041]. No finds were recovered from this pit and its function remains uncertain. Approximately 8m west of [1037] was another small pit [Cut 1043], which was circular in shape with finds of flint recovered from its fill.



Roughly 5m west of the southeast edge of site and 8m north of enclosure ditch [1086] lay a shallow oval pit [Cut 1035]. Limited pottery was recovered.

Approximately 20m northwest of the observed southwest extent of enclosure Ditch 1085 and close to the edge of site was a large pit [Cut 1009]. Oyster shell, flint, pot and bone were recovered from this pit.

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20m northwest of the bend in the enclosure ditches was a deposit of animal bone (Deposit 1046). The bone was spread over an area of approximately 0.6 x 0.5m. Pot was also recovered from the area around the bone. No feature could be found relating to this bone and this suggests this is a more recent burial within the topsoil.

#### 5.4.3 Eastern Group

A relatively large pit was recorded in the northeast corner of site [Pit 1082]. Three small pits were also observed [Cut 1062, 1068 & 1070] (see Drawing 01). Fills were generally silty clay of greyish or slightly yellowish-brown hue with inclusions of charcoal.

Pit [1082] was previously recorded and excavated during the evaluation by SWAT Archaeology (SWAT 2012), and so was cleaned and planned but not excavated further.

Some pot was recovered from the surface of the fill.

Further features were observed in Trench 15 during the evaluation by SWAT Archaeology (SWAT 2012). These features were cleaned and the area around this evaluation trench was machined to a level below that of the observed archaeology from this excavation. No further features were observed, and these pits/postholes only appeared to be within the evaluation trench (Photo 3303, 3306-7).

A small circular cut was observed approximately 1m north of Pit 1082 [Cut 1068].



#### Figure 14 West facing Section [1068]

Another small feature lay 2m south of Pit [1082] (Cut 1070). Orientated north-south this cut had an uneven profile with shallow sides and an uneven slightly concave base. From its fill a possible flint scraper was recovered. It is uncertain if this feature was a small pit or posthole.

A final small circular feature was observed approximately 11.5m south southeast of Pit 1082 [Cut 1061].



### 5.4.4 Clay spread

Towards the northwest end of the northern edge of the site was a large spread of compacted light greyishbrown clay with sparse sub-angular stones and roots and a small amount of bone and charcoal (Deposit 1077). This spread covered an area of 15x15m and continued beyond the northeast edge of site. Trench 03 was excavated along the northeast edge of site to investigate this deposit, which was up to 0.4m thick, measured from the excavated surface. Bone was collected from this spread (Find 37). A small slot was excavated in the base of Trench 03 (1073) to investigate the deposit but the edges proved very difficult to identify, but the deposit was 450mm deep as excavated (Photo 3287). This deposit was part of spread 1077, and thought to be water deposited material with a deeper linear part orientated approximately north-south below the upper spread, possibly indicating a small watercourse and associated flooding. The deeper part of this deposit is believed to relate to a possible ditch identified in trench 04 of the evaluation carried out by SWAT. No continuation of this feature was observed during the SLR excavation.

Trench 02 was excavated in the south part of the spread to investigate a possible resumption of D1084, but none was found. A slot was dug across a slight colour change in the clay deposit, but the recorded context within the slot ((1073), a compacted light greyish-brown clay with moderate roots and rare sub-angular pebbles up to 40mm) was determined to be a slight change within (1077), possibly representing a deeper channel.



Figure 15 South facing Section (1073)

Another possible ditch was observed in Trench 24 of the evaluation. No indication of this feature was found during this excavation.



## 5.5 Table of Features

Area	Category	Description	Contex t	Above	Within	Notes
1	Cut	Plan-shape: ovoid Section-shape: Irregular	1003	1002	-	contains one fill, (1004), and two small sherds of pottery.
1	Fill	Clarity top: gradual Clarity bottom: gradual Compaction: loose Lightness: mid Colour1: brownish- Colour2: black Consistency: sandy silt Inclusions: -	1004	-	1003	contains two smallsherds of pottery. possibly iron age?
1	Cut	Plan-shape: Linear Section-shape: U	1005	1002	-	Gully aligned north/south, west of larger ditch. Probable IA 0.75 x 0.78m. 0.38m deep
1	Fill	Clarity top: gradual Clarity bottom: gradual Compaction: compacted Lightness: dark Colour1: greyish- Colour2: brown Consistency: silty clay Inclusions: frequent sub-angular charcoal 2 10	1006	1005	1005	Fill of 1005, finds of bone, fired clay and prob IA pottery sample 5
1	Cut	Plan-shape: Linear Section-shape: U	1007	1002		Cut of curvilinear ditch- prob IA date 0.82 x 0.92m. 0.34m deep
1	Fill	Clarity top: gradual Clarity bottom: gradual Compaction: compacted Lightness: dark Colour1: greyish- Colour2: brown Consistency: silty clay Inclusions: moderate sub-rounded charcoal 1 10	1008	1007	1007	
1	Cut	Plan-shape: oval Section-shape: Irregular	1009	1002	-	1 fill-(1010) possibly a tree throw 1.44 x 1.24m 0.38m deep

#### Table 5-1 Features



Area	Category	Description	Contex	Above	Within	Notes
1	Fill	Clarity top: diffuse Clarity bottom: diffuse Compaction: compacted Lightness: dark Colour1: greyish- Colour2: brown Consistency: silty clay Inclusions: -	t 1010	1009	1009	possible tree throw. contains some burnt flint, animal bone and a tiny sherd of reddish pot sample 4
1	Cut	Plan-shape: Circular Section-shape: U	1011	1002	-	very shallow possible posthole. remains of burntn clay on top suggest itb is not just root action. 0.28 x 0.39m . 0.6m deep
1	Fill	Clarity top: - Clarity bottom: - Compaction: - Lightness: - Colour1: - Colour2: - Consistency: - Inclusions: -	1012	1011	1011	contains evidence of burnt clay towards the surface.
1	Cut	Plan-shape: Circular Section-shape: U	1013	1002	-	one fill- 1014 0.54x 1.20m. 0.13m deep
1	Fill	Clarity top: diffuse Clarity bottom: gradual Compaction: firm Lightness: mid Colour1: greyish- Colour2: brown Consistency: sandy silt Inclusions: -	1014	1013	1013	singular fill of 1013. contains small amounts of burnt clay.
1	Layer	Clarity top: - Clarity bottom: - Compaction: - Lightness: - Colour1: - Colour2: - Consistency: - Inclusions: -	1000			



Area	Category	Description	Contex t	Above	Within	Notes
1	Layer	Clarity top: clear Clarity bottom: - Compaction: firm Lightness: mid Colour1: reddish- Colour2: brown Consistency: clay Inclusions: - moderate sub-angular pebbles 0 70	1002			natural brickearth
1	Cut	Plan-shape: Linear Section-shape: U	1015	1002	-	Shallow ditch of prob. IA date no finds from this context 0.67 x 0.92m 0.29m deep
1	Fill	Clarity top: diffuse Clarity bottom: gradual Compaction: compacted Lightness: dark Colour1: brownish- Colour2: grey Consistency: silty clay Inclusions: moderate sub-angular charcoal 0 0	1016	1015	1015	fill of 1015
1	Cut	Plan-shape: Circular Section-shape: Irregular	1017	3016		shallow small pit between twin ditches 0.38 x 0.80m. 0.09m deep deep
1	Fill	Clarity top: diffuse Clarity bottom: gradual Compaction: compacted Lightness: dark Colour1: greyish- Colour2: brown Consistency: silty clay Inclusions: -	1018	1017	1017	fill of 1017, no finds
1	Cut	Plan-shape: Linear Section-shape: U	1019	1018		inner ditch, cuts 1018 0.91 x 0.80m. 0.31m deep dw- 20; 22
1	Fill	Clarity top: removed Clarity bottom: gradual Compaction: compacted Lightness: dark Colour1: greyish- Colour2: brown Consistency: silty clay Inclusions: -	1020	1019	1019	fill of 1019 flint cortex and pottery finds



Area	Category	Description	Contex	Above	Within	Notes
			t			
1	Cut	Plan-shape: Linear Section-shape: U	1021	1002		intersection slot with 1023 0.42 x 1.10m. 0.14m deep. dw- 21; 22
1	Fill	Clarity top: clear Clarity bottom: clear Compaction: compacted Lightness: dark Colour1: brownish- Colour2: grey Consistency: silty clay Inclusions: -	1022	1021	1021	fill of inner ditch
1	Cut	Plan-shape: Other Section-shape: U	1023	1021	-	n/s terminus of gully 0.7 x 0.42m. 0.21m deep. dw- 21;22
1	Fill	Clarity top: clear Clarity bottom: clear Compaction: compacted Lightness: mid Colour1: blueish- Colour2: grey Consistency: clay Inclusions: -	1024	1023	1023	fill of gully term
1	Cut	Plan-shape: Circular Section-shape: U	1025	1002	-	cut by a french drain in the western end. ine fill with lots of Iron Age pot sherds. 0.84 x 0.86m. 0.19m deep. DW 13; 14
1	Fill	Clarity top: clear Clarity bottom: clear Compaction: firm Lightness: mid Colour1: greyish- Colour2: brown Consistency: silty clay Inclusions: - moderate < NOT SET > charcoal -	1026	1025	1025	large amounts of very degraded Iron Age pot sherds truncated by a french drain in western side sample 8
1	Cut	Plan-shape: Linear Section-shape: U	1027	1002		cut of prob IA boundary ditch. 0.62 x 0.96m. 0.16m deep. DW 18;19



Area	Category	Description	Contex t	Above	Within	Notes
1	Fill	Clarity top: removed Clarity bottom: - Compaction: compacted Lightness: dark Colour1: greyish- Colour2: brown Consistency: silty clay Inclusions: -	1028	1027	1027	pot sherd find, infrequent shell
1	Cut	Plan-shape: Linear Section-shape: U	1029	1002	-	inner ditch, significantly bigger here than elsewhere. 1.14 x 0.91m. 0.20m deep. DW- 18; 19
1	Fill	Clarity top: removed Clarity bottom: gradual Compaction: compacted Lightness: mid Colour1: greyish- Colour2: brown Consistency: silty clay Inclusions: moderate sub-angular pebbles 20 50	1030	1029	1029	fill of inner ditch, flint scraper found. infrequent shell sample 6
1	Cut	Plan-shape: Linear Section-shape: V	1031	1002	-	Terminus of [1023] 0.38 x 0.61. 0.21m deep. DW- 15;22
1	Fill	Clarity top: diffuse Clarity bottom: diffuse Compaction: firm Lightness: light Colour1: greyish- Colour2: brown Consistency: sandy silt Inclusions: -	1032	1031	1031	contains one bladlet
1	Cut	Plan-shape: Circular Section-shape: U	1033	1002	-	shallow pit. one fill. 0.71 x 0.84m. 0.11m deep. DW- 24; 29
1	Fill	Clarity top: diffuse Clarity bottom: diffuse Compaction: firm Lightness: light Colour1: greyish- Colour2: brown Consistency: silty clay Inclusions: -	1034	1033	1033	very shallow pit



Area	Category	Description	Contex	Above	Within	Notes
Aica	category	Description	t	Above	••••	Notes
1	Cut	Plan-shape: Oval Section-shape: Irregular	1035	1002	-	Small shallow pit with a flattish base 0.44 x 0.64m. 0.06mdeep. DW- 24; 29
1	Fill	Clarity top: surface Clarity bottom: clear Compaction: firm Lightness: mid Colour1: brownish- Colour2: grey Consistency: silty clay Inclusions: sparse sub-angular charcoal 5 20	1036	1035	1035	
1	Cut	Plan-shape: Oval Section-shape: Irregular	1037	1002	-	Large pit with two fills, one cont large quant burnt clay pottery, bone and flint. 2.26 x 1.65m. 0.19m deep. DW 25;26
1	Fill	Clarity top: sharp Clarity bottom: clear Compaction: compacted Lightness: mid Colour1: brownish- Colour2: grey Consistency: silty clay Inclusions: moderate sub-angular pebbles 20 50 sparse sub-angular charcoal 0 20	1038	1037	1037	lower fill of 1738. Horn core, two pot sherds and poss worked flint finds. 1.33 x 1.54m. 0.40n deep. DW 25; 26 sample 2
1	Fill	Clarity top: surface Clarity bottom: sharp Compaction: firm Lightness: dark Colour1: brownish- Colour2: red Consistency: clay Inclusions: -	1039	1038	1037	Burnt clay clumps with brown clay matrix sample 01. 1.46 x 1.40m. 0.41m deep. DW 25; 26
1	Fill	Clarity top: surface Clarity bottom: clear Compaction: firm Lightness: mid Colour1: brownish- Colour2: grey Consistency: clay Inclusions: -  -	1040		1041	fill of possible pit 1041



Area	Category	Description	Contex	Above	Within	Notes
Alea	category	Description	t	Above	vvicinii	Notes
1	Cut	Plan-shape: Circular Section-shape: U	1041	1002	-	possible small pit lacking inclusions too small to be certain if real. 0.20 x 0.28m. 0.16m deep. DW 27; 28
1	Fill	Fill Clarity top: surface 1042 1043 1043 Clarity bottom: clear Compaction: firm Lightness: dark Colour1: brownish- Colour2: grey Consistency: clay Inclusions: - moderate - charcoal 01 02		1043	small frags of charcoal and burnt clay 1 piece flint- dump of waste sample 3	
1	Cut	Plan-shape: Circular Section-shape: U	1043	1002	-	waste pit. 00.24 x0.38m. 0.12m deep.
						DW 30; 31
1	Fill	Clarity top: surface Clarity bottom: clear Compaction: firm Lightness: light Colour1: greyish- Colour2: brown Consistency: clay Inclusions: -	1044	1045	1045	moderate small flecks of charcoal and burnt clay
1	Cut	Plan-shape: Circular Section-shape: U	1045	1002	-	possible waste pit- reasonable amount if charcoal and clay in fill 1044. 0.34 x 0.42m. 0.18m deep. DW 32; 33
1	Layer	Clarity top: surface Clarity bottom: clear Compaction: compacted Lightness: dark Colour1: greyish- Colour2: brown Consistency: silty clay Inclusions: -	1046	-	-	Deposit-partial animal burial



Area	Category	Description	Contex t	Above	Within	Notes
1	Cut	Plan-shape: Linear Section-shape: Irregular	1047	1002	-	ditch slot next to the bulk. SE side of slot has root damage. 0.60m wide. 0.23m deep.
						DW 34; 35
1	Fill	Clarity top: - Clarity bottom: - Compaction: - Lightness: - Colour1: - Colour2: - Consistency: - Inclusions: moderate - charcoal 0 0	1048	1047	1047	se edge unclear due to large amounts of roots.
1	Cut	Plan-shape: Linear Section-shape: U	1049	1002	-	linear ditch running ne/sw across west of area. 1.36m wide. 0.43m deep. DW 36; 37
1	Fill	Clarity top: surface Clarity bottom: clear Compaction: compacted Lightness: mid Colour1: greyish- Colour2: brown Consistency: silty clay Inclusions: sparse rounded pebbles 0 30	om: clear compacted s: mid reyish- brown silty clay		1049	fill of 1049-find of an animal leg bone, poss distal end of metatarsal or shin bone
1	Cut	Plan-shape: Oval Section-shape: U	1051	1002	-	very shallow pit west of ditch-appeared to intersect when stripped but are clearly separate following excavation. 0.92 x 0.64m. 0.07m deep. DW 36; 37
1	Fill	Clarity top: surface Clarity bottom: gradual Compaction: weak Lightness: dark Colour1: brownish- Colour2: grey Consistency: silty clay Inclusions: sparse sub-angular charcoal 0 30 moderate rounded Burnt clay 0 40	1052	1051	1051	fill of 1051 two sherds of pottery



Area	Category	Description	Contex	Above	Within	Notes
			t			
1	Cut	Plan-shape: Linear Section-shape: Irregular				
						DW 38; 39
1	Fill	Clarity top: gradual Clarity bottom: diffuse Compaction: weak Lightness: mid Colour1: yellowish- Colour2: brown Consistency: sandy silt Inclusions: -	1054	1053	1053	-
1	Cut	Plan-shape: Oval Section-shape: U	1055	1002	-	has french drain running through western half. 0.52 x 0.64m
						0.26m deep.
						DW 14; 40
1	Fill	Clarity top: diffuse Clarity bottom: clear Compaction: firm Lightness: dark Colour1: brownish- Colour2: grey Consistency: sandy silt Inclusions: - moderate < NOT SET > charcoal 00	Clarity bottom: clear Compaction: firm Lightness: dark Colour1: brownish- Colour2: grey Consistency: sandy silt Inclusions: - moderate < NOT SET > charcoal		has french drain running through it sample 9/10	
1	Cut	Plan-shape: Linear Section-shape: U	1057	1002		cut of ditch c 0.88m wide. 0.34m deep.
						DW 41; 42
1	Fill	Clarity top: surface Clarity bottom: clear Compaction: firm Lightness: mid Colour1: greyish- Colour2: brown Consistency: silty clay Inclusions: -	1058	1057	1057	fill of ditch 1057



Area	Category	Description	Contex	Above	Within	Notes
			t			
1	Cut	Plan-shape: - Section-shape: -	1059	1002	-	slot in west to east running ditch. 1.38m wide. 0.32m deep. DW- 43; 44
1	Fill	Clarity top: - Clarity bottom: - Compaction: - Lightness: - Colour1: - Colour2: - Consistency: - Inclusions: -	1060	1059	1059	slot in east to west facing ditch. 1.38m wide. 0.32m deep. DW- 43; 44 sample 11
1	Cut	Plan-shape: Oval Section-shape: U	1061	1002	-	very shallow, contains burnt clay. 0.36 x 0.38m 0.08m deep. DW 45; 46
1	Fill	Clarity top: - Clarity bottom: - Compaction: - Lightness: - Colour1: - Colour2: - Consistency: - Inclusions: -	1062	1061	1061	smalk put containing burnt clay. sample <012>
1	Cut	Plan-shape: Linear Section-shape: Irregular	1063	1002	-	western ditch, dug in poor light conditions. 2.12m wide 0.53m deep. DW 47; 48
1	Fill	Clarity top: surface Clarity bottom: gradual Compaction: firm Lightness: mid Colour1: brownish- Colour2: grey Consistency: silty clay Inclusions: sparse sub-angular charcoal 0 30	1064	1063	1063	animal bone including complete long bone



Area	Category	Description	Contex	Above	Within	Notes
			t			
1	Fill	Clarity top: - Clarity bottom: - Compaction: - Lightness: - Colour1: - Colour2: - Consistency: - Inclusions: -	1065	-	unknow n	number taken for pottery found, possibly fill of ditch
1	Cut	Plan-shape: Linear Section-shape: Irregular	1066	1002		very shallow, last part of ditch visible. only one clear edge W 1.70xD0.25 DW 51; 52
1	Fill	Clarity top: diffuse Clarity bottom: clear Compaction: firm Lightness: mid Colour1: greenish- Colour2: grey Consistency: clay Inclusions: -	1067	1066	1066	fill of 1066 pottery and two flint flakes found
1	Cut	Plan-shape: Circular Section-shape: V	1068	1002	-	dimension- charcoal rich fill with posdible burnt bone. sampled- <13> 0.24 x 0.23m 0.10m deep. DW 49; 50
1	Fill	Clarity top: - Clarity bottom: - Compaction: - Lightness: - Colour1: - Colour2: - Consistency: - Inclusions: -	1069	1069	1068	waste pit with a lot of burnt matter. sampled- <13>
1	Cut	Plan-shape: Oval Section-shape: Irregular	1070	1002		possible small posthole or pit L0.5xW0.35xD0.15



Area	Category	Description	Contex	Above	Within	Notes
1	Fill	Clarity topy surface	t 1071	1070	1070	fill of porc particula fligt
	FIII	Clarity top: surface Clarity bottom: gradual Compaction: weak Lightness: dark Colour1: greyish- Colour2: brown Consistency: silty clay Inclusions: -	1071	1070	1070	fill of poss posthole, flint scraper near surface
1	Layer	Clarity top: diffuse 1072 1002 Clarity bottom: diffuse Compaction: - Lightness: - Colour1: - Colour2: - Consistency: - Inclusions: -		1002	-	deposit of animal, cow,remains between the subsoil and the natural. no cut found despite exyensive searching. spead over a 1.77m x 0.58m area. photos- 3284-3285
1	Layer	Clarity top: clear Clarity bottom: diffuse Compaction: compacted Lightness: light Colour1: brownish- Colour2: grey Consistency: clay Inclusions: moderate - roots 0 0 rare sub- angular pebbles 0 40	1073	1002	1077	investigated feature-likely natural slot is 1.43mwide and 1.23m deep.
1	Cut	Plan-shape: Oval Section-shape: U	1074	1002	-	small posthole, no dating ev. 0.38 x 0.23m 0.16m deep. DW 55; 56
1	Fill	Clarity top: surface Clarity bottom: clear Compaction: firm Lightness: mid Colour1: brownish- Colour2: grey Consistency: silty clay Inclusions: sparse sub-angular charcoal 0 10	1075	1074	1074	fill of posthole, no dating ev
	Group	Other category	1076			



Area	Category	Description	Contex t	Above	Within	Notes
1	Layer	Clarity top: gradual Clarity bottom: clear Compaction: compacted Lightness: dark Colour1: greyish- Colour2: brown Consistency: silty clay Inclusions: -	1001			not present across entire site
1	Layer	Clarity top: gradual Clarity bottom: gradual Compaction: compacted Lightness: light Colour1: greyish- Colour2: brown Consistency: clay Inclusions: - sparse sub-angular stones_not_id 0 0 moderate < NOT SET > roots 0 0	1077	1002	-	Probable water deposit spread, contains small amount of bone and charcoal but no features present beneath L 15 x W 15 x D 0.4
1	Fill	Clarity top: - Clarity bottom: - Compaction: firm Lightness: mid Colour1: greyish- Colour2: brown Consistency: clay Inclusions: rare - Burnt clay 0 3mm	1078		1079	0.42 x 0.37m 100mm thick
1	Cut	Plan-shape: Oval Section-shape: U	1079	1002		0.42 x 0.37m 100mm deep
1	Fill	Clarity top: - Clarity bottom: - Compaction: firm Lightness: dark Colour1: brownish- Colour2: grey Consistency: silty clay Inclusions: - frequent - charcoal 0 3mm	1080		1081	burnt flint and possible flecks of burnt bone 80mm thick
1	Cut	Plan-shape: Oval Section-shape: U	1081	1002		0.35m (NW-SE) x 0.3m (NE- SW) 80mm deep fill very dark & contains waste possible waste pit
1	Cut	Plan-shape: Oval Section-shape: Other	1082	1002		pit from eval not excavated plan D61



Area	Category	Description	Contex t	Above	Within	Notes
1	Fill	Clarity top: removed Clarity bottom: clear Compaction: firm Lightness: mid Colour1: brownish- Colour2: grey Consistency: silty clay Inclusions: - moderate sub-rounded Burnt clay 0 0 moderate sub-angular charcoal 0 3	1083	1082	1082	fill of pit 1083

# 5.6 Summary of Artefacts

#### 5.6.1 Flint

George Nash, SLR Consulting

The full report is in Appendix 1 (Section 8)

15 pieces were sorted into diagnostic (3), debitage (9) and natural (3). The diagnostic pieces consisted of two scrapers and a blade and appear to be of a Neolithic to early/middle Bronze Age date, in line with the SWAT evaluation. The debitage was regarded as residual and of a generally earlier date to the diagnostic pieces, with a Mesolithic date not being ruled out though Neolithic is considered more likely. Fire cracked flint in context (1010) suggests that [1009] may have been a domestic surface.

### 5.6.2 Animal Bone

Kris Poole, Trent & Peak Archaeology

The full report is in Appendix 1 (Section 9).

A context list with provisional dates for the bone finds is in Appendix 1. Though a full report has not yet been produced, the assemblage is largely non-diagnostic with little merit in further analysis. A full catalogue will be included in the archive report to use as comparanda for research.

#### 5.6.3 Pottery

#### Sarah Percival

The full report is in Appendix 1 (Section 10).

The pottery assemblage totalled 82 sherds, collectively weighing 520g. Apart from a residual Post-Medieval sherd and a modern sherd from topsoil, the assemblage dated to the Late Iron Age and the Iron Age-Romano-British transition, though there was nothing dating to the Roman period proper.

## 5.7 Summary of Environmental Samples

The full report is in Appendix 1 (Section 11).

#### Introduction and Methodology

The fifteen bulk environmental samples were taken from enclosure ditches and associated pits dating to the Iron Age. The purpose was to recover environmental remains such as plant macrofossils, charcoal,



faunal remains and molluscs as well as to assist finds recovery and potentially provide material for scientific dating.

#### Results

Charred plant macrofossils were recorded in low concentrations in over half of the sampled features, with preservation ranging from poor to good.

The high levels of contamination indicated by roots and modern insect remains in the flots suggest that the remains may be intrusive or residual.

The remains were concentrated in the eastern pit group, and the inner and outer enclosure ditch and pits [1003] and [1055]. Cereal caryopses were the most common charred plant type. Several wheat grains were rounded in shape, potentially indicating the presence of the free-threshing variety. Individual large legumes, likely of a cultivated variety, were identified in pit [1003] and enclosure gully [1005]. Weed seeds in the upper fill of pit [1037] and in gully [1005]. A plum-type (*Prunus* sp.) drupe in pit [1025] and indeterminate nut shell fragments in pit [1003] signify the possible collection of wild food plants for consumption.

#### Significance

The charred plant macrofossils represent the 'background noise' of small-scale domestic cereal processing, likely carried out on a day-to-day basis and probably result from multiple burning events over time. The cereals identified indicate the presence of a mixed cereal economy of glume wheat and hulled barley with possible oat. Little can be discerned about the arable regime by the weed seeds due to their paucity. The cereals were concentrated in the inner and outer enclosure ditch and the eastern pits with other charred remains discarded in the surrounding pits. The low quantities of charcoal suggest burning activity was low at the site or that the features were subjected to thorough cleaning.



# 6.0 Conclusions and Recommendations

Though the site is relatively small, the larger SWAT excavations to the north and west provide a broader context for the excavations. The main aims of the fieldwork were to gain evidence of rural occupation or activity on the site and to consider how the evidence contributes to the wider research aim of understanding field forms and rural settlement south of the Swale from Prehistory through to the Medieval period.

## 6.1 Conclusions

### 6.1.1 Prehistory

There is limited evidence of Neolithic activity in the vicinity, comprising residual flints in feature fills. This was also the case in the SWAT excavations, with isolated Neolithic activity but no firm evidence of settlement.

The Iron Age is the earliest period for which evidence in a significant scale is visible on the site, with part of an enclosure, pit scatters and a linear boundary ditch all dating to the later part of the Iron Age. This is again in line with the results of previous excavations and shows that Iron Age enclosures and agricultural settlement did continue south of the extent established in the SWAT excavations.

### 6.1.2 Romano-British

No evidence of post-transition Romano-British occupation or even activity was recovered, and certainly there was nothing to suggest intensive occupation in line with, for example, a centuriated field system as seen in other parts of Kent. The presence of pottery from the Iron Age to Roman transition period but none dating to the later 1<sup>st</sup> Century would suggest that the site was abandoned following the Roman conquest.

### 6.1.3 Early Medieval

Unlike the SWAT 2012 excavations, this excavation did not identify any definitive Early Medieval features. However, the enclosure to the southeast is similar to the Early Medieval enclosure identified by SWAT in Area 1 of their excavation.

### 6.1.4 Late and Post Medieval

The isolated Medieval Post Medieval sherds may result from agricultural within the site. The postmedieval sherd in from 1057 in D1084 seems likely to be intrusive as the ditch contained Iron Age pottery at its terminal.

### 6.1.5 Summary

By and large, the excavations returned similar, if lower density, results to the SWAT excavations in 2012. The similarity in form between Iron Age features in these excavations and the Early Medieval features excavated elsewhere in the area provide an argument for continuity from the Iron Age through to the Anglo-Saxon period. However, the relative sparsity of Romano-British features suggests that rather than a continuity, there was an adjustment in settlement patterns back to more archaic land use in the post-Roman period to the north and west of the Site, while Medieval land use within the SLR excavated area was largely arable and pastoral.



# 6.2 Completion

No further work was recommended by artefactual specialists. Of the environmental samples, four yielded ecofacts with the potential for radiometric dating:

- the upper fill of pit [1037] (Samples 1, 2)
- pit [1025] in the eastern pit group (Sample 8)
- gully [1005] in the enclosure ditch (Sample 5)
- pit [1003] (Sample 7).

Of these all but Sample 1 (1037) are dated by Iron Age pottery. Pit 1037 is the largest member of the Eastern Pit Group but has no obvious other special significance and the provision of a date is unlikely to affect the overall results of the excavation.

It was recommended, therefore, that no further work was necessary to fulfil the requirements of the WSI.



# 7.0 Archive

SLR Consulting has commenced an online OASIS form at http://ads.ahds.ac.uk/project/oasis/ reference slrconsu1-387040 (1).

The project archive consists of all original records (paper and digital), artefacts, ecofacts/samples and documentation that relates to the archaeological works. The archives will be prepared according to the methodology set out in MAP2. SLR in conjunction with the archaeological regulator will jointly endeavour to persuade the legal owner of the artefacts to transfer ownership to a relevant repository.

The archive complies with the United Kingdom Institute for Conservation (Archaeology Section) *Guidelines for the Preparation of Excavation Archives for Long-Term* Storage (1990) the Society of Museum Archaeologists' *Towards An Accessible Archive* (1995) and the requirements of the recipient Museum. In accordance with section 4 of *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation* Archaeological Archives Forum 2007 (revised 2011) only those elements that are considered of significance for potential future study will be retained.

The archive will be deposited within two years of the completion of the site works, with the agreement of the Client.

The archive will be prepared according to appropriate procedures for the accepting repository. Temporary storage pending deposition will be with SLR Consulting for a period of up to five years after which responsibility for its maintenance will cease; if by this time no repository has accepted to take the material, then it will be returned to the client or some alternative option applied.

# 7.1 Report Deposition

Copies of the final report will be supplied through SLR Consulting to the client, Swale Borough Council, Kent County Council's Archaeologist, and KCC Historic Environment Record.

This will include:

- A .dxf file containing polygon data that describes in detail all excavated/ watched area boundaries, whether trenches, test pits, excavated areas or areas examined by watching brief. This .dxf file must be internally geo-referenced (i.e. the co-ordinate system used in the file must be the Ordnance Survey co-ordinate system).
- A separate .dxf file that contains a number of Layers. Each Layer should represent a different phase of the archaeological remains on site. The name of each Layer must be the phase number used on the site accompanied by a date range (e.g. "2 from –2000 to –800", "7A from 410 to 700" etc). Each layer must contain only the features relevant to that phase digitized as polylines. Where the dating is based on scientific dating methods such as radiocarbon, the dates must be calibrated calendar dates.
- A guidance document has been produced for Kent County Council that will inform contractors as to how this information can be produced within AutoCad. This document is available from the (KCCPA) and Kent County Council Historic Environment Record.
- The Archaeological Contractor should also provide a representative selection of digital site photographs illustrating the archaeology of the site and the operations of the investigation. These will be in .jpg format at a minimum 300dpi. These will be deposited with the County HER and will be used for presentations on aspects of the archaeology of Kent.

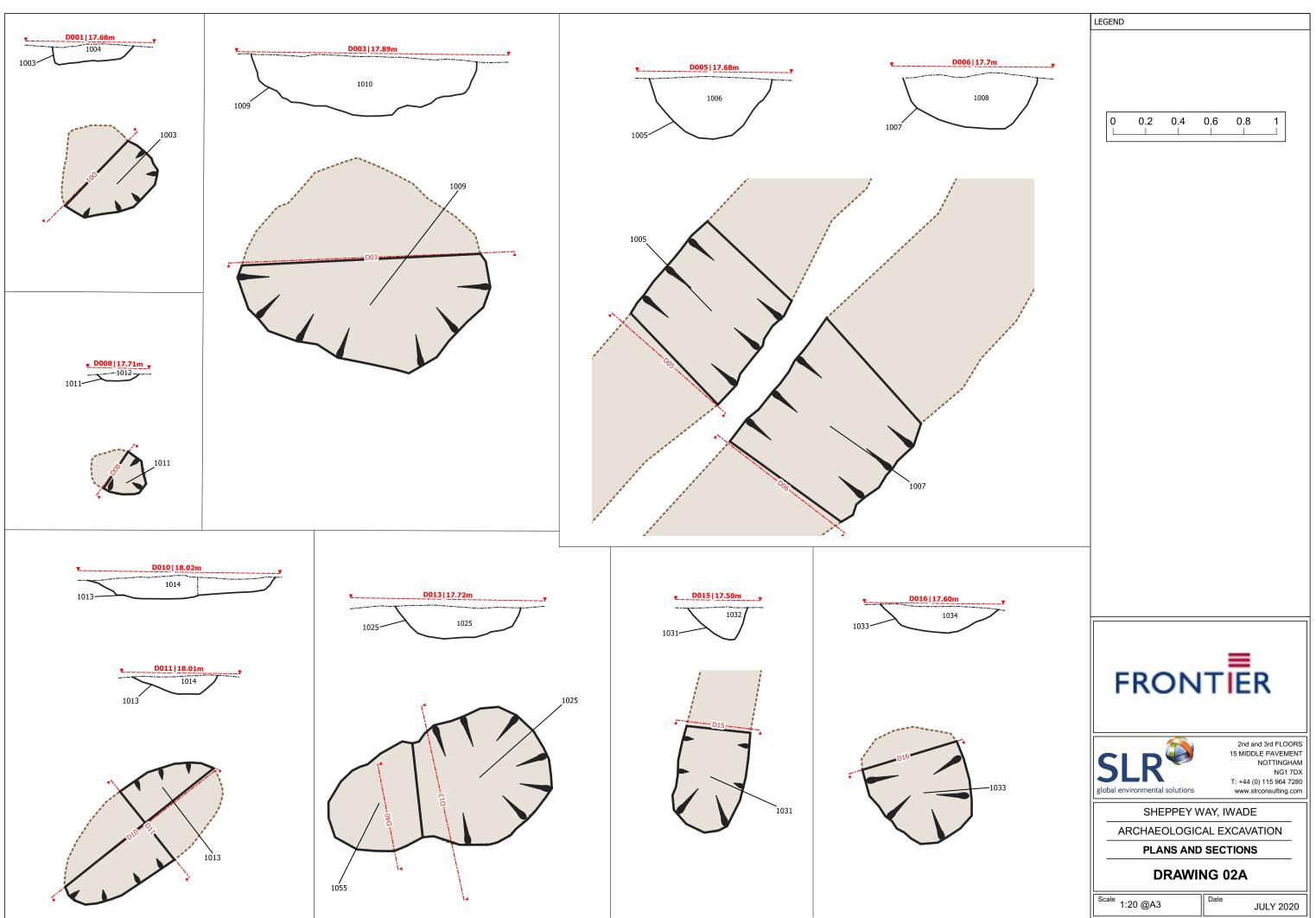




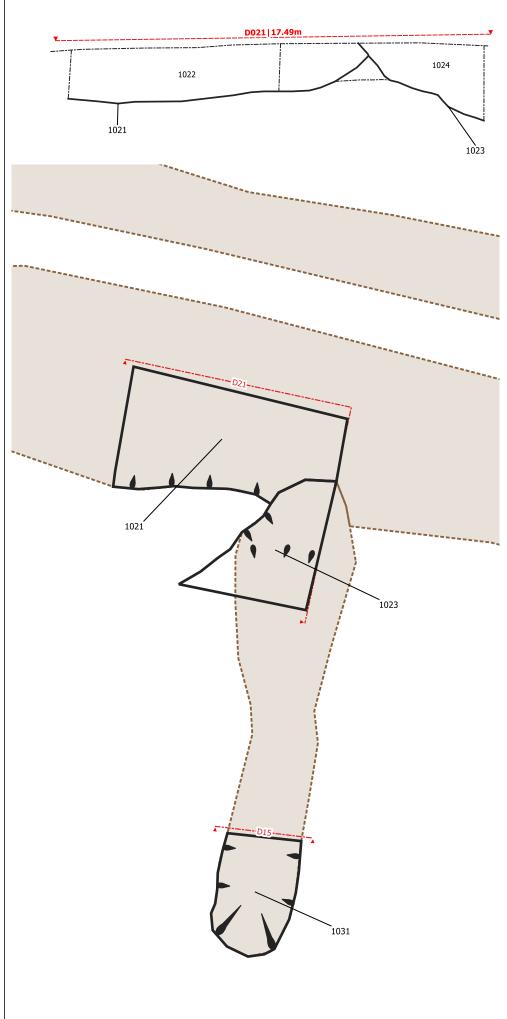


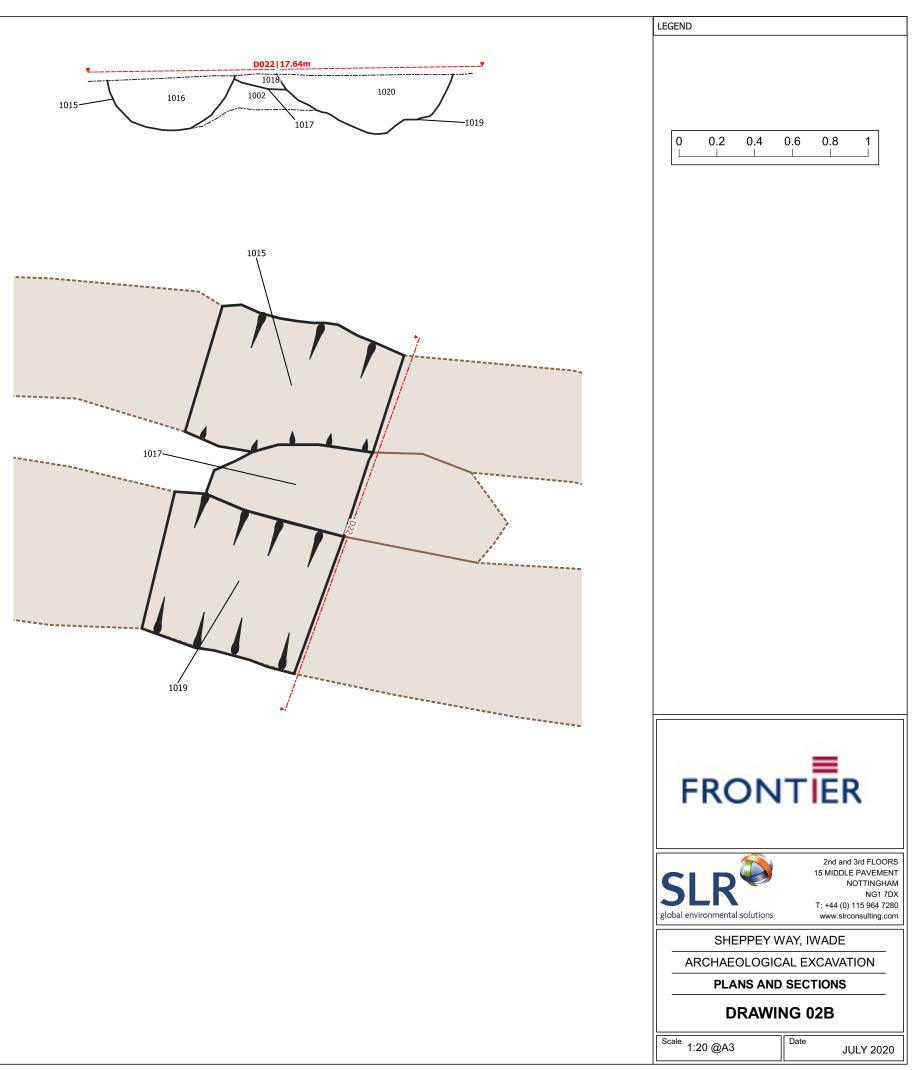


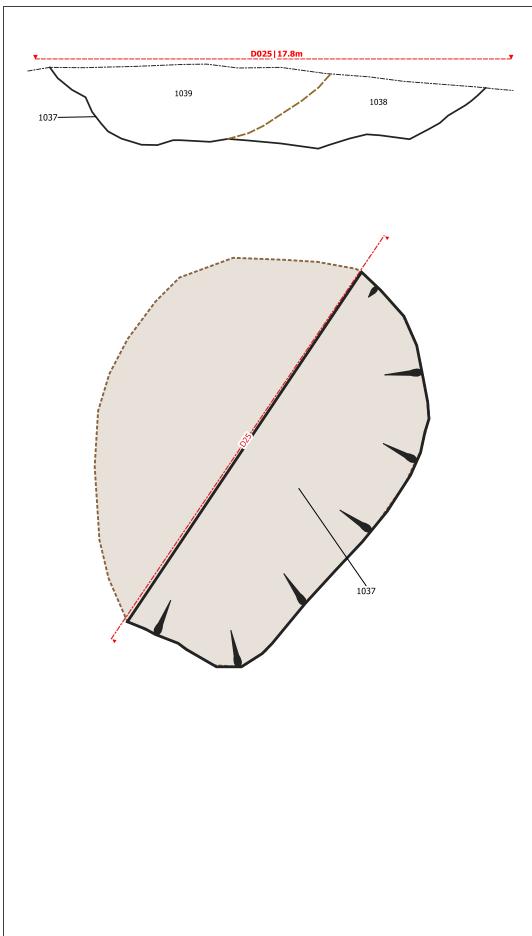


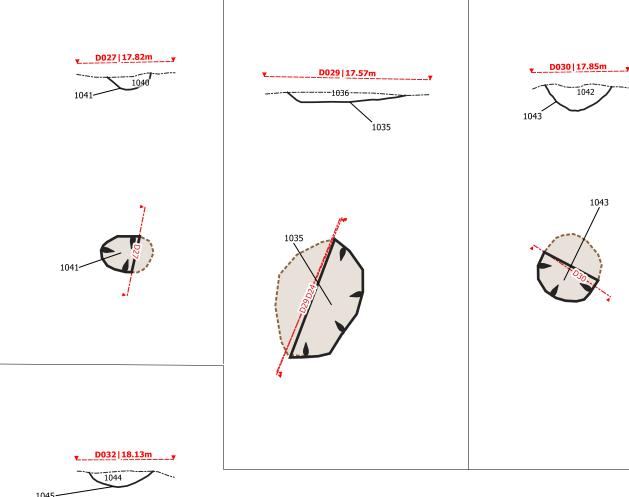


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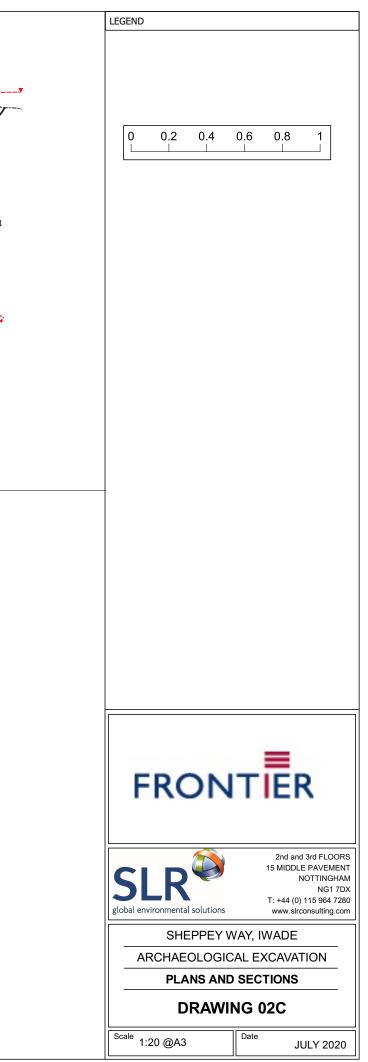


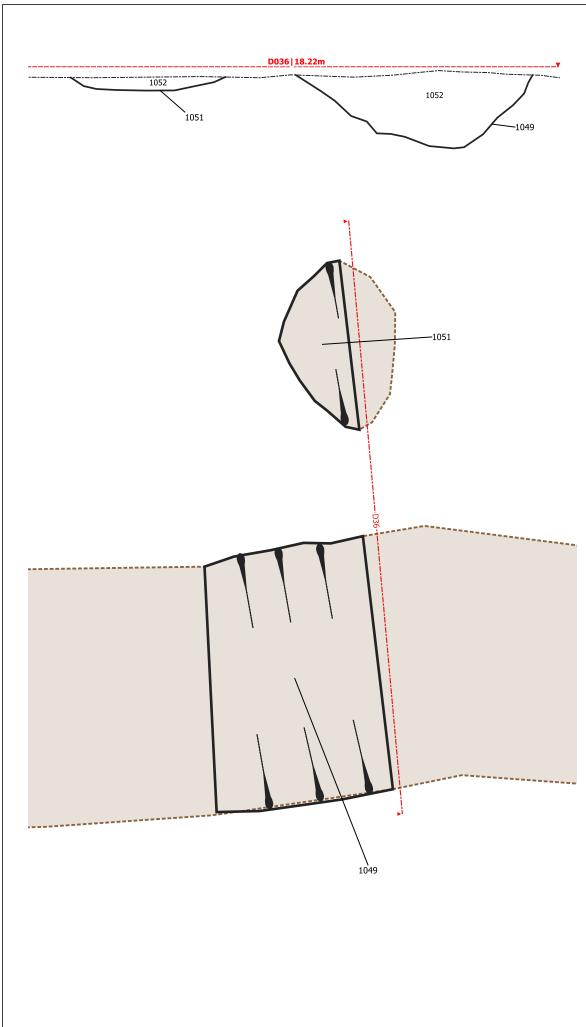


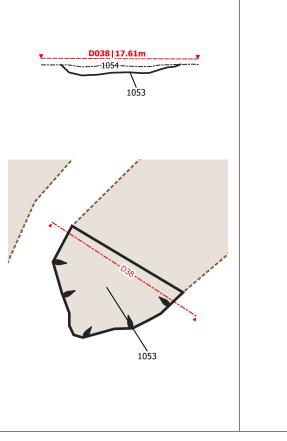


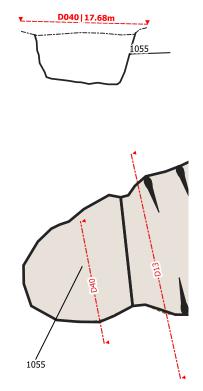


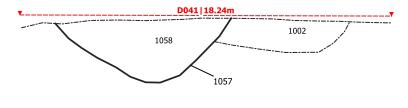


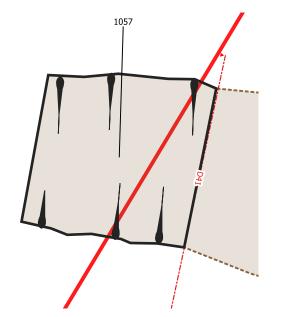


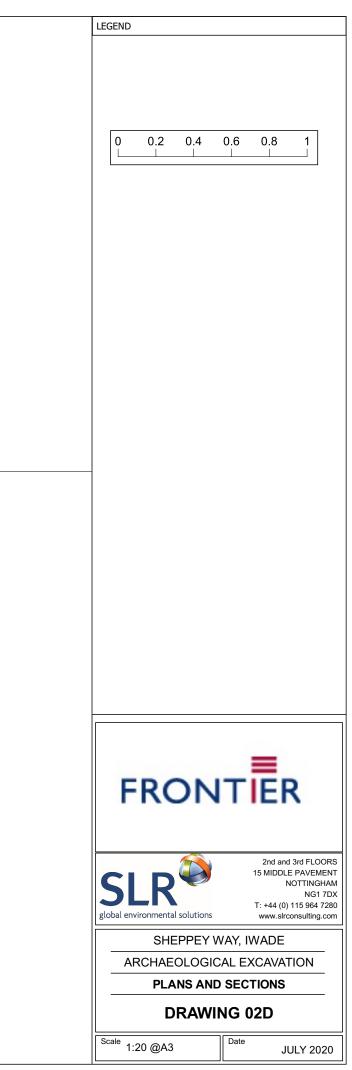


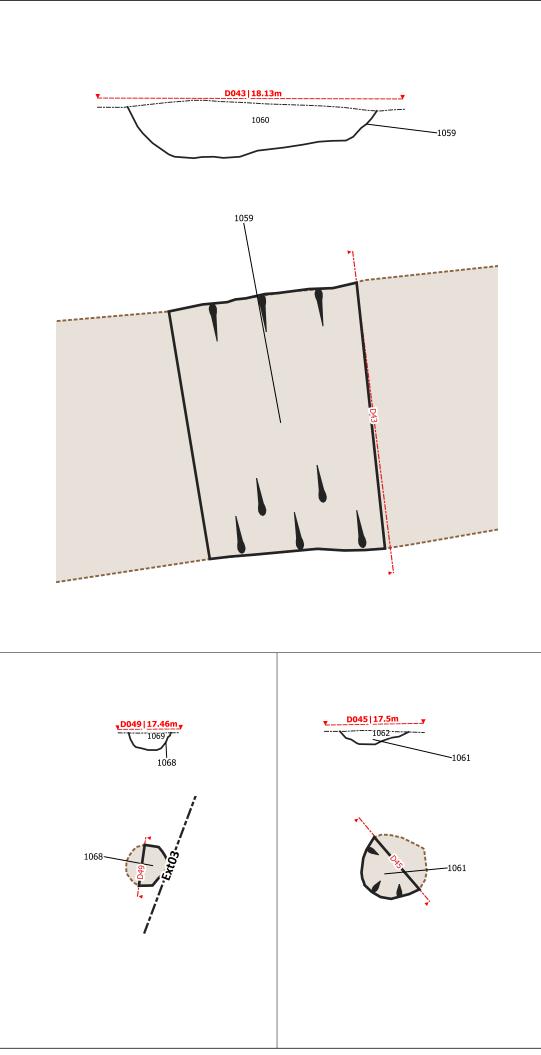


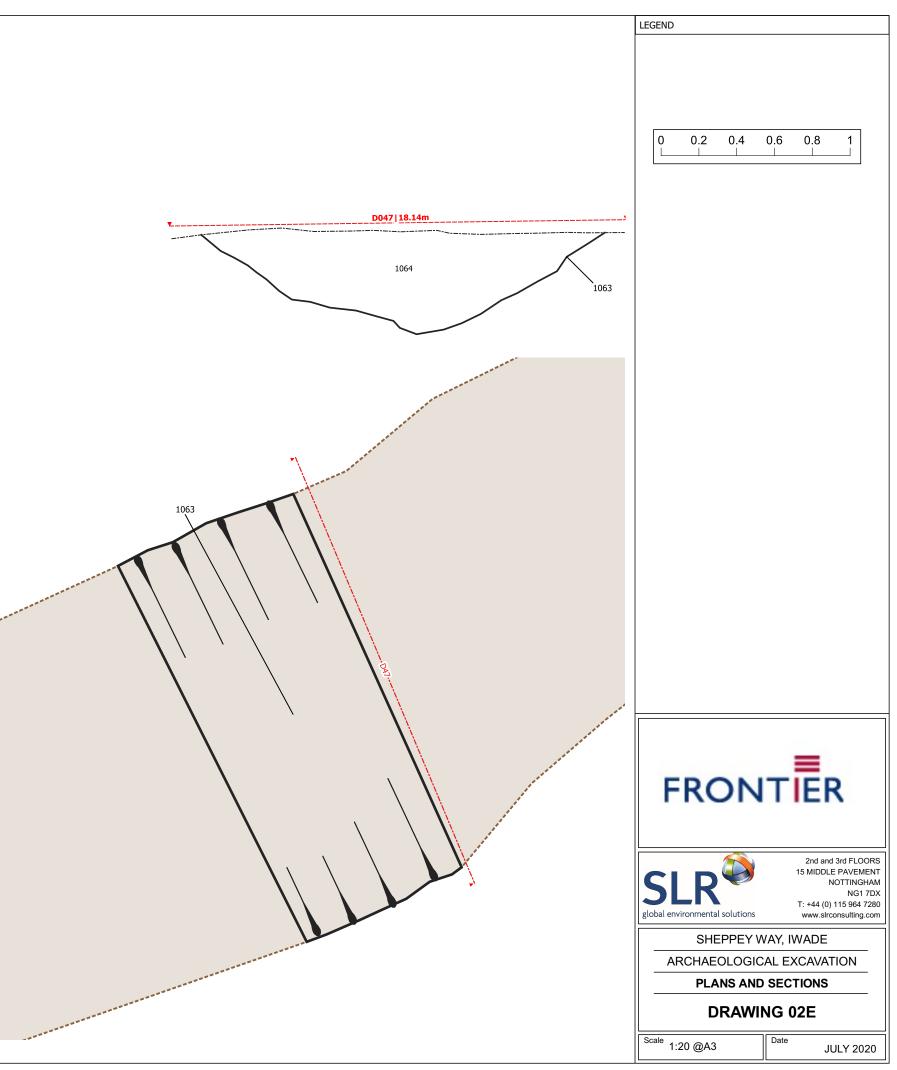




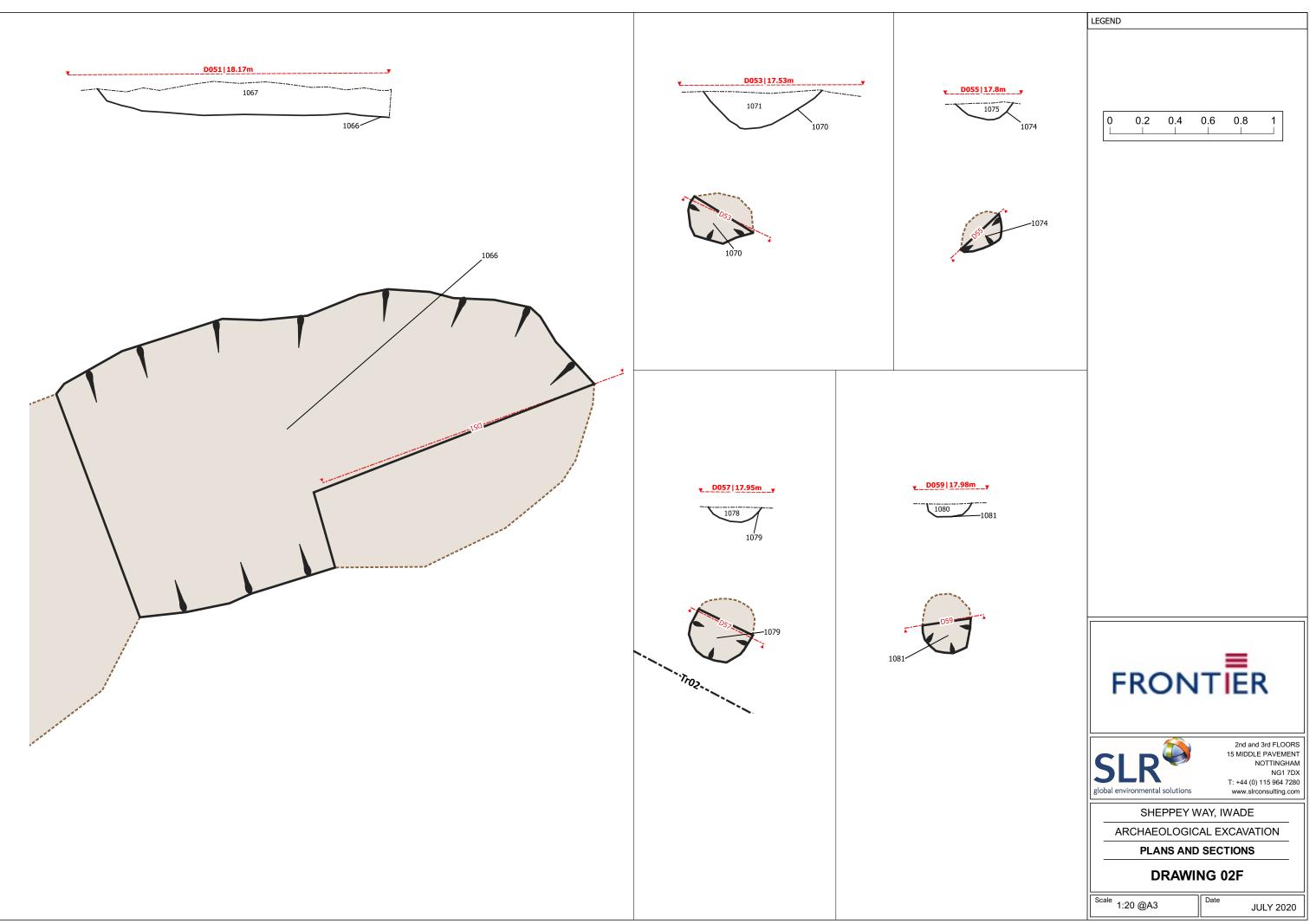








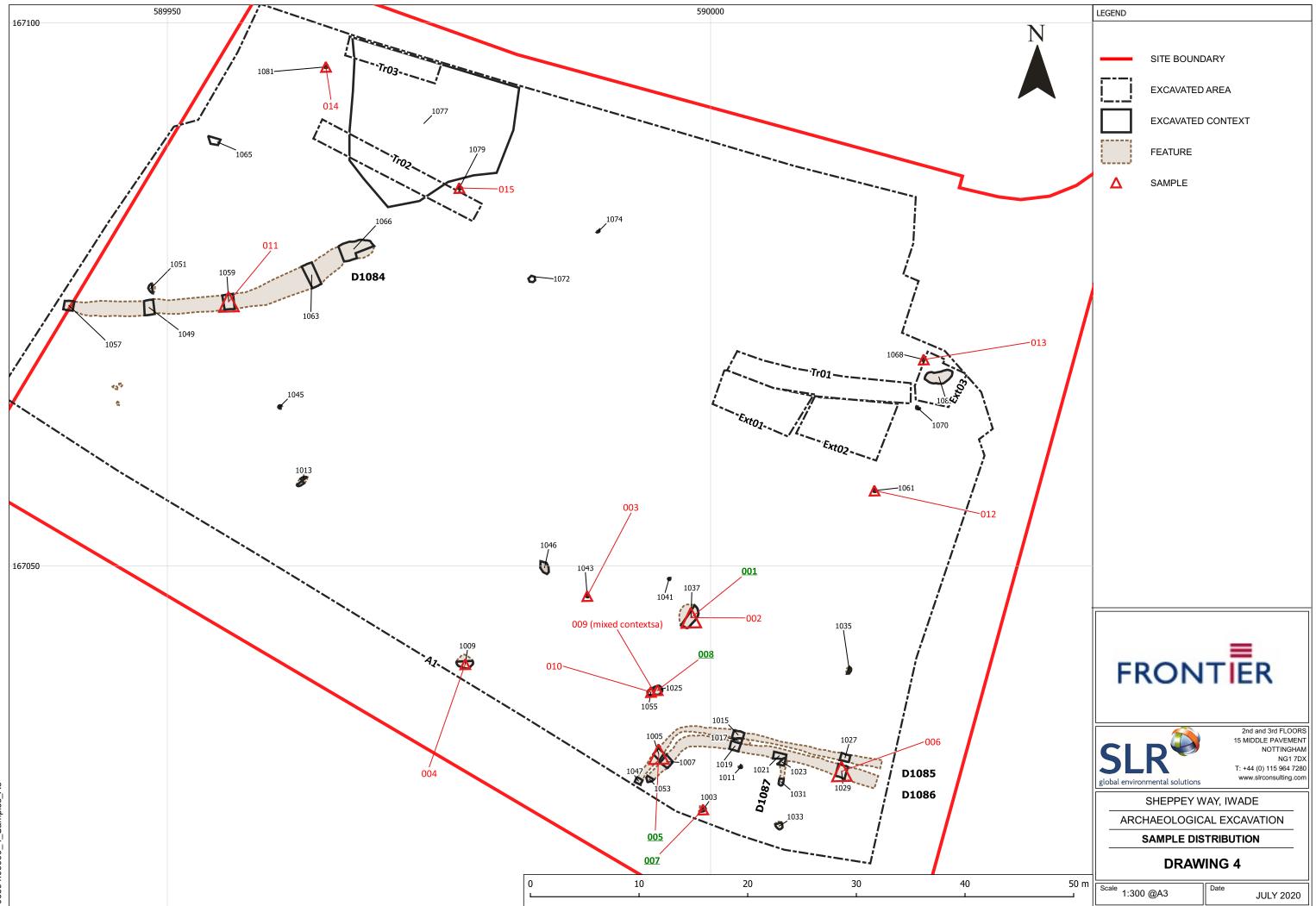
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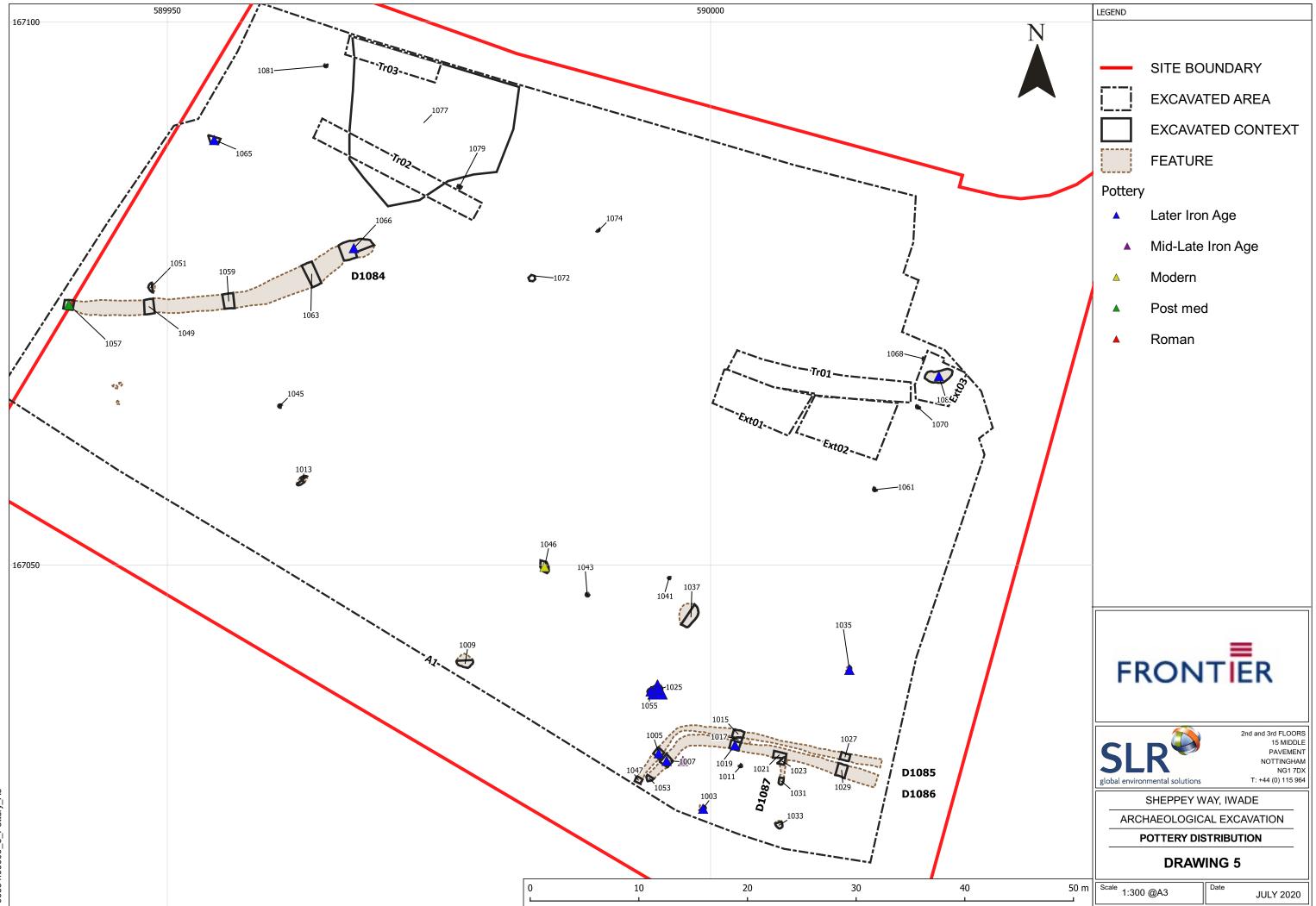


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# **APPENDIX 1**

# Artefacts, Ecofacts and Environmental Samples: Assessments and Reports



# 8.0 Flintwork

#### George Nash

### 8.1 Introduction

The assemblage comprised 15 pieces of flint and chert from nine archaeological contexts across the site. The lithic assemblage had a combined weight of 628g. The lithic material was collected from within fills of cut features: Contexts (1010), [1019], [1029], (1032), [1037], (1042). [1057], [1066] and [1070]. The assemblage reflected in this report indicates several possible phases of activity dating from the Neolithic or Bronze Age; however, only three pieces can be considered as generically diagnostic.

### 8.1.1 Methodology

Artefacts were washed, weighted and re-bagged prior to being individually quantified by type. In order to assess the nature of the assemblage, the fifteen lithic pieces were examined under a 20x magnification hand-lens for signs of retouch and secondary damage (e.g. rolling) and indications of use-wear in order to allow them to be subdivided by type category based on tool form (or non-tool form), presence of retouch and use-wear.

Measurements of each diagnostic piece were taken to ascertain the original form of blank, based on the length and breadth ratio using digital callipers rounded to the nearest millimetre accuracy as a guide to the possible standardisation and period of production. Length measurements were taken at the maximum distance between two points along the bulbar axis at right angles to the bulbar platform. Where this could not be identified, the measurement was taken following the percussion ripples. Width measurements were taken at the maximum distance between two points along the bulbar axis at right angles to the bulbar platform.

Thickness measurements were taken at the maximum distance between points on the ventral and dorsal surfaces. Where artefacts were incomplete, measurement data was deemed not suitable for analysis, though all measurements were recorded. All artefacts were weighed on digital scales and round to the nearest gram measurement.

Colour comparisons were made using the Munsell Rock Colour Book (2013) based on the dominant hue of each piece; their colour descriptions in this report are simplified to generic colours. Excluded was the colour of the cortex, patination or burning discolouration.

The nature of the cortex (whether historically rolled or not) was used to establish whether the material was from a nodule or river gravel source. The amount and nature of the cortex was also measured to establish the presence of primary, secondary and tertiary flaking waste. The presence of burning was also noted.

## 8.2 Results

### 8.2.1 Raw materials

The assemblage is made up of fifteen pieces of [generic] flint (with a combined weight of 628g). The majority of the assemblage is nodule sourced material. However, based on the lithography, the material probably originates from more than one source. Included within the assemblage are several pieces of cherty-flint and two pieces that are from a burning (hearth?) context. Close inspection of the burnt material suggests a cherty-flint type. The presence of chert (with accompanying cortex possibly indicates it derives from an estuarine/marine environment, probably as beach pebble flint. The largely worked flint assemblage is uniform in colour and lustre, being of a dark grey to black-type (see Table 1).



### 8.2.2 **Composition and technology**

The assemblage shows some evidence of an organised and proscribed approach to lithic production, with examples showing the use of pressure flaking - e.g. Context (1038). This and other technological approaches are witnessed in the debitage and objective pieces.

Of the worked pieces present within this assemblage, comprising one blade and two, maybe three scrapers, there is a suggestion that there was a preference in the production of flakes over blades (established by quantity). This assumption is matched when incomplete pieces were considered to have some working use (rather than being considered merely as waste [discarded] material. However, it should be noted that the assemblage is small and therefore little can be said about quantifying the potential amount flint artefacts present within the site.

As stated above, the assemblage contains a number of piece types that reflect later [secondary] stages of production, including the use of waste material, but also finished and utilised tools. As expected, there is a slight dominance of debitage over other piece types (including possible discarded objective pieces which demonstrate possible later stages of production. Inspection of the three diagnostic tools showed no evidence of retouch, including the damaged blade (from Context (1032).

#### 8.2.3 **Objective pieces**

A possible single objective piece was recovered from Context (1020) and weighed 541g. Inspection of this piece revealed little or no evidence of primary working (scars and percussion bulbs) and is therefore considered to be an unworked nodule.

#### 8.2.4 **Debitage**

The debitage assemblage comprises a total of nine pieces, comprising mainly flake blanks and blade-like flakes. The absence of both primary and secondary [percussion] removals indicates that the initial stages of core reduction occurred elsewhere on or near the site. The presence of tertiary pieces of debitage from Contexts (1038) and (1066) further indicates that primarily the later stages of core reduction and tool production is in operation. This assumption is supported by the size of the pieces of debitage present, none of the pieces being above 30mm, indicating that they represent

removals from near-exhausted cores or from large pieces of waste material.

#### 8.2.5 **Blades**

Only one diagnostic blade was recovered (from Context (1032 and weighing 1g). It was probably produced from a nodular flint and shows no evidence of retouch. The distal end (the point) is missing), however, both lateral edges are worked to form cutting edges (Figure 1). The shape and size of this piece are common throughout the Mesolithic, Neolithic and Bronze Age periods.

### 8.2.6 Scrapers

Within the assemblage were three clearly identified scrapers - from Contexts (1010), (1030) and (1071). All three pieces originate from primary and secondary flaking. Two of the pieces, form Contexts (1030) and (1071) both contain cortex and are sub-circular/ovate in shape can be considered thumbnail-type scrapers. The third scraper is a sub-triangular [crescent-shaped?) piece with a cortex section on one of its sides from Context (1010). The scraper edge has been worked using diagonal scaring, percussion-struck from its ventral surface (Figure 2).

In general, scrapers were used throughout prehistory and were utilised for a range of functions, most notably for hide preparation.





# Table 8-1Summary of flintwork

Bag no	No finds / context	Material	Weight	Worked material	Technologi cal period	Description
1	1	Flint	2g	Yes	Unknown	Translucent light brown-orange flint flake with cortex along the long edge. Found within (1058)
2	1	Flint	11g	Yes	Unknown	Opaque dark olive-green flint debitage with BP (and cracking ripples) on underside and cortex on the dorsal surface. Found within Context (1042).
3	2	Flint	3g	Yes	Unknown	Two dark grey to black worked flakes (secondary flaking), found within Context (1066). Both flakes contain cortex.
4	1	Cherty flint	10g	Yes	Neolithic/ Bronze Age	Opaque dark olive-green flint scraper with cortex on one of its faces. Found within Context (1030).
5	3	Flint	9g	Yes?	Unknown	All three flakes are opaque creamy grey to black flint; cortex present on two pieces and all found within Context (1038). BP on the smallest flake.
6	1	Flint	7g	Yes	Unknown	The opaque dark brown piece that may be a scraper? Cortex present on one edge and BP on the ventral face. Found within Context (1071).
7	1	Flint	1g	Yes	Neolithic/ Bronze Age	Translucent bifacial blade measuring 27mm ( <b>Plate 1</b> ). The dorsal face has a central arrise. The point at the distal edge is missing and has no evidence of retouch. BP present on ventral face. This diagnostic tool found within Context (1032).
8	1	Flint	541g	Yes(?)	Unknown	Large opaque grey to black nodule which may represent a core [objective piece] (but unlikely). Observation of the surfaces shows the presence of [Mesozoic] marine fossils. Cortex present on one of the surfaces. Incorporated into this surface is a large marine mollusc, possible a gastropod. The nodule is conchoidal on all but one face.
9	4	Flint and Cherty flint	44g	Yes	Neolithic/ Bronze Age	Three cherty-flint pieces, two of which show evidence of burning (reddened mottled surfaces. All three pieces contain cortex and show no sign of working (therefore natural). Context also contains one piece of flint – mottled opaque olive-grey to black, sub- triangular is shaped with a worked edge - indicating a clear scraper piece ( <b>Plate 2</b> ). All found with Context (1010).



# 8.3 Discussion

The small assemblage of later prehistoric flint suggests several phases of prehistoric activity within the excavated area. The assemblage was made up of flint/chert from at least two sources.

A total of 15 pieces of flint and chert were studied. Of these, 14 pieces (weighing a total of 87g were sorted into diagnostic pieces (3), debitage (9) and natural (3). The three diagnostic pieces – the two scrapers and a single blade possibly indicate a Neolithic - [Early to Middle] Bronze Age date. The remaining assemblage is possibly associated with the three diagnostic pieces. The presence of fire-cracked flint from Context (1010) suggests that the site contains a possible domestic floor.

The material from this small assemblage is mainly flint that is derived from [core] nodule sources. The flint is dark and opaque with several translucent pieces present. Also present are four pieces that are considered to be cherty-flint, opaque and mottled in form. It is, therefore, more than likely that the assemblage originates from several flint sources.

Based on the HER information and the SWAT report (2012), later prehistoric activity is recorded within the vicinity of the site (from trenches within the SWAT excavation). The material for the SWAT excavation revealed lithics that largely date from a Neolithic and Bronze Age date (2012, 14). Although no typologically distinctive pieces were recovered from the current site, the presence of two side scrapers and a blade (along with several flakes) suggests possible Neolithic or Early to Middle Bronze Age activity, possibly an open domestic site.

The majority of debitage recovered originated from mainly pit fill contexts and is considered nondiagnostic, being composed of debitage. This deposition though may suggest that the debitage may be residual, forming the fill of later pits and thus suggesting an earlier age for the debitage (and other flint pieces.

The nature and form of many of the pieces indicate that the assemblage most likely represents Neolithic or Bronze Age activity (although a Mesolithic date cannot be ruled out).

No further study is recommended.





#### Figure 17 Plate 2. Scraper from Context (1010)



## 8.4 References

Andrefsky, W., 2005. *Lithics: Macroscopic Approaches to Analysis*. Cambridge University Press.

Butler, C., 2012. Prehistoric Flintwork. The History Press.

Munsell Colour, 2013. Munsell Rock Colour Book. Geological Society of America.

Swales & Thames Survey Company, 2012. Archaeological Investigations on Land adjacent to Coleshall Farm, Iwade, Kent (Areas 1 & 2), 2011-2012.



# 9.0 Animal Remains

#### Kris Poole (Trent & Peak Archaeology)

### 9.1 Introduction

A total of 12 animal bones were recovered from IWA19, all of which were hand collected. This total differs from the actual total recovered for a number of reasons. Vertebrae (except axis and atlas vertebrae) were only recorded where the centrum was present, whilst ribs were only recorded where the rib head was present. A number of bones also had fresh breaks, which were refitted where possible and in each case also counted as one specimen. A full statement of the methodology employed can be found in Poole (2010).

## 9.2 Results

Bone preservation ranged from fair to poor. No evidence of butchery, gnawing or burning was identified, but this may be due to the bone condition. The bone identifications are listed below, by phase and then in context number order.

#### Iron Age

- Context (1006) [1005]
  - A cattle tarsal.
  - A medium mammal long bone fragment.
- Context (1008) [1007]
  - A cattle femur, missing the proximal and distal ends.
  - Part of a cattle ulna, without proximal or distal ends.
  - A complete left-hand side of a dog mandible, with all adult teeth present.
- Context (1050)
  - An unidentifiable bone fragment.
- Context (1060) [1059]
  - A largely complete horse pelvis from left-hand side. Fused at acetabulum.
- Context (1064) [1063]
  - A near-complete horse metatarsal (right-hand side), fused at proximal and distal ends.
     From an individual measuring 136.4cm at the shoulder (withers), thus would be considered a pony by modern standards. Other measurements were: Smallest diameter (SD): 29.4mm, Depth of distal end (dd): 35mm; Breadth at Distal fusion point: 44.2.

#### Undated

- Context (1010)
  - Fragments of a sheep/goat skull.
  - A fragment of rib from a medium-sized mammal.
- Context (1038) [1037]



- The distal end of a horse metatarsal (left-hand side), fused at the distal end. Measurements were: Breadth at Distal (Bd): 46.9; Depth of Distal (dd): 31.5; Breadth at Distal fusion point: 44.2.
- Context (1077)
  - A fragment of a large mammal (cattle or horse) scapula.

## 9.3 Discussion

This is a very small assemblage, some of which came from undated pit fills. Given its limited size, this assemblage has no potential to contribute to site research questions, beyond showing the presence of these particular species at the site. No further work is recommended.

## 9.4 References cited

Poole, K. 2010. Mammal and bird remains. In G. Thomas, *The Later Anglo-Saxon Settlement at Bishopstone: a Downland Manor in the Making*, pp. 146-157. York: Council for British Archaeology Research Report 163.



# **10.0** Prehistoric Pottery

#### Sarah Percival (independent specialist)

### **10.1** Introduction

Eighty-two sherds weighing 520g were collected from thirteen features and from unstratified surface collection (Table 1). The bulk of the assemblage dates from the Late Iron Age, >75BC, with a few transitional Iron to Roman fabrics, perhaps dating to around the early to mid-1<sup>st</sup> century AD. A single Glazed Red Earthenware sherd of 16<sup>th</sup> to 19<sup>th</sup> century AD date came from the fill of ditch [1057] and a sherd of modern blue and white transfer printed china was recovered from topsoil (1046). The sherds are in poor to moderate condition with a mean sherd weight of 6g.

Feature	Feature type	Spot date	Quantity	Weight(g)	Vessel count by rim
1003	Pit	Late Iron Age	1	4	1
1005	Ditch	>MC1AD	1	13	
1007	Ditch	Late Iron Age	1	3	1
		>MC1AD	1	5	
1019	Ditch	Late Iron Age	2	3	
1025	Pit	Late Iron Age	51	348	1
1035	Pit	Late Iron Age	1	5	
1038	Pit	Late Iron Age	2	13	
1046	Topsoil	Modern C19th	2	3	
1055	Pit	Late Iron Age	9	64	
1057	Ditch	Post medieval	1	16	
		C16th–C19th AD			
1065	Find spot	Late Iron Age	5	17	
1066	Ditch	Late Iron Age	1	6	
1082	Pit	Late Iron Age	3	7	
Unstratifie	d	>MC1AD	1	13	
Total			82	520	3

Table 1: Quantity and weight of pottery by feature

## **10.2** Methodology

The assemblage was analysed in accordance with the guidelines for analysis and publication recommended by the Prehistoric Ceramic Research Group (PCRG 2010). The total assemblage was studied and a full catalogue prepared. The sherds were examined using a binocular microscope (x10 magnification) and were divided into fabric groups defined on the basis of inclusion types. Vessel form was recorded and the sherds were counted and weighed to the nearest whole gram. Decoration, condition, food residues and sooting were also noted.



# **10.3** Assemblage description

Within the Iron Age assemblage three fabric groups were identified. Fabrics containing crushed calcined flint within a fine sandy clay matrix were most abundant forming 68% of the total assemblage by weight (Fabrics IA3 and IA9 Table 2). Similar locally made flint-tempered fabrics were in use in Kent from the mid Iron Age being replaced by Belgic sandy and grogged fabrics from the late 1<sup>st</sup> century BC (Lyne 2005, 71). Shell-tempered fabrics, perhaps from North Kent (Lyne 2005, 71) form 26% of the assemblage by weight and sandy fabrics the remaining 6%. The range of fabrics broadly matches those found at previous Later Iron Age sites excavated around Iwade (Lyne 2005). No grog-tempered fabrics are present suggesting that the main activity at the site focussed on the Later Iron Age and did extend much into the transitional or Belgic period.

Date	Fabric	Description	Quantity	Weight (g)	Vessel count by rim
100BC-25AD	B6	Handmade shell-tempered ware. Moderate to abundant shell plates >3mm and plate shaped voids	42	119	2
	B8	Handmade sandy with abundant fine quartz sand	1	8	
	IA3	Handmade with abundant medium angular flint >2mm	19	130	
	IA9	Handmade sandy with abundant quartz sand >0.1mm and sparse angular flint >2mm	14	213	1
MLC1AD	B6	Handmade shell-tempered ware. Moderate to abundant shell plates >3mm and plate shaped voids	1	13	
	B8	Handmade sandy with abundant fine quartz sand	2	18	
Modern	China	Blue and white transfer printed china C19th AD	2	3	
Post medieval	GRE	Glazed red earthenware. Mid C16 <sup>th</sup> to C19 <sup>th</sup> AD	1	16	
Total	Total				3

Table 2: Quantity and weight of pottery by fabric. Fabric descriptions follow Lyne 2005.

Rims are present from three vessels. A tub-shaped jar with direct flattened rim in flint-tempered fabric IA9 is broadly comparable to examples previously found at Iwade (Bishop and Bagwell 2005, fig.82, 6). The second rim is from a bead rim jar in sandy fabric B6 (Bishop and Bagwell 2005, fig.79, 3) and the third from a jar with flattened everted rim in shell-tempered fabric B6. All of these sherds are from handmade vessels.

### Discussion

The small assemblage suggests occupation at the site in the Later Iron Age with the bulk of the assemblage dating to c250BC to 75BC, with a few sherds perhaps dating to around the early to mid-1<sup>st</sup> century AD. The forms and fabrics mimic those found in contemporary assemblages found previously around Iwade and suggest activity similar to that noted on adjacent excavated sites (Bishop and Bagwell 2005).



### **Further Work**

No further work required





# **11.0** The Environmental Samples

### Stacey Adams (Trent & Peak Archaeology)

## 11.1 Introduction and Methodology

Fifteen bulk environmental samples were recovered from enclosure ditches and associated pits dating to the Iron Age. The sampling was undertaken during archaeological investigations at Coleshall Farm for the recovery of environmental remains such as plant macrofossils, charcoal, faunal remains and mollusca as well as to assist finds recovery and potentially provide material for scientific dating. The bulk environmental samples, ranging from 5 to 40 litres, were processed by flotation using a 500µm mesh for the heavy residue and a 250µm mesh for the flot. The residues were sorted, by hand, for environmental and artefactual remains. Sample <009> contains a mixture of fills from pits [1025] and [1055] and has been included in the assessment despite contamination. The flots were scanned, in their entirety, under a stereozoom microscope at magnifications 7x-45x and their contents recorded in Table 11-1. Nomenclature follows Stace (1997) for wild plants and Zohary and Hopf (1994) for cereals. Charcoal was not present in sufficient quantities (>3g from the >4mm fraction of the heavy residue) to be submitted for identification. This section discusses the significance and potential of the charred plant macrofossils and their ability to inform on feature function and use, as well as the diet and arable economy. The potential for radiocarbon dating is also considered.

## 11.2 Results

Charred plant macrofossils were recorded in over half of the sampled features at Coleshall Farm in low concentrations (<20 individuals) with preservation ranging from poor to good. The remains were concentrated in the eastern pit group, and the inner and outer enclosure ditch and pits [1003] and [1055]. Cereal caryopses were the most common charred plant type with hulled barley (*Hordeum vulgare*), oat (*Avena* sp.) and wheat (*Triticum* sp.) represented. A small number displayed the diagnostic lateral striations of glume impressions. The glume wheat is likely of the emmer/ spelt (*T. dicoccum/ spelta*) variety due to the caryopses' blunt apexes. Several of the wheat grains were rounded in shape, potentially indicating the presence of the free-threshing variety, although the morphological similarities in wheat varieties combined with distortions during the charring process make identification difficult. Individual large legumes, likely of a cultivated variety, were identified in pit [1003] and enclosure gully [1005]. Weed seeds were identified in the form of wild grasses (*Bromus/ Avena*) in the upper fill of pit [1037] and a single sedge (*Carex* sp.) seed in gully [1005]. A plum-type (*Prunus* sp.) drupe in pit [1025] and indeterminate nut shell fragments in pit [1003] signify the possible collection of wild food plants for consumption.

## 11.3 Significance

The charred plant macrofossils identified at Coleshall Farm represent the 'background noise' of smallscale domestic cereal processing, likely carried out on a day-to-day basis. It is probable that the charred cereals occur from multiple burning events and accumulated over time. The cereals identified indicate the presence of a mixed cereal economy of glume wheat and hulled barley with possible oat. Little can be discerned about the arable regime by the weed seeds due to their paucity. The cereals were concentrated in the inner and outer enclosure ditch and the eastern pits with other charred remains discarded in the surrounding pits. The low quantities of charcoal suggest burning activity was low at the site or that the features were subjected to thorough cleaning. The high levels of contamination indicated by roots and modern insect remains in the flots suggest the remains may be intrusive or residual.



# **11.4** Potential

The charred plant macrofossils identified at Coleshall Farm do not have the potential to inform further on the diet and arable economy of the site due to their paucity. The assemblage would benefit from precise dating, either from associated finds or through scientific methods. Charred cereal caryopses from the upper fill of pit [1037] and pit [1025] in the eastern pit group have the potential to be submitted for radiocarbon dating as do those from gully [1005] in the enclosure ditch. Similarly, the cereals in pit [1003] have the potential to be sent for scientific dating. If the features at Coleshall Farm are subjected to rigorous phasing then the small cereal assemblage can be summarised and compared to similar Iron Age assemblages at Military Road, Ramsgate (Adams 2017) and East Hall Farm, Sittingbourne (Boardman 2007).

## **11.5 Further Work**

No further work is recommended on the charred plant macrofossil assemblage. If scientific dating is required then appropriate material can be extracted from the highlighted samples. The final report should include a short summary contextualizing the results from the environmental samples.

# **11.6 References**

Adams, S. 2017. 'The Environmental Samples' in Dawkes, G. Archaeological Watching Brief: Military Road Rising Main Replacement, Chalk Hill Lane, Ramsgate, Kent. Portslade: Unpublished Archaeology South-East Final Report.

Boardman, S. 2007. "The Charred Plant Remains and Wood Charcoal" in Stansbie, D., Hayden, C., Foreman, S. and Wilson, M. 'Excavation of a Ring Ditch, Middle to Late Bronze Age and Late Iron Age Field Systems and Medieval Brickearth Pits at East Hill Farm, Sittingbourne, 2005 and 2007', *Kent Archaeological Reports Online.* 

Stace, C. 1997. New Flora of the British Isles (2<sup>nd</sup> ed). Cambridge: Cambridge University Press.

Zohary, D. and Hopf, M. 1994. Domestication of Plants in the Old World (2<sup>nd</sup> ed). Oxford: Oxford University Press.



* = 1-2	Flot Data from = Environmental Samples at Coleshall Farm, * = 1-10, ** = 11-50, *** = 51-150, **** = 151-250, ***** = >250.								m, Iwade. Quantification Preservation: + = poor, ++ = moderate, +++ = good.							
Group	Sample Number	Context	Context / Deposit Type	Sample Volume (L)	Flot Weight (g)	Flot Volume (ml)	Uncharred (%)	Seeds Uncharred	Charcoal >4mm	Charcoal 2-4mm	Charcoal <2mm	Charred Crop Remains	Preservation	Charred Wild/ Weed Seeds	Preservation	Modern Insects/ Worm Capsules
Western Ditch D1084	11	1060	Western Ditch [1059]	40	6	30	100	Chenopodium album ****								
Western pit group	14	1080	Pit [1081]	10	5	10	99	Chenopodium album ****	*	*	**					
	15	1078	Pit [1079]	5	1	<5	99	Chenopodium album *			*					
North-East Corner	12	1062	Pit [1061]	5	4	15	99				**					
	13	1069	Pit [1068]	10	2	5	99				**					**
Eastern pit Group	1	1039	Upper Fill of Pit [1037]	40	9	20	95	Chenopodium album ***		**	**	Hordeum vulgare (1) Avena sp. (1) Triticum sp. (2)	+++	Bromus/ Avena (1)	+++	***
	2	1038	Lower Fill of Pit [1037]	40	4	20	99	Chenopodium album ***		*	**					

# Table 11-1

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Group	Sample Number	Context	Context / Deposit	Sample Volume (L)	Flot Weight (g)	Flot Volume (ml)	Uncharred (%)	Seeds Uncharred	Charcoal >4mm	Charcoal 2-4mm	Charcoal <2mm	Charred Crop Rem	Preservation	Charred Wild/ Seeds	Preservation	Modern Insects/ Capsules
	3	1042	Pit [1043]	10	2	5	99	Chenopodium album **			**					
	4	1010	Pit/ Treethro w [1009]	25	19	30	99					<i>Cerealia</i> indet. (2)	+			*
	7	1004	Pit [1003]	30	10	40	95			*	**	Cerealia indet. (6) Triticum sp. (4) Triticum dicoccum/spelta (2) Triticum/Hordeu m(1) Triticum sp. (rounded) (2) Fabaceae (large) (1)	++	Indet. nut shell fragment (2)	++	**
	8	1026	Pit [1025]	15	6	10	99	Chenopodium album *		*	**	Hordeum vulgare (4) Triticum/Hordeu m (1) Triticum sp. (2) Cerealia indet. (5)	++	<i>Prunus</i> sp. drupe (1)	+++	
	10	1056	Pit [1055]	10	1	<5	99				**	<i>Hordeum vulgare</i> (1)	+++			
	9	1026/ 1056	Mixed Fill of 2 Pits	20	7	20	95			**	****	Hordeum vulgare (2) Triticum sp. (1) Cerealia	++			*



Group	Sample Number	Context	Context / Deposit Type	Sample Volume (L)	Flot Weight (g)	Flot Volume (ml)	Uncharred (%)	Seeds Uncharred	Charcoal >4mm	Charcoal 2-4mm	Charcoal <2mm	Charred Crop Remains	Preservation	Charred Wild/ Weed Seeds	Preservation	Modern Insects/ Worm Capsules
			[1025] & [1055]									indet. (4) <i>Triticum/Hordeu</i> <i>m</i> (1) <i>Triticum</i> <i>dicoccum/spelta</i> (1) cf. <i>Hordeum</i> sp. (1)				
Outer enclosure ditch D1085	5	1006	Gully [1005]	40	12	40	90	<i>Centaurea</i> sp. *	*	**	***	Triticumsp. (3)Triticumdicoccum/spelta(1) Cerealia indet.(4)cf.Hordeumsp. (1)Triticum/Hordeum(1)Fabaceae (large)(1)cf.Avenasp. (1)Triticumsp.(rounded)(2)	+	<i>Carex</i> sp. (1)	++	*
Inner enclosure ditch D1086	6	1030	Inner Boundary Ditch [1029]	40	9	20	99	Chenopodium album *		*	**	<i>Cerealia</i> indet. (1) <i>Triticum</i> sp. (1)	+			



# **APPENDIX 2**

Written Scheme of Investigation



## **BASIS OF REPORT**

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Drawing 1 Proposed Development site over previous archaeological evaluation trenching.

Drawing 2 Permitted Development.

Appendix 1: KCCs Strip, Map and Sample Guidance

# 1.0 Introduction

# 1.1 Planning Background

Swale Borough Council granted planning permission (Application No. 16/505299/OUT) on 7th December 2017 for an Outline application for the erection of a 60-bed care home with amenity space, car and cycle parking, associated development, landscaping and access.

Condition 13 was placed on this planning permission which requires the design and implementation of a programme of archaeological mitigation:

No development shall take place until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written specification and timetable which has been submitted to and approved by the Local Planning Authority.

*Reason: To ensure that features of archaeological interest are properly examined and recorded and to ensure that such matters are dealt with before development commences.* 

This programme of mitigation work falls within the remit of the National Planning Policy Framework (NPPF; section 16 addressing conservation of the historic environment; DCLG 2018). The location and extent of permitted new development is shown in **Figures 1 and Drawing SLR-06594.0002** 

Frontier Estates Ltd (the Client) has appointed SLR Consulting to design and implement a programme of archaeological investigation to accompany the reserved matters planning application and address condition 13 of the approved outline consent. The proposed programme of work contained in this document should comply with the CIFA Standard and Guidance for Archaeological Excavation December 2014

# 1.2 Location, Topography and Geology

The site is situated in the south of a recent development located off the Sheppey Way with proposed commercial units to the west, housing to the north, and open countryside to the east and south. The larger development site which has so far been developed by Hillreed is located to the south and west of Iwade. This is a 327-home development which will have three large public open space areas across the site.

The development has two access roads from Sheppey Way one for the housing development and one for the commercial units. The care home site is accessed from the latter. The site, at approximately 17m above Ordnance Datum (AOD), lies on Head Gravels and London Clay (British Geological Survey 1:50,000 series, England and Wales Sheet 272, Chatham).











## 1.3 Permitted Development

The proposed development (Drawing SLR-06594.0002) shows the distribution of proposed buildings, parking and access roads.

# 1.4 Archaeological and Historical Background

Archaeological work carried out to date as part of the wider development of Coleshall Farm has recorded the presence of significant archaeological remains dating from as early as the Neolithic period (c.5000 years old) through to medieval remains.

The site of the proposed residential care home is located within an area confirmed as having significant archaeological potential from the evaluation<sup>1,2</sup>. Remains of Neolithic, Bronze Age, Iron Age, Later Prehistoric and medieval dates have all been found in the area. Thusly this site has been identified for further work involving the stripping of the overburden across the development site to reveal archaeology, mapping and excavation of that archaeology to be then followed by post excavation works, reporting and publication of the results.

# 1.5 Assessment of Archaeological Potential

The area proposed for development falls within "Field 1" of the evaluation carried out in 2012 by Swat Archaeology. The report identified that in Field 1 some 60 evaluation trenches were excavated revealing potential field systems and settlement dated by pottery sherds from the Neolithic, Iron Age, and Medieval periods.

The reports as noted above should be read in conjunction with this WSI.

Drawing 1, of this report, shows the trenches that were excavated within the area of the proposed development. Trenches 1, 2, 3, 4, 14, 15 and 24 are located within or adjacent the proposed development site. These trenches revealed evidence for human activity with trenches 14 and 15 yielding evidence for later prehistoric activity with the rest undated thus far. It is probable given the breadth of evidence across the site that hitherto unknown archaeological deposits associated with discovery from the 2012 evaluation will be present.

 <sup>1</sup> Swat Archaeology 2013 Archaeological Excavations on Land Adjacent to Coleshall Farm, Iwade, Kent (Areas 1 & 2) 2011–2012. <u>http://www.swatarchaeology.co.uk/pdf/2013/21.%20Iwade%20EX%20final%20first%20phase%20report.pdf</u>
 <sup>2</sup> Swat Archaeology 2012 Archaeological Evaluations on Land Adjacent to Coleshall Farm/ Sheppey Way/School Lane, Iwade, Kent. <u>http://www.swatarchaeology.co.uk/pdf/2011/24.%20iwade.pdf</u>

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# 2.0 Archaeological Strip, Map and Sample

The following methodology follows KCCs MITIGATION – STRIP, MAP AND SAMPLE REQUIREMENTS as appropriate to this project. The full guidance can be seen in Appendix 1.

# 2.1 Aims and Scope

### 2.1.1 Aims

The aims of the proposed works are:

- to investigate and record archaeological remains within the development site
- to assess significance and analyse the results of the investigation, interpret, report and disseminate the results at a standard proportional to their heritage significance
- Address as appropriate research questions from SERF (South East Research Framework).

### 2.1.2 Scope

The scope of the proposed works is to:

- establish a site plan through GPS survey and related detailed manual planning as appropriate;
- sample investigation and recording of archaeological features and deposits;
- record and retain artefactual evidence as appropriate to their heritage significance;
- undertake assessment of the field results, identify samples that would benefit from analysis and scientific dating;
- establish the heritage significance and potential value for further analysis of all data-sets; and
- to report and interpret the results of the archaeological work and disseminate knowledge as appropriate to their heritage significance

## 2.2 Monitoring and Key Personnel

Initial consultation between SLR Consulting and Mr Simon Mason (County Principal Archaeological Officer), in 2017, identified the general scope of the SMS approach to be adopted. To ensure an appropriate level of monitoring Simon Mason will be kept informed of progress and will be invited to visit site as the work progresses.

Kent County Council's Principal Archaeological Officer is:

Simon Mason Principal Archaeological Officer Heritage Conservation Environment, Planning & Enforcement Kent County Council, Invicta House, County Hall Maidstone Kent ME14 1XX Telephone 03000 413415 Email: <u>simon.mason@kent.gov.uk</u>



The archaeological consultant is:

Guy Kendall Associate Archaeologist SLR Consulting Ltd 69 Polsloe Road, Exeter, EX1 2NF Tel: 01392 490152

Email: gkendall@slrconsulting.com

The recipient Museum:

Maidstone Museum and Bentlif Art Gallery, St Faith's St, Maidstone, Kent ME14 1LH, England.

## 2.3 Quality Assurance

All archaeologists deployed to work on the project will be suitably qualified to complete the tasks required. All archaeological work will adhere to the Chartered Institute for Archaeologists' (CIfA) Standard and Guidance for *Archaeological Excavation* (2014) (for the SMS exercise). SLR is a CIfA Registered Organisation which means that best practice would be followed.

# 2.4 Health & Safety

Prior to commencement of any fieldwork a Health and Safety risk assessment will be prepared by SLR for the archaeological work. A site-specific safety induction for all site staff will be organised by the Client (if necessary). All necessary protective clothing and equipment will be used. The archaeologists on site will wear hard hats, gloves, reflective jackets and protective footwear at all times. As required, staff will have CSCS cards.

A First-Aid Kit and Accident Book will be kept on site at all times. SLR and any sub-contractors they may use will operate in accordance with the health and safety procedures as set out in:

- The Health and Safety Work Act (1974) and related legislation;
- SLR Consulting Field Health and Safety Handbook (2013)
- Federation of Archaeological Managers and Employers 2010. Manual of Health and Safety for Archaeological Fieldwork; and
- The Council for British Archaeology (1989). Handbook No. 6, Safety in Archaeological Fieldwork.

## 2.5 Timetable

#### Stage 1: Soil Strip and Initial Survey

It is estimated that 15 days would be needed for a single machine to strip the area, but final arrangements might allow two mechanical excavators to work at the same time, each monitored by an archaeologist, which would reduce the first stage soil strip.

#### Stage 2: Archaeological Investigation

This would be followed by a site meeting to review the site survey and features exposed by the strip and agree a sampling strategy with Paul Mason (Kent County Council's Principal Archaeological Officer). The archaeological investigation, sampling, and recording would then be implemented with an expected duration of approximately a month.



#### Stage 3: Initial Post- Excavation Tasks

Processing, cataloguing, indexing and cross-referencing would be undertaken in the two months after coming off site, and as necessary artefacts or soil samples would be sent to external specialists for assessment. An interim statement on the results of field work would be produced.

#### Stage 4: Post-Excavation Assessment and Report

Initial assessment from internal and external contributors, and a preliminary site matrix and narrative, as well as important plans and section drawings, would be completed over a four-month period, with either an Assessment Report being produced and proposing further analysis as justified, or a full report being produced on the basis of the assessment stage. This would be written during Month 7 after site work was completed. Dependant on the results of the field work the post excavation assessment design may need, in collaboration with the (KCCPA), to be updated as a matter of course.

#### Stage 5 Analysis and Report/Publication

As appropriate more detailed analysis and scientific dating of samples would be conducted, before a final integrated report could be produced. The duration of this stage might require three months, with an additional month to integrate the results into a single report, suitably illustrated. A synthesis for publication in a local journal would be produced if justified by the heritage significance of the results.

#### Stage 6: Dissemination and Archive Deposition

The final stage would occur approximately one year after completion of the site work.



# 3.0 Detailed Methodology

## **3.1 Preparation and Access**

It is the Client's responsibility to identify and mark the location of all services in the development area prior to commencement of fieldwork. There will be no excavation of live cables by archaeological staff. The client or nominated agent will assume responsibility for CDM regulations.

A surveyor will attend site on a regular basis to record and measure progress, and to accurately locate archaeological remains as appropriate.

Any variations to the archaeological programme will normally be undertaken after consultation with, and the approval of both the Client and Kent County Council's Principal Archaeologist (KCCPA) unless urgent circumstances such as safety reasons require otherwise). Any variations will be fully recorded and circulated to all parties.

Topsoil and subsoil and fills from archaeological features will be removed from the excavation area and stored in areas agreed with the developer and the (KCCPA where appropriate). Spoil heaps will be set back at least 1 metre from the edge of excavation areas.

# 3.2 Strip, Map, and Record

The archaeological investigation will consist of a strip of those areas subject to development and archaeological sampling and recording of visible features identified by this process. The ground reduction will be undertaken using a mechanical excavator with toothless ditching bucket to carefully remove soil across the site to a level indicated by the archaeologist on site. The excavation by machine is to be taken down to the top of the archaeological level or to the top of 'natural' subsoil where no archaeological deposits are found at a higher level. Care will be taken not to damage archaeological deposits through excessive use of mechanical excavation. Machine excavation from the surface must be taken down in spits of no more than 100mm thickness to ensure that deposits and features are not over excavated and that any artefacts/biological evidence in the soil are recorded.

Great care will be exercised to identify as soon as possible during stripping any features such as post holes, pits, gullies, and burials or other archaeological remains which might be disturbed. A toothless ditching bucket c.1.8m – 2m in width would be used and the work would be carried out under the direction of experienced archaeologists.

As appropriate to characterize the deposits, excavation of a stratigraphically excavated pit to expose the sedimentary sequence and identify the most appropriate general stripping level, would be undertaken.

As man-made features are identified the area would be stripped back at that level to expose them. As appropriate an archaeologist would hand clean and record any detailed stratigraphic sequence.

Where archaeological features or deposits are present, they would be recorded and excavated in order to achieve the project aims. Larger features may be part-excavated if necessary by machine under archaeological control.

Exposed archaeological features would be investigated as appropriate to their significance and the following provides guidance in accordance:

- burials will be fully excavated;
- a representative sample of small discrete features (post-holes) will be fully excavated;
- a representative sample of larger discrete features will be half-sectioned (50% excavated); and



long linear features will be sample excavated along their length – with investigative excavations
distributed along the exposed length of any such feature and to investigate terminals, junctions and
relationships with other features.

## 3.3 Environmental Sampling

As appropriate soil samples from prehistoric or early historic features would be taken and assessed for palaeoenvironmental assessment. The quantities and types of sample would be determined by the nature of the deposit and feature, applying Historic England's *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation* 2002.

The following approach would be adopted if appropriate. Where deposits potentially containing palaeoenvironmental data are encountered, the project environmental specialist will be contacted for advice. Such deposits will include at least any peat or colluvial deposits, and any buried soils. Where necessary he/she will make a site visit, in order to identify the appropriate approach in detail.

Where deposits are dry, bulk samples for the recovery of charred plant remains, small bones and finds, will be taken from sealed and datable features such as pits, ditches, hearths and floors. Each context will normally be sampled. The size of the sample is expected to be in the range of 40-60 litres per context or 100% of smaller contexts. Samples will not be taken from the intersection of features.

For large features / spreads appropriate consideration will be given to sampling on a grid system.

Where good conditions for the preservation of bone have been identified, all large bones will be collected by hand and sieving of bulk samples up to 100 litres will be undertaken as appropriate.

Mollusc samples of 2 litres each will be taken vertically from appropriate sections to investigate the changes of vegetation through time.

Where deposits are wet, waterlogged or peaty, monoliths will be taken along cleaned vertical surfaces for the retrieval of pollen, diatoms, ostracods and foraminifera. The numbers to be taken will be agreed with the (KCCPA).

For wet, waterlogged or peaty deposits, bulk samples of 20 litres will be taken from visible layers or spits for the retrieval of plant macro-remains and insects.

Environmental samples from dry deposits will normally be processed by flotation during the course of the archaeological fieldwork and the residues will be sorted to retrieve small bones, small finds and charcoal that has not floated. Environmental samples from wet deposits will normally be sent to specialists for processing in laboratory conditions. Provisional results should be fed back to the onsite team to inform subsequent investigation strategy.

The Archaeological Contractor will make appropriate provision for the application of scientific dating techniques such as radiocarbon, dendrochronology, archaeomagnetic dating, OSL and thermoluminescence dating. The advice of the English heritage regional Scientific Advisor will be sought in advance of the application of these techniques.

Where appropriate the guidance in the following Historic England papers will be followed:

- "Guidelines on the recording, sampling, conservation, and curation of waterlogged wood" 1996
- "Dendrochronology guidelines on producing and interpreting dendrochronological dates" 1997
- "Archaeometallurgy" 2001
- "Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation" 2002
- "Human bones from Archaeological Sites: Guidelines for Producing Assessment Documents and Analytical Reports" 2004



- "Geoarchaeology" 2004
- "Wet Wood and Leather"
- "Archaeomagnetic Dating: Guidelines on producing and interpreting archaeomagnetic dates" 2006
- "Guidelines on the X-radiography of archaeological metalwork" 2006

Issues to be addressed will be the survival of material, preferably for each phase, and to assess key contexts. Sampling will be directed to a representative range of context types across the site and from each phase present, and to obtain samples for scientific dating.

### 3.3.1 Burial Remains

Inhumation and cremation burials will be fully excavated by hand within 24 hours of exposure unless otherwise agreed with the (KCCPA).

The Archaeological Contractor will put in place arrangements to ensure the security, protection from deterioration and damage, and the respectful treatment of human remains and burial goods.

Where burial remains are expected the Archaeological Contractor will submit to and agree with the (KCCPA) detailed procedures for the excavation and recording of inhumation and cremation burials.

The Archaeological Contractor will have available within the team or on call an appropriately qualified and experienced osteoarchaeologist to supervise the excavation and removal of human remains from the site. The Archaeological Contractor will use an appropriately qualified and experienced archaeological conservator to assist where appropriate in the lifting of human remains and grave goods / cremation vessels.

In the event that human burials are discovered, a Ministry of Justice Licence will be required (in accordance with Section 25 of the Burial Act 1857) before the remains can be lifted. The need for a Ministry of Justice Licence applies to both inhumation and cremated remains. Application for a Licence will be made by the Archaeological Contractor. The Archaeological Contractor is to comply with the conditions of the Licence and discuss any requirements of that Licence which conflict with the agreed method of investigation with the (KCCPA).

## **3.4 Fieldwork Recording**

As appropriate within health and safety requirements, cut features will be recorded in plan and a section cut across each one.

As appropriate archaeological remains will be textually recorded using pro-forma recording system, and fully cross-referenced with other types of record. The drawn record will comprise plans of the site at a suitable scale, typically plans at scale of 1:500 or 1:100 for area locations, 1:50 or 1:20 for detail of features, and profiles and sections at scale 1:20 (or section drawings at 1:10 dependent on their complexity).

When possible, records will be located in relation to the National Grid and Ordnance Survey datum, and a surveyor will periodically measure the progress on site, recording the change in levels as the ground strip proceeds.

The location of any remains will be recorded using hand-measured offsets or a hand-held GPS and tied in by periodic visits from a surveyor. An overall site plan of remains at the site will be maintained. An overall plan of the stripped site will be prepared and provided to the (KCCPA) within one week of the completion of machine stripping.

All artefacts not obviously modern will be collected during excavation; the presence of any modern material will be noted in the written record. Artefacts/ecofacts will be collected and recorded stratigraphically in accordance with Chartered Institute for Archaeologists (2014) Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials.



The revealed features will be excavated and recorded in accordance with the agreed excavation sampling strategy. The sampling strategy will continue to be developed throughout the investigation period in consultation with the (KCCPA) in light of the results of the field work. The excavation will include initially as a minimum:

- The investigation of the intersections of features of archaeological date to obtain a phasing of the site;
- A robust spatial framework of excavation to provide an understanding of the spatial distribution of past activities across the investigation area including any 'special' deposits and any patterning in artefact distribution. Such a framework will take into account the inter-relationship of major features.
- Structural remains and other areas of significant and specific activity (domestic, industrial, religious, hearths, 'special'/ patterned deposits etc) will be fully excavated and recorded.
- Where appropriate, for instance where the stratigraphy is complex, single context planning will be used.
- Non-structural linear cut features will be sample excavated and recorded with a sufficient number of sections to establish the feature's character, date and morphology and to provide information on activities taking place in close proximity to the feature. All terminal ends will be investigated. Sections will normally be at least 1m wide.
- Non-structural pits will be half-sectioned unless the character, number or size of the pits makes this
  unpractical. For instance, if a pit contains several intersections and re-cuts, it would not always be
  appropriate to half-section it. In this situation, the Archaeological Contractor will consider
  'quadranting' or single context planning. Equally if 'special' deposits are expected pits may need to be
  excavated in plan rather than being half-sectioned. The strategy will need to be agreed with the
  (KCCPA).
- Non-structural post and stake-holes will be half-sectioned sufficiently to clarify character, relationships and chronology.
- All burial deposits and associated remains will be fully excavated and recorded in accordance with an agreed methodology.

At the completion of the archaeological fieldwork programme, Kent County Council's Principal Archaeologist will confirm that the fieldwork stage has been satisfactorily accomplished, and Stage 3 can commence.

## 3.5 Finds

All artefacts recovered during the excavations on the site are the property of the Landowner. They are to be suitably bagged, boxed and marked in accordance with the United Kingdom Institute for Conservation, Conservation Guidelines no.2 and on completion of the archaeological post-excavation programme the landowner will arrange for them to be deposited in a museum or similar repository agreed with the (KCCPA) and the Local Planning Authority.

Artefacts will be excavated carefully by hand. The Archaeological Contractor will use an appropriately qualified and experienced archaeological conservator to assist where appropriate in the lifting of fragile finds of significance and / or value.

Artefacts will be collected and bagged by archaeological context. The location of special finds will be recorded in three dimensions. Three-dimensional recording of in-situ flint working deposits will be carried out.

Where appropriate to address the research objectives of the archaeological investigation, sieving of deposits will be undertaken to maximise recovery of small artefacts. A strategy for such sieving will be agreed in advance with the (KCCPA).

Records of artefact assemblages will clearly state how they have been recovered, sub-sampled and processed.

Excavated artefacts will be bagged upon recovery or placed in finds trays. They must not be left loose on site.



### 3.5.1 Storage

Artefacts and palaeoenvironmental samples will be collected, labelled, and stored following standard practice as outlined in UKIC (United Kingdom Institute for Conservation) guidelines and in accordance with Chartered Institute for Archaeologists (2014) Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials.

### **3.5.2** Human Remains

Should human remains be found on the site and need to be removed, they will be archaeologically excavated and recorded according to the guidance set out in J. McKinley and C. Roberts, Excavation and post-excavation treatment of cremated and inhumed human remains CIFA technical paper 13, 1993.

### 3.5.3 Treasure

Finds, discovered by the Archaeological Contractor, falling under the statutory definition of Treasure (as defined by the Treasure Act of 1996 and its revision of 2002) will be reported immediately to the relevant Coroner's Office, the Kent Finds Liaison Officer (FLO) who is the designated treasure co-ordinator for Kent, the landowner and the (KCCPA). A Treasure Receipt (obtainable from either the FLO or the DCMS website) must be completed and a report submitted to the Coroner's Office and the FLO within 14 days of understanding the find is Treasure. Failure to report within 14 days is a criminal offence. The Treasure Receipt and Report must include the date and circumstances of the discovery, the identity of the finder (put as unit/contractor) and (as exactly as possible) the location of the find.

Finds processing will normally be carried out during the course of the archaeological fieldwork and provisional spot dating fed back to inform investigation strategy.

- any object other than a coin which is at least 10% silver or gold by weight and more than 300 years old;
- any coins that are at least 10% silver or gold by weight and come from a single find, provided the find contains at least two coins with a gold or silver content of at least 10%; the coins must be at least 300 years old at the time of discovery. Where finds consist of coins that are less than 10% gold or silver by weight, there must be at least 10 coins in the find and they must be at least 300 years old at the time of discovery for the find to be considered treasure;
- any object, of whatever, composition, that is found in the same place as, or that had previously been together with, another object that is treasure;
- any object (other than a coin), any part of which is base metal, which, when found is one of at least two base metal objects in the same find which are of prehistoric date;
- any object, (other than a coin) which is of prehistoric date, and any part of which is gold or silver; and
- any object that would previously have been treasure trove but does not fall within the specific categories given above.
- All metal objects, other than late post medieval objects, will be X-rayed unless otherwise agreed with the (KCCPA).



# 4.0 Analysis & Reporting

## 4.1 Initial Processing

On completion of site operations, the records produced during the programme will be checked, ordered, listed and indexed. The stratigraphic sequence will be described and included in the record. All photographic material will be catalogued identifying the subject/s photographed.

As appropriate finds recovered during the programme will be washed, marked, bagged and labelled according to the individual deposit from which they were recovered.

## 4.2 Report

Within 4 weeks of completion of the work on site, the Archaeological Contractor will carry out an initial assessment of the results and produce an Interim Report. This will comprise a basic description of the archaeology and a plan at an appropriate scale (e.g 1:500), one copy of which will be provided to:

- the (KCCPA),
- the site developer
- the Local Planning Authority.
- Local Archaeological Society.

A report will be completed, and a draft will be sent to the client and to Kent County Councils Archaeological Advisor for comment within 3 months of completion of the work on the site, however, this would be dependent on any ongoing scientific analysis. The Archaeological Contractor will carry out an assessment of the results and produce a MAP2 'Post-excavation Assessment Report', copies of which are to be provided as in 4.2 above. An additional copy will be provided to the Historic England Regional Scientific Advisor. This report will include a 'Proposal' to be agreed with the (KCCPA) that sets out a programme of post excavation analysis through to completion of a 'Full Report' and 'Publication' of the findings.

SLR will retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act of 1988 with all rights reserved; excepting that SLR hereby provide an exclusive licence to the Client for the use of such documents by the Client in all matters directly relating to the project as described in this WSI.

As necessary an appropriately-detailed publication article will be offered to a local journal, the local (CBA) Round-Up, or more popular format (such as British Archaeology, or Current Archaeology). The scope of the report will be proportionate to the significance of the results obtained.

The Archive Report will follow KCCs Strip Map and Sample methodology and might include some or all of the following items:

- a non-technical summary of the results of the investigation;
- a description of the archaeological setting of the site;
- description of the topography and geology of the investigation area;
- description of the methodologies used during the investigation and discussion of their effectiveness in the light of the results;
- a text describing the findings of the investigation;
- plans of the area showing the archaeological features exposed including spot-heights sufficient to define the general excavated surface and existing surface levels. if a sequence of archaeological deposits is encountered, separate plans for each phase will be produced;
- drawn sections of the archaeological features and scaled photographs with written descriptions of sample sections representing the general stratigraphic sequence;



- interpretation of the archaeological features exposed and their context within the surrounding landscape;
- specialist reports on the finds from the site;
- appropriate photographs of the site and specific archaeological features or groups of features; and
- a consideration of the significance of the remains found, in local, and regional terms, using recognised evaluation criteria.

## 4.3 Archive

SLR Consulting will complete the online OASIS form at http://ads.ahds.ac.uk/project/oasis/ at completion of the project.

The project archive might consist of all original records, artefacts, ecofacts/samples and all documentation that relates to the archaeological works. The archives will be prepared according to the methodology set out in MAP2. SLR in conjunction with the archaeological regulator will jointly endeavour to persuade the legal owner of the artefacts to transfer ownership to a relevant repository.

The archive will comply with the United Kingdom Institute for Conservation (Archaeology Section) Guidelines for the Preparation of Excavation Archives for Long-Term Storage (1990) the Society of Museum Archaeologists *Towards An Accessible Archive* (1995) and to the reasonable requirements of the recipient Museum or approved repository. In accordance with section 4 of Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation Archaeological Archives Forum 2007 (revised 2011) a rigorous process of selection and discard will be followed so that only those elements that are considered of significance for potential future study will be retained. Bulk items such as ceramic building materials, stonework, large quantities of undiagnostic pottery, and material that is difficult and costly to conserve such as worked wood, may be selected for discard once appropriate recording and analysis has been undertaken, on site or in the laboratory post-excavation.

The archive will be deposited within two years of the completion of the site works, with the agreement of the Client.

The archive will be prepared according to appropriate procedures for the accepting repository. Temporary storage pending deposition will be with SLR Consulting for a period of up to five years after which responsibility for its maintenance will cease; if by this time no repository has accepted to take the material, then it will be returned to the client or some alternative option applied.

## 4.4 Report Deposition

Copies of the final report will be supplied through SLR Consulting to the client, Swale Borough Council, Kent County Council's Archaeologist, and KCC Historic Environment Record.

This will include:

- A .dxf file containing polygon data that describes in detail all excavated/ watched area boundaries, whether trenches, test pits, excavated areas or areas examined by watching brief. This .dxf file must be internally geo-referenced (i.e. the co-ordinate system used in the file must be the Ordnance Survey co-ordinate system).
- A separate .dxf file that contains a number of Layers. Each Layer should represent a different phase of the archaeological remains on site. The name of each Layer must be the phase number used on the site accompanied by a date range (e.g. "2 from -2000 to -800", "7A from 410 to 700" etc). Each layer must contain only the features relevant to that phase digitized as polylines. Where the dating is based on scientific dating methods such as radiocarbon, the dates must be calibrated calendar dates.



- A guidance document has been produced for Kent County Council that will inform contractors as to how this information can be produced within AutoCad. This document is available from the (KCCPA) and Kent County Council Historic Environment Record.
- The Archaeological Contractor should also provide a representative selection of digital site photographs illustrating the archaeology of the site and the operations of the investigation. These will be in .jpg format at a minimum 300dpi. These will be deposited with the County HER and will be used for presentations on aspects of the archaeology of Kent.



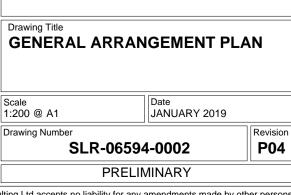
**DRAWINGS** 



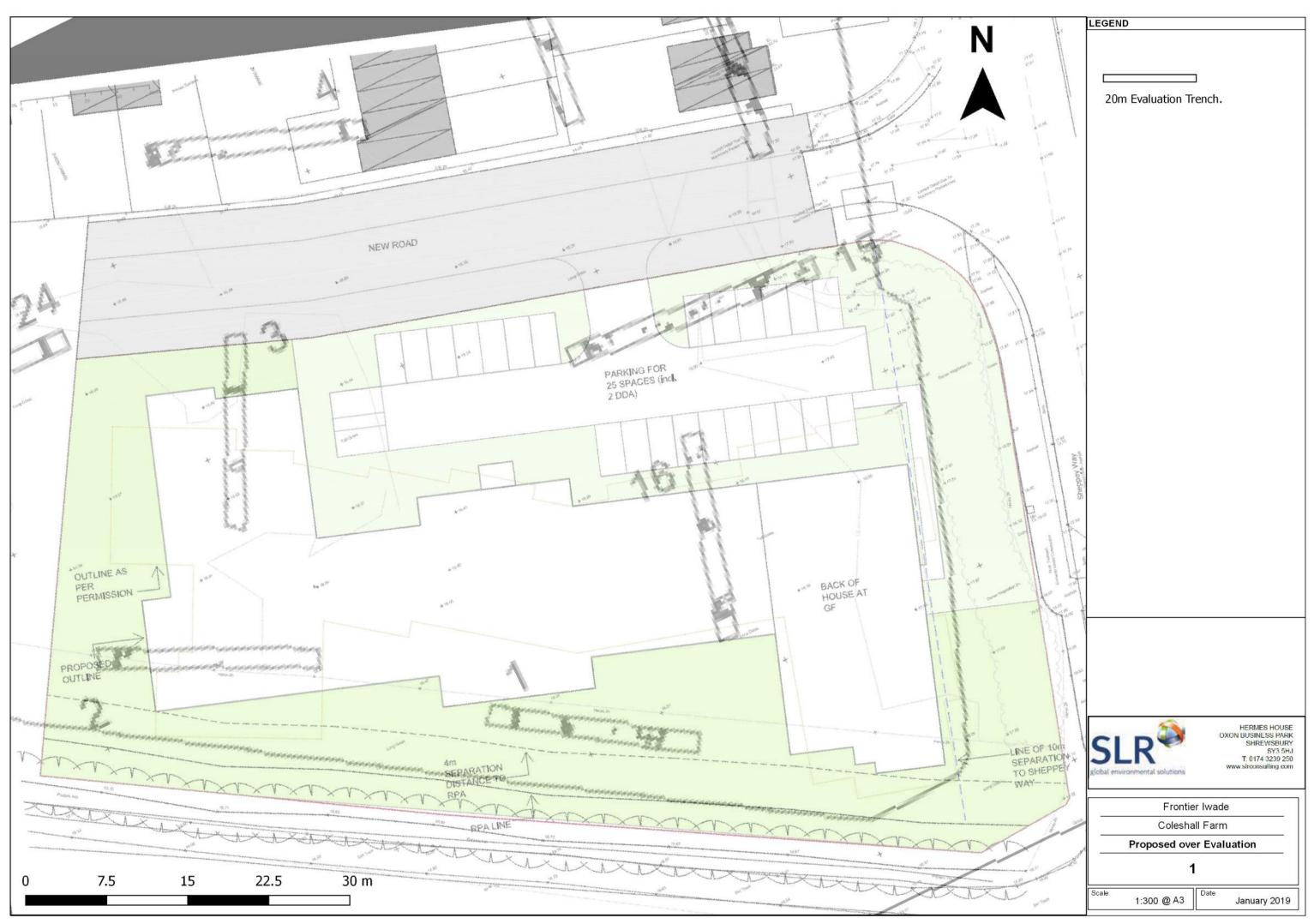


ΞY		BUILDING OUTLINE						
	Site Boundary		Ground Floor of Building					
RDWOF	RKS	FURNITUR	E AND FEATURES					
7	Proposed Vehicle Asphalt Concrete Refer to Engineer's Specification & Details		Proposed Cycle Stands Total Cycle Stands: 6nr To Architects Details					
	Proposed Pedestrian Asphalt Refer to Engineer's Specification & Details		<b>Proposed Granite Sphere Water Feature</b> Product: Primrose Polished Drilled Granite Sphere Water Feature Size: 400mm Ø with grey rounded beach pebbles					
	Proposed Permeable Block Paving Refer to Engineer's Details	0	<b>Proposed Timber Tree Seat</b> Product: Woodscape Halo Tree Seat (with backrest) or similar approv Size: 2400mm Diameter					
	Proposed Tobermore Textured Concrete Flags Or Similar Size: 400 x 400 x 50mm Colour: Buff		<b>Proposed Circular Seat</b> Product: Woodscape Clifton Bench With Backrest or Similar Size: 2500 x 450 x 500mm					
BP	<b>Proposed Blister Paving</b> Product: Tobermore Tactile Flags Sizes: 2x rows of 400x400mm or similar		<b>Proposed Circular Seat</b> Product: Woodscape Inline Back Rest Seat With Arm Rests or similar approved Size: 1715mm					
	Proposed 1800mm Metal Bow Top Fencing To Architects Specification		<b>Proposed Tree Grille</b> Product: Broxap Lea Tree Grille BX1238 or similar approved					
	Proposed 1200mm Metal Railing Fence To Architects Specification		Proposed Shade Sail Overhead Canopy Product: Solent Sail Shades or similar approved					
	Proposed 500mm High Timber Birds Mouth Railings or similar approved		Proposed GRP Raised Planter					
]	Proposed Single and Double Gates: Gates to match adjoining fence type	Q	Proposed Timber Picnic Bench					
	KS	SHED	Proposed Shed					
	Proposed Extra Heavy Standard Tree Planting	P <b>*</b>	Proposed Log Pile					
$\overline{\cdot}$	Proposed Fruit Tree Planting	НВ	Proposed Hedgehog Box					
	Proposed Native Hedging	BF	Proposed Bird Feeders					
	Proposed Mixed Shrub & Herbaceous Planting	LB	Proposed Broxap Centurion Dome Illuminated Bollard Product: BX46 7006-RT or similar approved					
	Proposed Amenity Grass Areas Mix: Emorsgate EL1 Flowering Lawn Mix Sown At 4g/m <sup>2</sup> or similar approved							

P04 CL AC 02/19 Fencing around perimeter of bog garden added P03 CL AC 02/19 Amendments Made To The General Layout P02 CL AC 02/19 Site Layout Updated In South East Corner P01 CL AC 01/19 First Issue Revision By Chk'd By Date Comments SAILORS BETHEL HORATIO STREET NEWCASTLE UPON TYNE TYNE AND WEAR. NE1 2PE T: 0191 261 1966 F: 0191 230 2346 CI D 💐 JLN global environmental solutions www.slrconsulting.com Site IWADE LANDSCAPE ASSESSMENT Drawing Title GENERAL ARRANGEMENT PLAN Date JANUARY 2019 Scale 1:200 @ A1



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# Appendix 1



## MITIGATION – STRIP, MAP AND SAMPLE REQUIREMENTS

### 1. Introduction

- 1.1 A key objective of field archaeology is to see how sites and features relate to each other spatially and chronologically the dynamics of settlement evolution. At one level it is about sites and features and their immediate surroundings but it can be about the wider use of the landscape. Accordingly in undertaking archaeological investigations of more extensive sites it is important to relate site-specific work to a broader context. Here Strip, Map and Sample archaeological excavation is a key tool.
- 1.2 In Strip, Map and Sample a major focus of the investigation will be on removing the overburden and establishing a phased plan of the archaeology which has been revealed, with further work then being based on an appreciation of this complete plan rather than on those more limited insights revealed from trial trenching and limited area excavation. The overall phased plan is paramount and subsequent sampling will be targeted to answering questions about the chronology and function of the component elements of the site and how they relate to each other. Relatively blank areas may also be significant.
- 1.3 Key stages in Strip, Map and Sample, all to be agreed with the curator, are:
  - The careful stripping of the site to the agreed level, in order to reveal the site plan.
  - Immediate planning of the site while the uncovered surface is fresh. The site should be regularly checked subsequently to see if weathering reveals further features and the plan updated.
  - Following planning, sampling should proceed. Initially this is likely to concentrate on establishing a relative chronology through the investigation of feature intersections. Secondly an attempt should be made to establish a more precise chronology.
  - Key areas and nodes should then be investigated in sufficient detail to understand them both in respect of themselves and also in relation to their surroundings.
  - Additional work should be focused on adding to the spatial, chronological, functional and environmental context of the investigated area.
- 1.4 Excavation should be an iterative process relating to an agreed strategy which will be refined as new information emerges. At all stages of the investigation it is essential that an overall phase plan is maintained, incorporating what is being revealed through excavation.

### 2. General Requirements

- 2.1 Strip, Map and Sample archaeological excavation will be carried out by archaeological organisations (from here on referred to as 'the Archaeological Contractor') acceptable to the relevant Local Planning Authority, with recognised experience and expertise in the specified type of work to be undertaken. Registration with the Institute of Field Archaeologists (IFA) as a Registered Archaeological Organisation (RAO) will normally be considered as an indicator, but not a prerequisite, of such expertise and experience. A good working knowledge of the archaeology of Kent will also be considered necessary.
- 2.2 Prior to any work being undertaken in Kent, the Archaeological Contractor will

inform the County Archaeologist and communicate details of the proposed team, including (if required) CVs for senior staff and specialists. Such staff will be able to demonstrate an appropriate level of experience and expertise and should preferably, where appropriate, be Members of the Institute of Field Archaeologists (IFA).

- 2.3 Prior to undertaking the Strip, Map and Sample the Archaeological Contractor will demonstrate that appropriate provision has been made for the resources needed to undertake the work, through to and completion of reporting. The Archaeological Contractor will have available appropriate specialists necessary to support the successful completion of the archaeological fieldwork and post excavation work.
- 2.4 During fieldwork, the Archaeological Contractor will be represented on site at all times by a member of staff with the required level of experience and who will be responsible for the conduct of on-site work.

## **3. Pre-fieldwork Requirements**

- 3.1 Prior to undertaking the investigation the Archaeological Contractor will have gathered and considered the following information:
  - Relevant information on the Kent County Council Historic Environment Record (HER) maintained by the Heritage Conservation Team;
  - Any earlier reports of fieldwork relevant to the site;
  - Solid and drift geology;
  - Geotechnical site investigation data (if available);
  - Any desk based studies of the site.
- 3.2 In certain circumstances the following will also be considered:
  - Relevant published secondary documentary sources;
  - Relevant historic maps held at the Centre for Kentish Studies, Maidstone;
  - Aerial photographs where cropmarks are considered to indicate archaeology on or close to the site.
- 3.3 The Archaeological Contractor will ensure that all reasonable measures have been taken to identify any constraints to undertaking the investigation. The Archaeological Contractor will seek information on the presence of services, any ecological constraints, the presence of Public Rights of Way, the presence of contaminated land or any other risks to health and safety.
- 3.4 The Archaeological Contractor will make provisional arrangements for the deposition of the site archive with an appropriate museum or suitable repository agreed with the County Archaeologist. The Archaeological Contractor will obtain a provisional accession number for the site archive from the recipient museum (except where the museum prefers to issue an accession number following completion of fieldwork) and any guidelines from the recipient museum regarding deposition of the site archive.
- 3.5 Full copies of the Specification must be issued to the field officer responsible for onsite work and a copy of the agreed Specification and any additional method statements must be available on site at all times. The team carrying out the investigation must be familiar with the Specification and have access on site to any previous evaluation or

survey reports.

3.6 The Archaeological Contractor will inform the County Archaeologist of their appointment, the start date (at least two working weeks before) and arrange for monitoring visits to be undertaken, using the Site Fieldwork Notification Form (see Appendix II). The Archaeological Contractor will continue to keep the County Archaeologist informed of the progress of work and will notify the County Archaeologist immediately if particularly important archaeological remains are encountered.

### 4. Objective

- 4.1 The objective of the archaeological mitigation is to identify, excavate, record and analyse any significant archaeological remains that will be disturbed by the proposed development. The physical archaeological remains will be replaced by a detailed record and a better understanding of the past activities that have taken place on the site, thereby contributing to an increased knowledge of Kent's past and providing a resource for future research and education.
- 4.2 The objective of the Strip, Map and Sample approach is to understand the broad pattern of settlement dynamics and how key elements of the archaeological landscape (sites, activities, deposits and finds) relate to each other spatially, functionally and chronologically.
- 4.3 Strip, Map and Sample will seek to :
  - Establish a broad phased plan of the archaeology revealed following the stripping of the site;
  - Provide a refined chronology of the archaeological phasing;
  - Investigate the function of structural remains and the activities taking place within and close to the site.
- 4.4 The archaeological investigation will seek to understand the context of the findings in relationship to the wider settlement pattern, landscape, economy and environment.
- 4.5 Specific aims are detailed in Part A of this specification.

## 5. Scope of Strip, Map and Sample Archaeological Excavation

- 5.1 The site area subject to Strip, Map and Sample, as set out in Part A of this specification will be machine-stripped of overburden and mapped and then archaeologically investigated following an agreed sample excavation strategy. Any amendment to the area proposed for stripping due to on-site constraints must be agreed with the County Archaeologist in advance of the work being undertaken.
- 5.2 Particular issues that will be addressed during the course of the Strip, Map and Sample archaeological excavation are set out in Part A of this specification.

### 6. Machine Stripping

- 6.1 All machine stripping of overburden soils will be carried out under constant archaeological direction by a suitably experienced archaeologist familiar with the ground conditions anticipated on the investigation site.
- 6.2 A mechanical excavator using a large flat bladed, toothless, bucket of no less than 1.8mwidth will carry out machine stripping of overburden soils. The machine stripping will be carried out by one or more large 360<sup>o</sup> tracked excavators working back from one or several fronts.
- 6.3 No mechanical excavators, earthmoving and other vehicles will travel on the freshly stripped subsoil surface and any identified areas of archaeological investigation until these areas have been signed off by the County Archaeologist or specific agreement has been reached to enable re-stripping.
- 6.4 Care will be taken to avoid damage to buried surfaces by manoeuvring of plant on unstripped areas of the site. The supervising archaeologist will monitor the effects of plant manoeuvring on the site and will suspend operations that are potentially damaging to underlying archaeological deposits.
- 6.5 The excavation by machine is to be taken down to the top of the archaeological level or to the top of 'natural' subsoil where no archaeological deposits are found at a higher level. Care will be taken not to damage archaeological deposits through excessive use of mechanical excavation. Machine excavation from the surface must be taken down in spits of no more than 100mm thickness to ensure that deposits and features are not over-excavated and that any artefacts/biological evidence in the soil are recorded.
- 6.6 The Archaeological Contractor will maintain a constant watch and regularly closely inspect exposed surfaces during the course of machining. If archaeological remains are found to be present cutting through soils (e.g. colluvium) which conceal lower archaeological horizons then the upper levels will be mapped and investigated prior to removal of deposits overlying the lower levels.
- 6.7 Topsoil and subsoil and fills from archaeological features will be removed from the excavation area and stored in areas agreed with the developer and the County Archaeologist (where appropriate). Spoil heaps will be set back at least 1 metre from the edge of excavation areas.
- 6.8 Machine-excavated deposits and the exposed surface will be regularly scanned for the presence and collection of artefacts. Exposed surfaces and excavated spoil will be regularly scanned by metal detector.
- 6.9 The supervising archaeologist will ensure that the machine exposed surface has been left in a clean state suitable for the proper identification of archaeological features. If following the stripping, there remain any areas where it is not clear that archaeological features have been adequately exposed or defined these will be hand cleaned to further define the archaeology.

- 6.10 Mechanical excavators will not be used to re-clean areas of excavation that have been obscured through weathering. Such areas will be cleaned by hand tools.
- 6.11 Measures will be taken to protect particularly significant, valuable or sensitive archaeological remains from exposure, accidental damage and / or theft.

### 7. Mapping

- 7.1 A site grid is to be established, using an EDM or theodolite, and this tied into the Ordnance Survey National Grid at the outset of the project.
- 7.2 On completion of, or during, machine-stripping, the resultant surface will be accurately planned at an appropriate scale (1:50 or 1:100 dependent upon complexity). Some hand-cleaning may be necessary to clarify features, particularly in areas of complexity, but generally it is hoped that a sufficiently clear surface can be gained from machine stripping.
- 7.3 The archaeological team is to be structured to ensure that the hand-cleaning and planning operations run in close sequence. The exposing and planning of archaeological features is to be undertaken on the same or consecutive days while the uncovered surface is fresh, whether or not those features are exposed by machine or handcleaning. Where particularly vulnerable deposits are apparent such as graves or cremations these will be given special priority.
- 7.4 The exposed surface will be regularly monitored during the course of the investigation to identify any further features that may appear due to weathering. Any additional features revealed will be added to the overall pre-excavation site plan.
- 7.5 Use will be made of spray line paint marker to record the unexcavated form of features prior to mapping.
- 7.6 Where initial plan data for a stripped site is captured electronically, through use of EDM, Total Stations, theodolite or GPS, the Archaeological Contractor will ensure that sufficient points are taken on any feature to provide a true reflection of its form in plan. A print out of the plan will be checked for accuracy on site.
- 7.7 In addition to capturing plan data, sufficient levels will be taken across the stripped surface to support future topographic modelling of the investigation site.
- 7.8 An overall plan of the stripped site will be prepared and provided to the County Archaeologist within one week of the completion of machine stripping. The plan is an essential pre-requisite of agreeing a suitable sampling strategy for the exposed archaeology.

### 8. Investigation and Sampling Strategy

8.1 The excavation strategy will be agreed with the County Archaeologist following a site meeting on the completion of machine stripping and provision of a suitable site mapping plan. A written record of the agreed strategy should be provided by the Archaeological

Contractor to the County Archaeologist within one week of agreement.

- 8.2 The revealed features will be excavated and recorded in accordance with the agreed excavation sampling strategy. The sampling strategy will continue to be developed throughout the investigation period in consultation with the County Archaeologist in light of the results of the field work. The excavation will include initially as a minimum:
  - The investigation of the intersections of features of archaeological date to obtain a phasing of the site;
  - A robust spatial framework of excavation to provide an understanding of the spatial distribution of past activities across the investigation area including any 'special' deposits and any patterning in artefact distribution. Such a framework will take into account the inter-relationship of major features.
  - Structural remains and other areas of significant and specific activity (domestic, industrial, religious, hearths, 'special'/ patterned deposits etc) will be fully excavated and recorded.
  - Where appropriate, for instance where the stratigraphy is complex, single context planning will be used.
  - Non-structural linear cut features will be sample excavated and recorded with a sufficient number of sections to establish the feature's character, date and morphology and to provide information on activities taking place in close proximity to the feature. All terminal ends will be investigated. Sections will normally be at least 1m wide.
  - Non-structural pits will be half-sectioned unless the character, number or size of the pits makes this unpractical. For instance, if a pit contains several intersections and re-cuts, it would not always be appropriate to half-section it. In this situation, the Archaeological Contractor will consider 'quadranting' or single context planning. Equally if 'special' deposits are expected pits may need to be excavated in plan rather than being half-sectioned. The strategy will need to be agreed with the County Archaeologist.
  - Non-structural post and stake-holes will be half-sectioned sufficiently to clarify character, relationships and chronology.
  - All burial deposits and associated remains will be fully excavated and recorded in accordance with an agreed methodology (see below).
- 8.3 The sampling excavation strategy will be reviewed continuously throughout the course of fieldwork and, if necessary, amended in order to take account of changing circumstances and understanding. Any changes or amendments will be agreed in advance of implementation with the County Archaeologist.
- 8.4 Where insufficient dating material or information has been gathered from a partially or half-sectioned feature, further sampling will be undertaken unless agreed otherwise with the County Archaeologist.
- 8.5 Archaeological features will be hand cleaned prior to excavation to provide a more accurate dimension than was obtained through the initial mapping. For linear features such hand cleaning will be targeted at sample excavation points.

### **Burial Remains**

- 8.6 Inhumation and cremation burials will be fully excavated by hand within 24 hours of exposure unless otherwise agreed with the County Archaeologist.
- 8.7 The Archaeological Contractor will put in place arrangements to ensure the security, protection from deterioration and damage, and the respectful treatment of human remains and burial goods.
- 8.8 Where burial remains are expected the Archaeological Contractor will submit to and agree with the County Archaeologist detailed procedures for the excavation and recording of inhumation and cremation burials.
- 8.9 The Archaeological Contractor will have available within the team or on call an appropriately qualified and experienced osteoarchaeologist to supervise the excavation and removal of human remains from the site. The Archaeological Contractor will use an appropriately qualified and experienced archaeological conservator to assist where appropriate in the lifting of human remains and grave goods / cremation vessels.
- 8.10 In the event that human burials are discovered, a Ministry of Justice Licence will be required (in accordance with Section 25 of the Burial Act 1857) before the remains can be lifted. The need for a Ministry of Justice Licence applies to both inhumation and cremated remains. Application for a Licence will be made by the Archaeological Contractor. The Archaeological Contractor is to comply with the conditions of the Licence and discuss any requirements of that Licence which conflict with the agreed method of investigation with the County Archaeologist.

#### 9. Finds recovery processing and treatment

- 9.1 All artefacts recovered during the excavations on the site are the property of the Landowner. They are to be suitably bagged, boxed and marked in accordance with the United Kingdom Institute for Conservation, *Conservation Guidelines no.2* and on completion of the archaeological post-excavation programme the landowner will arrange for them to be deposited in a museum or similar repository agreed with the County Archaeologist and the Local Planning Authority.
- 9.2 Artefacts will be excavated carefully by hand. The Archaeological Contractor will use an appropriately qualified and experienced archaeological conservator to assist where appropriate in the lifting of fragile finds of significance and / or value.
- 9.3 Artefacts will be collected and bagged by archaeological context. The location of special finds will be recorded in three dimensions. Three-dimensional recording of insitu flint working deposits will be carried out.
- 9.4 Where appropriate to address the research objectives of the archaeological investigation, sieving of deposits will be undertaken to maximise recovery of small artefacts. A strategy for such sieving will be agreed in advance with the County Archaeologist.

- 9.5 Records of artefact assemblages will clearly state how they have been recovered, subsampled and processed.
- 9.6 Excavated artefacts will be bagged upon recovery or placed in finds trays. They must not be left loose on site.
- 9.7 **Treatment of treasure -** Finds, discovered by the Archaeological Contractor, falling under the statutory definition of Treasure (as defined by the Treasure Act of 1996 and its revision of 2002) will be reported immediately to the relevant Coroner's Office, the Kent Finds Liaison Officer (FLO) who is the designated treasure co-ordinator for Kent, the landowner and the County Archaeologist. A Treasure Receipt (obtainable from either the FLO or the DCMS website) must be completed and a report submitted to the Coroner's Office and the FLO within 14 days of understanding the find is Treasure. Failure to report within 14 days is a criminal offence. The Treasure Receipt and Report must include the date and circumstances of the discovery, the identity of the finder (put as unit/contractor) and (as exactly as possible) the location of the find.
- 9.8 Finds processing will normally be carried out during the course of the archaeological fieldwork and provisional spot dating fed back to inform investigation strategy.
- 9.9 All metal objects, other than late post medieval objects, will be X-rayed unless otherwise agreed with the County Archaeologist.

### **10.** Archaeological Science and Environmental Sampling

- 10.1 An appropriate and structured programme of environmental sampling will be implemented. The strategy and methodology for the sampling, recording, processing, assessment, analysis and reporting of deposits with environmental archaeology potential will be in accordance with English Heritage Centre for Archaeology Guidelines "Environmental Archaeology A guide to the theory and practice of methods, from sampling and recovery to post-excavation" March 2002. Any variation to this guidance will be agreed in advance with both the County Archaeologist and the English Heritage Regional Scientific Advisor. Particular note will be taken of the following requirements.
- 10.2 The Archaeological Contractor will use an appropriately qualified and experienced geoarchaeologist to record any deposits of particular significance such as buried soils or advise on depositional processes.
- 10.3 An appropriately qualified and experienced environmental archaeologist will devise and supervise the implementation of the environmental sampling strategy.
- 10.4 The advice of the English Heritage Regional Scientific Advisor is to be sought regarding specialist sampling requirements and any scientific applications relevant to the archaeological investigation of this site.
- 10.5 Where deposits are dry, bulk samples for the recovery of charred plant remains, small bones and finds, will be taken from sealed and datable features such as pits, ditches, hearths and floors. Each context will normally be sampled. The size of the sample is expected to be in the range of 40-60 litres per context or 100% of smaller contexts.

Samples will not be taken from the intersection of features.

- 10.6 For large features / spreads appropriate consideration will be given to sampling on a grid system.
- 10.7 Where good conditions for the preservation of bone have been identified, all large bones will be collected by hand and sieving of bulk samples up to 100 litres will be undertaken as appropriate.
- 10.8 Mollusc samples of 2 litres each will be taken vertically from appropriate sections to investigate the changes of vegetation through time.
- 10.9 Where deposits are wet, waterlogged or peaty, monoliths will be taken along cleaned vertical surfaces for the retrieval of pollen, diatoms, ostracods and foraminifera. The numbers to be taken will be agreed with the County Archaeologist.
- 10.10 For wet, waterlogged or peaty deposits, bulk samples of 20 litres will be taken from visible layers or spits for the retrieval of plant macro-remains and insects.
- 10.11 Environmental samples from dry deposits will normally be processed by flotation during the course of the archaeological fieldwork and the residues will be sorted to retrieve small bones, small finds and charcoal that has not floated. Environmental samples from wet deposits will normally be sent to specialists for processing in laboratory conditions. Provisional results should be fed back to the on site team to inform subsequent investigation strategy.
- 10.12 The Archaeological Contractor will make appropriate provision for the application of scientific dating techniques such as radiocarbon, dendrochronology, archaeomagnetic dating, OSL and thermoluminescence dating. The advice of the English heritage regional Scientific Advisor will be sought in advance of the application of these techniques.
- 10.13 Where appropriate the guidance in the following English Heritage papers will be followed:
  - "Guidelines on the recording, sampling, conservation, and curation of waterlogged wood" 1996
  - "Dendrochronology guidelines on producing and interpreting dendrochronological dates" 1997
  - "Archaeometallurgy" 2001
  - "Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation" 2002
  - "Human bones from Archaeological Sites: Guidelines for Producing Assessment Documents and Analytical Reports" 2004
  - "Geoarchaeology" 2004
  - "Wet Wood and Leather"
  - "Archaeomagnetic Dating: Guidelines on producing and interpreting archaeomagnetic dates" 2006
  - "Guidelines on the X-radiography of archaeological metalwork" 2006

### 11. Recording

- 11.1 All features, deposits and finds are to be recorded according to accepted professional standards.
- 11.2 All archaeological contexts are to be recorded individually on context record sheets. A further more general record of the work comprising a description and discussion of the archaeology is to be maintained as appropriate. Context sheets are to be primarily filled in by the archaeologist excavating the feature or deposit.
- 11.3 A plan to indicate the location of the boundaries of the excavated area and the site grid is to be drawn at a scale of 1:1250 (or a similar appropriate scale). Sections will be drawn at a scale of 1:10. Significant archaeological features will normally be drawn in plan at a scale of 1:20 or 1:10 if appropriate. All detailed plans and sections are to be related to the 1:100 plan (see 7.2 above). The 1:1250 and 1:100 plans are to be related accurately to the National Grid.
- 11.4 All plans and sections are to be levelled with respect to OD.
- 11.5 All plans and sections are to be drawn on polyester based drafting film and clearly labelled.
- 11.6 A full black and white and colour (35mm transparency) photographic record of the work is to be kept. The photographic record is to be regarded as part of the site archive.
- 11.7 The Archaeological Contractor will keep a day to day digital photographic record of the investigation. Consideration will be given to maintaining a video record of key features, findings and operations during the fieldwork
- 11.8 The Archaeological Contractor will ensure that the complete site archive including finds and environmental samples are kept in a secure place throughout the period of excavation and post excavation works.
- 11.9 The site archive is to be consolidated after completion of the whole project, with all site drawings inked-in, and records and finds collated and ordered as a permanent record.

#### **12.** Completion of fieldwork

- 12.1 On completion of fieldwork the site will be left in a safe state and in accordance with the requirements of the landowner / client.
- 12.2 On completion of fieldwork the Archaeological Contractor will complete the relevant section of the Fieldwork Notification Form and submit to the County Archaeologist.

### 13. Reporting

13.1 Within 4 weeks of completion of the work on site, the Archaeological Contractor will carry out an initial assessment of the results and produce an **Interim Report**. This will comprise a basic description of the archaeology and a plan at an appropriate scale (e.g.

1:500), one copy of which will be provided to:

- the County Archaeologist,
- the site developer
- the Local Planning Authority.
- Local Archaeological Society
- 13.2 Within 3 months of completion of the work on the site the Archaeological Contractor will carry out an assessment of the results and produce a MAP2 '**Post-excavation Assessment Report**', copies of which are to be provided as in 13.1 above. An additional copy will be provided to the English Heritage Regional Scientific Advisor. This report will include a '**Proposal'** to be agreed with the County Archaeologist that sets out a programme of post excavation analysis through to completion of a '**Full Report**' and '**Publication**' of the findings.
- 13.3 The Archaeological Contractor may determine the general style and format of the **'Post-excavation Assessment Report'** and the **'Full Report'** but they must be completed in accordance with this specification. The reports must provide sufficient information and assessment to stand as a detailed report on the archaeological fieldwork for future research and to inform on further stages of the post excavation programme.
- 13.4 Reports that do not provide sufficient information or that have not been compiled in accordance with the relevant sections of this specification will be returned to the Archaeological Contractor for revision and resubmission.
- 13.5 The **Post Excavation Assessment Report** is to include as a minimum:
- 13.5.1 An Abstract summarising the scope and results of the archaeological investigation.
- 13.5.2 An Introduction including:
  - the location of the site including a National Grid Reference for the centre sufficient to locate the site to 1m accuracy (e.g. TQ 55555 77777 or easting: 555555, northing: 177777);
  - an account of the background and circumstances of the work;
  - a description of the development proposals, planning history and planning reference together with the planning condition (where appropriate);
  - the nature of potential impacts arising from the proposals;
  - the scope and date of the fieldwork, the personnel involved and who commissioned it;
- 13.5.3 An account of the Archaeological Background of the development site including:
  - geology, soils and topography;
  - any known existing disturbances on the site;
  - background archaeological potential of the site. This will include a summary of the known Historic Environment Record entries within 500m of the boundaries of the site (or wider where appropriate). The HER entries should be quoted with their full KHER identifier (e.g. TR 36 NW 12);

- summary of any previous phases of archaeological investigation at the development site;
- any constraints on the archaeological investigation.
- 13.5.4 The **Methodology** employed during the investigation must be detailed in the report. Simply referring to the methodology outlined in the specification is not acceptable. Any aims and objectives specified in the specification will be included, as will any further objectives identified during the course of the investigation.
- 13.5.5 The report will include a quantification of the archive contents, their state and future location.
- 13.5.6 A description of the **Results** of the archaeological investigation. This description must include:
  - the nature and depth of overburden soils encountered;
  - a description of the geological subsoil encountered across the site;
  - description of all archaeological features and finds encountered, their dimensions, states of preservation and interpretation;
  - heights related to Ordnance Datum will be provided for each feature and deposit.
  - For complex remains a Harris Matrix diagram will be provided
- 13.5.7 The **Finds** recovered during the course of the investigation will be described, quantified and assessed by artefact type within the report. The report will also indicate the potential of each category of artefact for further analysis and research. For each category of artefact the report will describe the method of processing, any sub-sampling, conservation and assessment undertaken. Where appropriate local reference collections will be referred to for descriptive and analytical consistency. Any implications for future archive, conservation or discard of the artefacts will also be detailed.
- 13.5.8 The report will include a table showing the contexts, classes and quantity of artefacts recovered, together with their date and interpretation.
- 13.5.9 The report will include an assessment of the **Environmental** potential of the site. Details will be provided of any environmental sampling undertaken in connection with the fieldwork and the results of any processing and assessment of the samples. The report will describe the method of processing, any sub-sampling and assessment. Any potential for future analysis of the samples or environmental remains recovered from the investigation will be described. Implications for future archive, conservation or discard of environmental samples or remains will be detailed.
- 13.5.10 The report will include, as appropriate, tables summarising environmental samples taken, together with the results of processing and assessment.
- 13.5.11 Any results from the application of archaeological scientific techniques e.g. specialist dating will be included in the assessment report.
- 13.5.12 An **Interpretation** of the archaeology of the site. This will be a synthesis of the stratigraphic, finds and environmental results of the investigation and a consideration

of the site in its wider context as appropriate. This section will be supported by a phased interpretative plan of the site, clearly showing the major areas and periods of archaeological activity.

- 13.5.13 The report will include an assessment of the results of the archaeological investigations and their potential to address both the original research aims and objectives of the project and any further research objectives identified during the course of the on-site and post excavation works.
- 13.5.14 The report will include a detailed proposal for any further analysis necessary on the project records, artefact and environmental assemblages to achieve the research potential of the site. A justification will be included for each analysis proposed.
- 13.5.15 The proposal will set out a timetable for completion of analysis and reporting, detailing all individual tasks to be completed, resources required and the key personnel involved. The proposal will set out arrangements for monitoring of the post excavation process.
- 13.5.16 The report will include a synopsis of the proposed '**Full Report**' and '**Publication**' and identify the likely destination of the publication.
- 13.5.17 Figures as a minimum the assessment report will include the following figures:
  - a site location plan tied into the Ordnance Survey at 1:1250 or in the case of larger sites at 1:2500. The plan will also include at least two National Grid points and show the site boundary;
  - a plan at 1:1250, or a scale to be agreed with the County Archaeologist, showing the layout of the development groundworks clearly indicating the areas investigated. The plan will show significant archaeological features, coloured by phases or period as related to the development site. This plan will also include two National grid points;
  - plans of the features revealed in each of the investigation areas at a larger scale e.g. 1:20 or 1:50; such plans are to also illustrate areas of disturbance, change in subsoil and location of sections; The location of significant finds and samples taken will also be indicated;
  - relevant section drawings and soil trench profiles as appropriate;
  - illustrations and/or photographs of significant finds will be included where appropriate.
- 13.5.18 All report illustrations must be fully captioned and scale drawings must include a bar scale. Standard archaeological drawing conventions must be used. Plan and section illustrations must include the numbers of all contexts illustrated. North must be included on all plans. Sections must indicate the orientation of the section and the Ordnance Datum height of the section datum.
- 13.5.19 Black & White or Colour photographs will be included to illustrate the archaeology of the site, the development operations or the range of soil profiles encountered. All photographs will be appropriately captioned.
- 13.6 The report will be submitted to the County Archaeologist in a heat-bound hard-copy and in digital format. The digital copy will be supplied in .pdf format and will contain all text, images and plans present in the hard-copy report in a single .pdf file. The

medium should be a CD-ROM formatted according to ISO 9660:1999.

13.7 **Full Report and Publication** – Following submission of the Assessment Report and proposal for analysis and publication, the Archaeological Contractor will discuss and agree with the County Archaeologist the scope of the Full Report and the format and destination of subsequent publication(s) arising from excavation and post-excavation work on the site. The Archaeological Contractor will be expected to produce a paper suitable for publication within 18 months of completion of work on the site.

### 14. Archive Preparation & Deposition

14.1 The site archive, to include all project records and cultural material produced by the project, is to be prepared in accordance with *Guidelines for the preparation of excavation archives for long-term storage (UKIC 1990)*. On completion of the project the Archaeological Contractor will arrange for the archive to be deposited in accordance with the provisional arrangements made with a suitable museum or repository at the onset of fieldwork. Any alternative arrangements will be agreed with the County Archaeologist and the Local Planning Authority.

### 15 Monitoring and Liaison

- 15.1 The Archaeological Contractor is to allow the site records to be inspected and examined at any reasonable time, during or after the excavation, by the client/developer, the County Archaeologist or any designated representative of the Local Planning Authority
- 15.2 Once the site has been stripped and mapped and an initial assessment of the archaeology carried out, there will be an on-site meeting with the County Archaeologist to determine the scope of subsequent investigation.
- 15.3 The Archaeological Contractor will liaise closely with the County Archaeologist throughout the course of the investigation and will arrange for on-site meetings at key decision points.
- 15.4 The Archaeological Contractor is to make contact with the local archaeological society and keep them informed on the progress of the investigation. Subject to health and safety constraints the Archaeological Contractor will afford opportunity to the local archaeological society to visit the investigation site. Copies of all reports will be provided to the local archaeological society.
- 15.5 The Archaeological Contractor is to circulate a completed Fieldwork Notification Form (Appendix 2) at the start and completion of fieldwork and at the completion of post excavation reporting stages.

### **16.** Copyright and data protection

16.1 Information submitted to the County Archaeologist in conjunction with planning applications automatically becomes publicly accessible and can be viewed by anyone at any time. In addition, the Local Planning Authority and Kent County Council are subject to the requirements of the Freedom of Information Act (2000) and Environmental

Information Regulations (2004). Information may be subject to FoI or EIR requests and any documentation submitted in connection with the project may be made publicly available unless doing so contravenes the Data Protection Act (1998).

16.2 While copyright of reports and other information arising from the fieldwork remains with the originator, the Archaeological Contractor will undertake to make this information available to interested parties. The Archaeological Contractor will agree to allow reports of the fieldwork to be copied and made available to interested parties for archaeological research. The reports may be made available on the Internet no sooner than three months after the submission of the report. Archaeological Contractors who believe that there are special reasons for not publishing the report on the Internet should reach a separate agreement with the County Archaeologist.

### **17.** Health and Safety

- 17.1 The Archaeological Contractor will conduct the work in compliance with the Health and Safety at Work etc Act 1974. The Archaeological Contractor will also follow the guidance set out in "Health and Safety in Field Archaeology" Standing Conference of Archaeological Unit Managers 1997.
- 17.2 The Archaeological Contractor is expected to maintain a Health and Safety Policy and a procedures manual and have available appropriate expertise in Health and Safety advice. Site staff will have an appropriate level of training to enable them to carry out fieldwork safely.
- 17.3 The Archaeological Contractor will maintain the site in a safe condition. All hazards will be appropriately identified and managed. Deep excavations will be appropriately fenced.
- 17.4 The Archaeological Contractor will carry out a risk assessment prior to commencement of fieldwork and where appropriate a COSHH assessment. Risks and measures to reduce risk will be communicated to all working on and visiting the site.
- 17.5 The Archaeological Contractor will have available suitable site accommodation, welfare and toilet facilities.

### 18. General

- 18.1 In carrying out the work the Archaeological Contractor is to abide by:
  - all statutory provisions and by-laws relating to the work in question,
  - the Institute of Field Archaeologists *Code of Conduct*
  - the Institute of Field Archaeologists *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology.*

## 19. KCC HER

19.1 The Archaeological Contractor is to provide the Kent Historic Environment Record with copies of all reports in both heat-bound hardcopy and digital format (see 13.6 above).

- 19.2 Upon completion of the excavation the Archaeological Contractor will supply the Kent Historic Environment Record with a completed HER form (see Appendix 1)
- 19.3 The Archaeological Contractor will supply the Kent Historic Environment Record with the following digital datasets:
  - A .dxf file containing polygon data that describes in detail all excavated/ watched area boundaries, whether trenches, test pits, excavated areas or areas examined by watching brief. This .dxf file must be internally geo-referenced (i.e. the co-ordinate system used in the file must be the Ordnance Survey co-ordinate system).
  - A separate .dxf file that contains a number of Layers. Each Layer should represent a different phase of the archaeological remains on site. The name of each Layer must be the phase number used on the site accompanied by a date range (e.g. "2 from 2000 to –800", "7A from 410 to 700" etc). Each layer must contain only the features relevant to that phase digitized as polylines. Where the dating is based on scientific dating methods such as radiocarbon, the dates must be calibrated calendar dates.
- 19.4 A guidance document has been produced for Kent County Council that will inform contractors as to how this information can be produced within AutoCad. This document is available from the County Archaeologist and Kent County Council Historic Environment Record.
- 19.5.1 The Archaeological Contractor should also provide a representative selection of digital site photographs illustrating the archaeology of the site and the operations of the investigation. These will be in .jpg format at a minimum 300dpi. These will be deposited with the County HER and will be used for presentations on aspects of the archaeology of Kent.
- 19.6 It is to be understood that photographs and notes taken by KCC Archaeological Officers in connection with the work that do not identify individuals or site locations may be used by KCC for outreach and publicity purposes, including on social media sites such as Facebook, Twitter etc. The Archaeological Contractor should, **preferably in advance** of the works, raise with the KCC Archaeological Officer any concerns that they or their client may have over the use and dissemination of images or information for outreach purposes. In such cases the Archaeological Contractor and their client will agree a protocol with the KCC Archaeological Officer for the appropriate dissemination and use of images and information which balances the concerns of the contractor and/or client with the objective of ensuring that the people of Kent are kept informed of the archaeological discoveries in the county.

## KENT COUNTY COUNCIL

## APPENDIX 1 Kent Council HER summary form

Site Name:		
Site Address:		
Summary: (50 words max)		
District/Unitary:	Parish:	
District/Unitary: Period(s):	Parisii.	
NGR (centre of site : 8 figures (NB if large or linear site give		
Type of archaeological work (		
Evaluation:	Watching Brief	Field Walking
Documentary study	Building recording	Earthwork survey
Excavation:	Geophysical Survey	Field Survey
Geoarchaeological investigation		
Date of Recording:	, <b></b>	
Unit undertaking recording:		
Geology:		
Title and author of accompany	ring report:	
Summary of fieldwork results appropriate) (200 words max)	(begin with earliest period	first, add NGRs where
		(cont on attached sheet)
Location of archive/finds:		
Contact at Unit:	Date:	
	2 4001	

## APPENDIX 2 - FIELDWORK NOTIFICATION FORM

## **Guidance for Completing the Kent Archaeological Fieldwork Notification Form**

### **Purpose**

The purpose of the form is to improve the notification, tracking and monitoring of archaeological fieldwork in Kent. Its primary purpose relates to archaeological work being undertaken for the purposes of planning and development but it is hoped that it will be also used by archaeological societies and other bodies undertaking fieldwork in the county.

## **Approach**

- The archaeological body undertaking the fieldwork should fill in the form. Sections A and B should be filled in before fieldwork starts and submitted to the County Archaeologist. This may be submitted in digital copy to speed things along but a signed copy should follow in the post.
- Section A contains details of the project while Section B refers specifically to the onset of the phase of fieldwork. In signing section B the Archaeological Contractor is confirming that the necessary funds and resources to complete the works to the specification have been made available.
- The form should not be filled in separately for each period of an intermittent watching brief but should be filled in for major stages of fieldwork, for example separate phases of evaluation and excavation.
- Section C should be submitted at the completion of the fieldwork stage and should if known indicate whether further work is anticipated. This section sets out a brief summary of findings and what reports are to be submitted. For excavations these will include interim, assessment and full reports. Again the form may be submitted digitally with a signed copy to follow in the post. (The details of Sections A and B should remain filled in on the same form).
- Section D should be submitted as reports are submitted to the County Archaeologist. For excavations the form need not be submitted with interim reports but should be submitted with assessment and full reports.

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