



### Archaeological excavations at Neats Court, Queenborough, Isle of Sheppey, Kent 2008–2009

#### **SWAT.** Archaeology

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## SWALE AND THAMES ARCHAEOLOGICAL SURVEY COMPANY

# ARCHAEOLOGICAL EXCAVATIONS AT NEATSCOURT, QUEENBOROUGH, ISLE OF SHEPPEY, KENT

2008-2009

Emma Boast, David Britchfield, Nigel Macpherson-Grant, Geoff Morley and Paul Wilkinson

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Swale and Thames Archaeological Survey Company 2010

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Paul Wilkinson

**SWAT Archaeology** 

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#### **Summary**

Swale & Thames Archaeological Survey Company (SWAT) was contracted by BAM Nuttall to conduct an archaeological investigation associated with proposed remediation works at the Queenborough and Rushenden Regeneration site, Neatscourt, Isle of Sheppey in Kent (N.G.R TQ919 715). The excavation was conducted under the direction of Dr Paul Wilkinson (SWAT) between October 2008 and September 2009

Archaeological excavations carried out within the proposed development area confirmed the presence of a fragmented multiphase agrarian prehistoric settlement with substantial evidence to illustrate the presence of a buried domestic, industrial and ritual landscape within the proposed development area. Investigations also revealed the presence of ditches, drove-ways and large timber structures associated with Early Medieval settlement on high ground located between the River Swale and Minster Abbey.

This document forms an initial phase of post excavation assessment, following the submission of a draft report to the Archaeological Officer, Kent County Council.

#### 1 Introduction

#### 1.1 Project background

- 1.1.1 Swale & Thames Archaeological Survey Company (SWAT) was contracted by BAM Nuttall to conduct an archaeological investigation associated with proposed remediation works at the Queenborough and Rushenden Regeneration site, Neatscourt, Isle of Sheppey in Kent (N.G.R TQ919 715). The excavation was conducted under the direction of Dr Paul Wilkinson (SWAT) between October 2008 and September 2009 in accordance with requirements set out within an Archaeological Project Design (Oxford Archaeology 2007) and generic Archaeological Specification (Kent County Council 2007) and in discussion with the Heritage & Conservation team at Kent County Council (KCCHC).
- 1.1.2 This report details the final stages of archaeological mitigation, comprising a phased programme of archaeological work involving areas of strip, map and sample (SMS), along with the preservation of archaeological material *in situ* and stages of archaeological monitoring (for further details see Section 1.3 below). This mitigation was agreed in response to the results of a series of predetermination archaeological works, which identified several areas of archaeological interest within the proposed development area (PDA). This report forms the Archaeological Report associated with Post Excavation Works as set out in the Archaeological Project Design (Oxford Archaeology 2007:31).

#### 1.2 Planning background

- 1.2.1 Queenborough and Rushenden Regeneration forms part of the overall Swale Redevelopment Project. Current archaeological investigations are associated with two specific applications associated with the overall regeneration project: the Rushenden Relief Road (Planning Application Number SW/07/01) and Neatscourt Phase I (Planning Application Number (SW/06/1468).
- 1.2.2 To date, archaeological mitigation associated with the proposed development has comprised a series of investigation stages carried out prior to the commencement of any other work on site. These stages are summarised below:
- 1.2.3 **Stage 1: Cultural Heritage Assessment:** Stage 1 comprised a desk-based study, commissioned by Campbell Reith Hill Engineers Limited (on behalf of SEEDA) and

prepared by Oxford Archaeology (2005), forming part of a NATA Appraisal for the Queenborough and Rushenden Relief Road. Utilising both published and unpublished sources, as well as appropriate Historic Environmental Records (HER), the National Monuments Record (NMR), aerial photographs, cartographic references, geotechnical studies and project specific documentation, the assessment provided an impact assessment associated with the proposed development.

Conclusions: As part of the initial Stage 1 archaeological investigations, an archaeological desk top assessment was carried out in order to provide a non-intrusive insight into the archaeological potential in order to determine the potential impact the development would/may have on the archaeological resource. The Stage 1 study suggested that the marshland surrounding the proposed development area would have been subject to transgression and regression since the Neolithic (c. 4000 BC), rather than forming during the (assumed) medieval period. Such a dynamic landscape would have been exploited throughout the past 6000 years providing an environment suitable for organic preservation. Emphasis was placed on the potential for surviving prehistoric timbers, revetments, trackways, boats, fish traps (2005: 5.14.4), burial mounds (2005: 5.6) and later (Iron Age, Roman and medieval) salt extraction (2005: 5.14.5) within the sequence of lower lying alluvium associated with the central and western extents of the site. The study also concluded that on the higher ground directly to the north of the proposed relief road, evidence for prehistoric, Roman and medieval occupation had been recorded both on the Historic Environmental Records (Listed Buildings, Conservation Areas, Scheduled Monuments, etc.) and during recent archaeological excavations within the surrounding area (see Archaeological and historical background below).

An impact assessment incorporated within the study suggested that the proposed road scheme would have a Moderate adverse effect on the historical landscape where the 'overall effect is mainly influenced by the impacts to the setting of the Listed Buildings, Conservation Area and Scheduled Monument caused by increased traffic within Queenborough. All other impacts after mitigation are either negligible or slight adverse' (2005: 7.2.2).

1.2.4 **Stage 2: Geoarchaeological Test Pitting:** Stage 2 of the assessment was commissioned by Campbell Reith Hill Engineers Limited (on behalf of SEEDA) and prepared by Oxford Archaeology (2007a). This geoarchaeological assessment was designed in order to prepare a preliminary subsurface deposit model in order to

further inform on the potential archaeological and geoarchaeological potential of the proposed development area and thus provide appropriate project design for further evaluation.

Conclusions: Thirty three geotechnical test pits were excavated in order to gain an insight into the subsurface stratigraphic deposit model across the site. Results from the study illustrated that the Holocene sequence across the site comprised two phases of marine transgression (Alluvium I and Alluvium II) and one phase of regression. It is suggested the early phase of transgression dates to the Bronze Age (c. 1500BC) prior to which the landscape would have been relatively dry (2007a: 6.1.4). Test pits within the northern extent of the site provided evidence for buried soil horizons, along with the potential for a 'large Bronze Age settlement' sealed by early inundation of the site (Alluvium I) at a level between 1.98m AOD and 2.53m AOD. Later Roman and medieval archaeological deposits were recorded following the latter phase of transgression at a level between 2.80m AOD and 3.80m AOD (2007a: 7.1.1). The geoarchaeological assessment subsequently provided recommendations and a project design for further archaeological evaluation, comprising trial trenching.

1.2.5 **Stage 3: Archaeological Trial Trenching:** Stage 3 of the assessment comprised a 71 trench field evaluation commissioned by Campbell Reith Hill Engineers Limited (on behalf of SEEDA) and prepared by Oxford Archaeology (2007b). The results of the evaluation were to 'be used to assess possible impacts on the Cultural Heritage that may be caused by the proposed development, so that they can be minimised, or suitable mitigation measures adopted' (2007b: 2.1.2).

**Conclusions:** During the summer of 2007, the proposed development site was the subject of an archaeological evaluation. A total of 71 evaluation trenches were excavated encapsulating approximately 4260 square metres representing a 2% sample of the 20ha site. A detailed breakdown of archaeological finds and features associated with specific areas are provided in each associated results section below. A brief summary is provided herewith:

The archaeological evaluation recognised three areas of archaeological potential which included the area proposed for the construction of the Rushenden Relief Road (Areas 1 & 2, OA 2007; Fig. 17), the far eastern extent of the site and the low lying reclaimed marshland within the centre of the proposed development site (Area 4, 2007; Fig. 17). Remains encountered throughout the course of the evaluation included

prehistoric spot finds, three early Roman cremation burials and midden, along with a medieval (12<sup>th</sup>-13<sup>th</sup> century) cattle burial and ditch.

It was concluded that none of the features encountered were of national importance and a mitigation design was proposed comprising the removal of topsoil and 'limiting the extent and depth of excavation within the alluvial areas to the minimum possible' (2007:5). Mitigation methods adopted are discussed further within each associated section below. Approximately 50% of the features revealed within evaluation trenches were examined.

#### 1.3 Geology and topography of the site

1.3.1 For the sake of clarity and ease of reference, the site (Fig. 1.1) has been divided into six specific areas. Table 1.1 (below) provides a breakdown of these areas, which are shown on Figure 1.2.

Area	Description		
	Area A is located within the north western extents of the site and covers areas previously identified as Plots		
A	1A, 1Da, 1Db and 1E, along with the Rushenden relief road embankment and adjacent car park extension		
	(also referred to as the IMG site). See Section 2, this report.		
В	Area B incorporates areas previously identified as Plots 1B.1 and 1B.2. See Section 3, this report.		
C	Area C is located within Area B, focusing on an artificial mound. See Section 4, this report.		
D	Area D is defined by the extents of the area previously identified as Plot 1B.3. See Section 5, this report.		
Е	Area E comprises approximately half of the area previously identified as Plot C. See Section 6, this report.		
F	Area F consists of the remaining half of the area previously identified as Plot C. See Section 7, this report.		

Table 1.1: Site areas referred to in the text

- 1.3.2 Area A consisted of reclaimed marshland within the western extent of the site (Figure 2). Located directly adjacent to the Sheerness Railway Line and IMG site the undulated surface measured approximately 67,047 square metres in size at a level between 2.4m AOD and 3.5m AOD. According to recent geoarchaeological investigations the underlying geology comprised London Clay underlying a Holocene sequence consisting of Alluvium I, peat and Alluvium II (OA 2007a).
- 1.3.3 Located centrally within the proposed development site, Area B measured 104,531 square metres in size. Sloping gently from east to west from approximately 2.5m AOD to 3m AOD, this area consisted of reclaimed marsh and salt flats more recently used for pastoral grazing. A flood bank constructed in the 1960's dissected the northwest corner. Area C is located within Area B (see below). The stratigraphic deposit model within this area of the site comprised London Clay overlain by peat, Alluvium II and topsoil (2007a: Figure 3).

- 1.3.4 Area C was located within Area B. The extent of this area was determined by the presence of an artificial mound sealed by Alluvium II. This monument is described and discussed in detail below (see Section 4). Area C measured approximately 250 square metres.
- 1.3.5 Area D was located directly adjacent to Area B on higher ground rising from 3m AOD in the west to 6m AOD in the east. The stratigraphic deposit model within the area of the site, which measured approximately 51,345 square meters in size, consisted of topsoil directly overlaying natural London Clay. Prior to development, this area of the site was used for grazing.
- 1.3.6 Areas E and F were located on the higher ground with the far eastern extent of the site. These areas were relatively flat at a level of approximately 9m AOD (east) gently sloping to the west to a level of approximately 6m AOD. Area E measured approximately 29,905 square metres, while Area F measured approximately 24,579 square metres. The delineation of these two areas is marked by the density of archaeological deposits recorded in Area F (see below). As with Area D, the deposit model within both Area E and Area F comprised topsoil directly overlying natural London Clay.

#### 1.4 Archaeological and historical background

1.4.1 Extensive archaeological narratives for the proposed development site as well as archaeological investigations within surrounding area are provided by a variety of sources. On the whole, archaeological investigations associated with development are detailed within site specific reports, summaries of which are provided within a Cultural Heritage Assessment (2005) that formed Stage 1 of archaeological works associated with the Queenborough and Rushenden Regeneration Scheme, along with Stage 3 which detailed results from the archaeological evaluation (2007b). Detailed results obtained for the archaeological evaluation (Stage 3) are included in each relevant section below, along with results of archaeological excavations along the A249 Iwade Bypass to Queenborough Improvement, Isle of Sheppey (CgMs Consulting 2008), the Kingsferry Bridge to Queen borough Roundabout (Canterbury Archaeological Trust 1995) and during archaeological monitoring at Queenborough Water Treat Works (Wessex Archaeology Ltd., 1996 & 1999).

#### 1.5 Aims and objectives

1.5.1 The aims of the archaeological work are specified within the Archaeological Project Design and provided below for the sake of clarity:

1.5.2 'The aim of the archaeological work is to investigate and record the significant archaeological features, deposits and artefacts associated with prehistoric, Romano-British, medieval and post-medieval activities that will be adversely affected by the development and contribute significantly to our understanding of past human activities in the context of the historic landscape within the project area' (OA 2007c: 2.1.1).

#### 1.6 Archaeological Mitigation

1.6.1 Archaeological mitigation in advance and during the course of the proposed development was designed and detailed by Oxford Archaeology (2009) as approved by Kent County Council. A summary of the archaeological mitigation adopted for each area is provided in the relevant chapters below.

#### 1.7 Methodology

Area A

- 1.7.1 Archaeological mitigation within Area A (Fig. 2.1) comprised preservation in situ (deferred until detailed planning) within areas formally recognised as Plots 1A, 1Da, 1Db and 1E. That said, an intermittent watching brief was carried out during the removal of topsoil in accordance with the Archaeological Project Design.
- 1.7.2 The car park extension area was subject to an intensive (constant) watching brief during the removal of the topsoil, as was the area assigned to the Rushenden relief road project. In addition to the watching brief, however, an archaeological excavation of an area c. 0.75 ha in extent was required to further assess archaeological remains revealed during the archaeological evaluation (Trench 2, Trench 78 and Trench 79).

Areas B & C

- 1.7.3 Archaeological mitigation within Areas B & C (Fig. 3.1) comprised a watching brief during topsoil stripping for construction purposes within the area formally recognised as Plot 1B.2. A constant archaeological presence was maintained during the removal of topsoil within the eastern extent of Area B, whilst a more intermittent policy was adopted within the western extent of the area (2007: 10)
- 1.7.4 Within the northern extent of Area B a small strip, map and sample exercise was required in order to determine the presence or absence of archaeological features associated with those recorded on a previously excavated site, now beneath the existing A249 (Plot 1B.1). Constant archaeological monitoring was carried out during

the removal of topsoil and hardcore within this area. Potential archaeological features were then examined, as detailed below.

Area D, Area E & Area F

1.7.5 The whole of Areas D, E & F, formally known as Plot 1B.3 and Plot 1C (Fig. 5.1), was subject to a strip, map and sample exercise, as specified within the project design (2007:9). Topsoil was removed in strips of approximately 20m from the eastern extent of the site to the western boundary with Area B. It was considered unnecessary to excavate in alternate strips, as suggested in the project design.

#### 1.8 Project timetable, project management and staff structure

Team composition and organisation

- 1.8.1 The appointed archaeological contractor for this project was SWAT Archaeology, appointing freelance field archaeologists and sub-contracting archaeological units as required (see below). As a minimum, the Project Manager and Project Supervisors maintained a constant presence on site during the course of the archaeological fieldwork. Additional staff (see 2.1.2 and 2.1.3) were called upon as and when required, dependent on timescales/deadlines and the frequency of archaeological deposits encountered.
- 1.8.2 The core SWAT archaeological team were:
  - Project Director Paul Wilkinson (SWAT Archaeology)
  - Project Manager David Britchfield (Freelance Archaeologist)
  - Site Supervisor James Madden (Freelance Archaeologist)
  - Site Supervisor Emma Boast (Trust of Thanet Archaeology)
  - Site Supervisor Piotr Cichy (Freelance Archaeologist)
  - Site Supervisor Eliott Wragg (Freelance Archaeologist)
  - GIS/TST Surveyor/CAD draughtsman Jonny Madden (Digitise This)
- 1.8.3 Thirty additional freelance field archaeologists were required to assist with the fieldwork element of the project. All staff were fully qualified, inducted in health & safety protocols/procedures and fully briefed on the archaeological background and potential of the site, as well as SWAT procedures. All archaeological teams worked to a standardised system, were consistently managed and were fully briefed on their responsibilities and duties before commencing work.

- 1.8.4 The Project Director was Paul Wilkinson (SWAT Archaeology). He was responsible for the implementation of the Archaeological Project Design, assisted by the site-based Project Manager and Site Supervisors, and had overall responsibility for the archaeological project. He liaised directly with the Principal Contractor He was primarily office-based and attended progress and monitoring meetings; made site visits and provided support in the field as and when required.
- 1.8.5 The Project Manager was David Britchfield (Freelance Archaeologist). He was site-based and was responsible for implementing the Archaeological Design and for the submission of weekly progress reports, interim reports and assisting in the Post-Excavation programmes. His other duties included: day-to-day personnel and logistics management for the archaeological team, health and safety management and liaison with the construction team. He was also responsible for overseeing the work of the Site Supervisors, ensuring that recording standards be maintained.
- 1.8.6 The Site Supervisors (see above) were site-based and responsible for the day-to-day supervision of field archaeologists, under the direct supervision of the Project Manager. They had particular responsibility for supervising the landscape recording element of the Archaeological Design, including the work of the survey team and maintenance of the Project GIS.

#### Specialist Services

- 1.8.7 Provisionally nominated specialists to undertake assessment and post-excavation analysis include:
  - Worked flint Hugo Lamdin-Whymark
  - Prehistoric pottery Nigel MacPherson-Grant
  - Romano-British pottery Malcolm Lyne
  - Medieval and post-medieval pottery Nigel Macpherson-Grant & Paul Blinkhorn
  - Small finds Ian Riddler
  - Animal bone Dr James Morris, Archaeological Solutions
  - Geoarchaeological assessment ArchaeoScape, School of Human & Environmental Sciences, University of Reading – Dr C.R. Batchelor & Dr C.P. Green
  - Charred plant remains Lisa Grey & Alys Vaughan-Williams
  - Pollen analysis Lisa Grey & Alys Vaughan-Williams
  - Human remains KORA, University of Kent

1.8.8 SWAT Archaeology maintained a constant presence on site from 13<sup>th</sup> October 2008 until 12<sup>th</sup> June 2009, during which time all archaeological works were carried out. A breakdown of times and a date associated with each phase of the project are detailed in *Table 1.2* below:

Area	Plot	Activity	Start	Completion
A	1A	Topsoil strip (intermittent monitoring)	11/08	12/2008
	1Da	Topsoil strip (intermittent monitoring)	11/08	12/2008
	1Db	Topsoil strip (intermittent monitoring)	11/08	12/2008
	1E	Topsoil strip (intermittent monitoring)	11/08	12/2008
		Topsoil strip (constant monitoring)	22/10/08	31/10/2008
	IMG	Sample excavation	3/11/08	14/11/2008
		Detailed excavation	17/11/08	23/11/2008
	1B.1	Topsoil strip (constant monitoring)	9/3/09	10/3/2009
В		Sample excavation	15/3/09	16/3/2009
В	1B.2	Topsoil strip (intermittent monitoring)	16/3/09	12/9/2009
		Pond area	8/6/09	12/6/2009
С	C 1.B.2 Prehistoric mound		8/7/09	12/9/2009
D	1B.3	Topsoil strip	18/5/09	29/5/2009
		Sample excavation	22/5/09	12/6/2009
	1C	Topsoil strip	13/10/08	4/11/2008
Е		Sample excavation	30/10/08	19/12/2008
		Detailed excavation	5/1/09	13/3/2009
F	1C	Topsoil strip	13/10/08	31/10/2008
Г		Sample excavation	3/11/08	19/12/2008

Table 1.3 Timetable of Archaeological Fieldwork (2008-2009)

#### 1.9 Scope of the post-excavation report

1.9.1 In accordance with the Archaeological Project Design, this report comprises a summary of the project's planning background (Section 1.2), the geological and archaeological/historical background to the site (relevant Area section below), along with the projects aims (Section 1.4). Methodologies adopted for each area of the site are described within the corresponding section of the report in order to provide a more coherent format. Similarly, the results obtained from this assessment are then presented in these separate sections, supplemented by appendices, and subsequently presented in order of chronological Periods and Phases (see Table 1.3 below). Specialist artefactual and environmental assessments are presented within individual chapters and supplemented, where necessary, by data sets set out within the Appendices. Quantification of the site archive, along with recommendations for

further assessment and/or publication is then offered with conclusions set out in Section 16.

Period		Dates	Phase	Dates
I	Neolithic	4000BC - 2200BC	NA	NA
П	Early Bronze Age	2200BC - 1500BC	1	2200BC - 1900BC
11		2200BC - 1300BC	2 & 3	1900BC - 1500BC
III	Middle – Late Bronze Age	1500BC - 1200BC	NA	NA
IV	Late Bronze Age – Early Iron Age	1200BC - 600BC	1	1200BC - 800BC
1 V		1200BC - 000BC	2	800BC - 600BC
V	Middle-Late Iron Age	200BC - 150BC	NA	NA
VI	Late Iron Age	50BC - AD43	NA	NA
	Early-Late Roman	AD43 – AD450	1	AD43 – AD150
VII			2	AD150 – AD250
			3	AD250 – AD450
VIII	Early Saxon	Early Saxon AD450 – AD650	1	AD450 – AD650
VIII			2	AD650 – AD700
IX	Mid Saxon	Mid Saxon AD700 – AD850	1	AD650 – AD750
IA.			2	AD750 – AD850
Х	Late Saxon	AD850 – AD1050	1	AD850 – AD950
Λ			2	AD950 – AD1050
	Early Medieval - Medieval		1	AD1050 – AD1125
XI		AD1050 – AD1250	2	AD1125 – AD1175
		AD1030 - AD1230	3	AD1175 – AD 1225/1250
			4	AD 1250 onwards

Table 1.2 Chronological Periods and Phases used for this assessment

#### 2 Review of the Archaeological Fieldwork within Area A

David Britchfield

#### 2.1 Summary

- 2.1.1 Archaeological investigations within the western extent of the proposed development site confirmed the presence of the upper stratigraphic sequence (Alluvium II) directly underlying the existing topsoil. Constant archaeological monitoring during the topsoil strip revealed the localised presence of pits and ditches dating to the Iron Age and Roman periods, cut into the upper alluvium, within the southern area of the site directly north of the existing IMG car parks. These features were spread over an area measuring approximately 30m x 28m, which was subsequently labelled Area A/1.
- 2.1.2 Preliminary archaeological investigations in this area (Area A/1) revealed a total of 27 features comprising 25 pits, one gully and one ditch indicative of temporary exploitation of the marshes (i.e. salt production) rather than long term settlement.
- 2.2.3 Further limited investigation of three adjacent areas (Areas A/2, A/3 and A/4) revealed the presence of 13 additional features cut into the natural London Clay sealed by the upper alluvium, confirming the probability that archaeological horizons remained intact at lower levels. The site was subsequently protected and preserved in situ.

#### 2.2 Archaeological Background (Area A)

- 2.2.1 Archaeological investigations within Area A (Fig. 2.1) comprised a series of geoarchaeological test pitting (see section 1.3) followed by limited trial trenching. A total of nine trenches were excavated within Area A, each measuring approximately 30m x 2m in width (c.540sqm) giving a representative sample of approximately 0.8% of the site.
- 2.2.2 To the west of Area A the evaluation recorded the presence of late Roman midden deposits cut into upper alluvium and directly underlying the topsoil. Fragments of fired clay (Briquetage) and charred plant remains led to the assumption that this area was primarily industrial rather than domestic and while salt-making was considered for this period it was not conclusive (OA 2007a:18). A later sub rectangular pit containing medieval pottery dated between AD1075 and AD 1150 was also interpreted as a saltern, although no artefactual evidence supported this theory. The pit was later used as a midden.
- 2.2.3 To the east of Area A. two out of five excavated trenches recorded abraded prehistoric pottery within shallow undulations cut into the upper alluvium (Alluvium

II). It was concluded that these finds were residual in nature and that prehistoric land surfaces actually existed below the upper alluvial layers (2007a:20).

#### 2.3 Archaeological methodology and mitigation associated with Area A

- 2.3.1 In accordance with the Archaeological Project Design, constant archaeological monitoring was carried out during the initial topsoil strip within Area A (2007b:10). Mechanical excavation ceased at the upper alluvial clay whereby inspection of the upper surface was carried out by an experienced archaeologist. Archaeological features were then mapped and a sampling strategy agreed.
- 2.3.2 Following the positive identification of features within Area A/1 it was decided that further archaeological investigations were necessary in order to mitigate against the impact caused through the future construction of the Rushenden Relief Road. It was therefore agreed with KCC that an area equating to approximately 0.75ha, as suggested within the Archaeological Project Design (2007b:10). As a result Area A/2 and A/4 were opened and excavated down to natural London Clay. No archaeological features were present within these areas. Area A/3 (Fig. 2.3) however, revealed the presence of four ditches and nine pits, three of which positively dated to the Roman period (see below).
- 2.3.3 Following completion of the archaeological investigations within Area A, it was agreed with KCC that lower lying features would remain preserved insitu.

#### 2.4 Summary of Results

- 2.4.1 The upper alluvial deposits known as Alluvium II were recognised directly underlying the topsoil, confirming results from the evaluation and geoarchaeological investigations. On the whole no archaeological features were visible at this level, with only modern service trenches (500) and natural root boles and animal burrows truncating the upper alluvial horizon. However, a small area (Area A/1) directly to the north of the existing IMG car park contained a cluster of discrete anomalies that warranted further investigation (Fig. 2.2). Within an area measuring c. 0.18ha one ditch, one gully and 25 pits were exposed.
- 2.4.2 A common stratigraphic deposit model was recognised across the site consisting of upper alluvium comprising mid brown blue silty clay (503) directly underlying the topsoil (502).
  - Excavations within Areas A/2 and A/3 revealed the complete sequence overlying the natural London Clay which consisted of Alluvium I (412), underlying a weathered clay (413), sealed by Alluvium II.
- 2.4.3 Variations in the upper alluvium were indicative of naturally forming channels and/or pools of sediment, which, in effect overlay Alluvium II. Prominent within Area A/1,

these natural deposits consisted of dark reddish brown clay (542), light blue grey clay (543) and firm red brown silty clay (544) within the south-eastern extent of Area A/1. Within the centre of A/1 similar deposits comprising light grey clay (545) and dark blackish brown silty clay (547) overlay the upper alluvium (503), as did light blue grey clay (546) to the east. A firm mid-dark bluish grey clay alluvial deposit (610) was also located within the northern extent of Area A/1, which, along with (614) and (615), overlay the upper alluvium (503) directly to freshly stripped topsoil (502).

2.4.4 Contexts (**542**), (**614**) and (**615**) all contained residual Period 6 fragments of pottery, suggesting that natural undulations within the upper alluvial salt marsh may have been in existence during this period.

#### 2.5 Archaeological Narrative

Period 5: Middle-Late Iron Age

2.5.1. A single feature dated to this period. Located centrally within Area A/1, a small subcircular pit (initially recorded as a post hole) measured 0.45m in diameter with a depth of 0.16m [548]. The single fill comprised firm mid grey brown silty clay (549) contained pottery that has been provisionally assigned to this period (see ceramic assessment below).

#### Period 6: Late Iron Age

- 2.5.2 A total of eight features with Area A/1 can be assigned to this period: one gully, one ditch and six pits.
- 2.5.3 Within the western extent of Area A/2, a single undulating gully [505] measured 0.42m in width with a depth of 0.18m. The single fill comprised mid bluish brown silty clay (504) with organic bioturbation. In contrast to this, ditch [518] was completely masked beneath layers of alluvium (503) and (610) and only partially visible within the northern extent of Area A/1. The nature of the fills associated with this feature, which comprised silty sediments with dumped refuse (shell, pottery, charcoal, etc.) to a depth of over 1m suggested that this feature represented a palaeochannel having been formed (or at least filled) naturally rather than deliberately. Positive dating of ceramics associated with the fills provides clear evidence of the exploitation of the marshes during the Late Iron Age, most likely associated with salt production. This is discussed further below.
- 2.5.4 Located centrally within Area A/1, a series of burnt pits provided a focus point for prehistoric activity. Although only three of these features [574], [593] and [606] can be positively dated, it is likely that others [522], [541] and [577] are contemporary. All fills were similar comprising heavy burnt clay forming red circular pattern within

- the upper alluvium. Further examination of these features produced quantities of briquetage indicative of salt making. Similar deposits were recorded within a larger pit directly to the north [531].
- 2.5.5 A total of 18 Area A contexts produced varying-sized pieces of organic-tempered clay or briquetage, associated with the production of salt – and a number have the buffypink and mauve tinges that are particularly derived from that process. Overall there are 123 fragments weighing 1.619kgms). Some, occurring in ones and twos, are small, worn and clearly residual in Mid Roman or later contexts. Others, from Contexts (514-516), (531), (575), (592), (594), (600) and (602)-(603) are mostly fresh and un-weathered and, of these, (514), (575), (592), (594), (600) and (603) produced varying quantities (between 10-30 pieces each) of frequently fairly large fragments. The production of salt along the wide tidal mud-flats bordering estuaries may have been more widespread during the regional LIA than has been recognized to date - the two main areas with definite pre-Conquest AD roots are the North Kent marshes zone and the more recently discovered material from Romney Marsh. Once the evaporation process was complete, the extracted salt was placed in small organic-tempered pottery containers (chaff-tempered ware) and sold in local markets. The current dating evidence indicates a c.25-50 AD start-date for the occurrence of chaff-tempered ware - and it continued until c.75/100 AD or shortly after. Its inception is likely to be earlier - but there is no firm proof to date. Here, the material is derived from four contexts that can only be dated to between c.25 BC-25 AD or slightly later, five that can be dated to c.25-50 AD (and of these one *might* pre-date the Conquest), and only one datable to between c.50-75 AD – and in general, tending to confirm the main regional trend.
- 2.5.6 Within the eastern extent of Area A/1 and cut into later alluvium (546) a shallow oval shaped pit measuring 0.44m x 0.38m in width with a depth of up to 0.11m [536] contained the near complete low-body of a flint tempered storage/cooking jar within a light orange clay fill (535). The absence of the upper part of this vessel, coupled with the good preservation of the base suggest destruction through post depositional processes, most likely ploughing activity. The nature of the deposit was unclear although the absence of cremated bone leads us away from a funerary purpose and more towards domestic

#### Period 7: Early-Late Roman

2.5.7 Features positively dating to the Roman period were isolated to Area A/3 (Fig. 2.3) and comprised a large NW-SE orientated ditch [416], a contemporary albeit smaller NE-SW orientated ditch/gully [401/411] and three smaller pits [381], [383] and [409].

All of these features were cut directly into the natural London clay, being sealed by a thin layer of alluvium, suggesting that the natural topography within the area drops away from high ground to the south of the site (i.e. the IMG car park) towards the north (i.e. Rushenden marshes). The features represented here are therefore on the interface between high dry ground and low wet ground sealed by alluvial encroachment to the north. Even though positive dating is not available, two additional ditches [403] and [407] were stratigraphically earlier than the Period 7 features, placing them either within an earlier phase of Roman activity, or firmly within prehistory. The size and shape and more importantly the alignment of all of these ditches, being either parallel or tangential to the edge of the marsh, would suggest that they formed some kind of drainage purpose, possibly protecting occupation to the immediate south.

#### Period 11: Early Medieval

- 2.5.8 A single pit within Area A/1 [587] provides the possibility that exploitation of this area of the marsh continued into the 12<sup>th</sup> century, although it must be stated that this feature is in isolation from the majority of contemporary features nearly 1km to the south.
- 2.5.9 Fragments of intrusive 12<sup>th</sup> century pottery had found their way into the early Roman ditch [416].

#### 2.6 Assessment of Archaeological Potential

- 2.6.1 The archaeological investigations within Area A have provided evidence for a fragmented multiphase industrial, domestic and possibly ritual landscape. It needs to be stressed at this stage however, that systematic examination has been limited to the upper surface of the alluvium only. Evidence obtained throughout the evaluation and the later excavation would suggest that it is almost certain that underlying archaeological remains exist buried beneath the alluvial layers. The only reason why archaeological features were present during these current works is to due to the proximity to higher ground and therefore absence of alluvial encroachment.
- 2.6.2 The construction of the new IMG car park and Rushenden Relief Road consists of large scale ground raising. Therefore archaeological deposits both within and beneath the upper alluvium will be preserved insitu. That said, should any future development involving deep excavations be planned for Area A, further archaeological mitigation should be considered essential. Archaeological remains will be preserved insitu as long as the alluvium remains unthreatened.

#### 3 Review of the Archaeological Fieldwork within Area B

David Britchfield

#### 3.1 Summary

- 3.1.1 Archaeological investigations within the central area of the proposed development site confirmed the presence of the upper stratigraphic sequence (Alluvium II) directly underlying the existing topsoil. Constant archaeological monitoring during the topsoil strip revealed the presence of prehistoric pits and post holes within the area of a proposed pond, a modern creek network and the presence of a prehistoric burial mound (Fig. 4.1). Subsequent mapping of sampling of exposed archaeological features was subsequently carried out in two areas; the 'pond' (Fig. 3.1, 3.2) and at the location of the burial mound (Area C see chapter 4).
- 3.1.2 Preliminary archaeological investigations within the 'pond' area revealed a total of 18 features comprising eight post holes, eight pits and two natural undulations associated with a buried prehistoric landscape, confirming the probability that intact archaeological horizons remained at lower levels. The site was subsequently raised and protected, thus preserving buried archaeological remains insitu.

#### 3.2 Archaeological Background (Area B)

- 3.2.1 Archaeological investigations within Area B comprised a series of geoarchaeological test pitting (see section 1.3) followed by limited trial trenching. A total of 29 trenches were excavated within Area B, each measuring approximately 30m x 2m in width (c.1740sqm) giving a representative sample of approximately 1.7% of the site.
- 3.2.2 Within the northern extent of Area B, adjacent to the A249, the evaluation recorded the presence of a late prehistoric pit (Trench 11) and residual Romano-British pottery within the upper alluvium (Trench 10) and directly underlying the topsoil. Further to the south, Trench 24 contained a possible prehistoric hearth underlying the upper alluvium suggesting the possible presence of a buried prehistoric landscape (2007a:21). Directly adjacent to this, Trench 26 contained a modern ditch and proposed palaeochannel. No further details on the nature of these features are provided within the evaluation report. The confirmed presence of a buried prehistoric landscape beneath the upper alluvium is provided within Trench 36, 37 and 38 where pits, ditches and a hearth were recorded (2007a:22).

#### 3.3 Archaeological mitigation and methodologies associated with Area B

3.3.1 In accordance with the Archaeological Project Design, constant archaeological monitoring was carried out during the initial topsoil strip within Area B (2007b:9).

- Mechanical excavation ceased at the upper alluvial clay whereby inspection of the upper surface was carried out by an experienced archaeologist. Archaeological features were then mapped and a sampling strategy agreed.
- 3.3.2 Archaeological mitigation for Area B was based on a similar strategy to that adopted for Area A. However, the basis of this mitigation had preservation insitu as its primary aim. This was unfortunately not possible as the Archaeological Project Design had not taken into account the proposed construction of large landscape features such as ponds, as well as the excavation of an essential network of service trenches. As a result, additional monitoring of these works was carried in accordance with generic watching brief guidelines.

#### 3.4 Summary of Results

- 3.4.1 The upper alluvial deposits, known as Alluvium II, were recognised directly underlying the topsoil, once again confirming results from the evaluation and geoarchaeological investigations. On the whole no archaeological features were visible at this level, with only modern drains and a network of backfilled creeks truncating the upper alluvial horizon.
  - That said, a small circular spread of redeposited clay was recognised within the southern central area of Area B. A rapid examination of this material confirmed that it did in fact sit beneath the upper alluvium and that the redeposited clay represented a mound or island within the marsh. Further investigation revealed the presence of burnt bone which resulted in the area being fenced off and subjected to more intense archaeological investigations. The results from these investigations are set out in Chapter 4 of this assessment (Morley, below).
- 3.4.2 Two additional areas were subject to archaeological monitoring. Prior to the commencement of large scale works on site, a compound was constructed within the northern extents of Area B. Archaeological investigations here comprised the removal of topsoil (001) and upper alluvium (002 & 003) during which time a series of naturally formed channels was revealed, the majority of which contained Middle-Late Bronze Age pottery [005], [008], [010], [012], [014], [016], [018], [022], [026], [028] & [030].
- 3.4.3 Directly south of the 'compound' the watching brief was maintained during the excavation of the 'pond'. A common stratigraphic deposit model was recognised across the site consisting of upper alluvium comprising mid brown blue silty clay (003) directly underlying the topsoil (001). At a level of approximately 1.2m AOD, c. 1.3m below the exiting ground level, the natural London Clay was reached. Cut into this clay 18 archaeological features were recorded. These included two natural

channels, [3335/3380] & [3376], seven undated post holes [3280], [3358], [3281], [3382], [3368], [3366] and [3343] as well as four undated pits [3352], [3374], [3372] and [3360]. Five features assigned dates are described below.

#### 3.5 Archaeological Narrative

Period II: Early Bronze Age

3.5.1. Two archaeological features dated to this period. Located centrally within the 'pond' a relatively large undulated pit measured 1.45m in length with a depth of 0.37m [3339]. Three fills consisted of mid grey silty clay (3342) overlying mid grey brown silty clay with burnt clay (3341) and a mid-light brown clay with occasional flecks of charcoal (3341). The distribution and nature of burnt material suggested an insitu, albeit disturbed, fireplace. Interestingly, the second feature dated to this period consisted of an adjacent post hole [3349] that also comprised a fill containing small flecks of charcoal (3350). It is entirely possible that these two features, coupled with the series of surrounding (undated) post holes formed an Early Bronze Age structure with possible association to the funerary mound to the east. Provisional dating of said structure(s) would place it/them between c.1400BC and c.1200BC although this is discussed further within the ceramic assessment below.

#### Period 3: Middle-Late Bronze Age

- 3.5.2 Three features within the Area B 'pond' can be assigned to this period: all of which represent shallow pits, one of which posses a possible lower cut post hole. Located within the southern extent of the Area B 'pond', a pit [3348] measuring 2.2m in length with a depth of c.0.18m contained a fill comprising mid grey brown silty clay with frequent inclusion of charcoal (3347). Directly underlying this an earlier pit or possible post hole [3346] possessed shallow sloping sides with a fill consisting of clean yellow brown clay (3345). The distinction between these two features was clear, one with burnt material and one without. It was, however, the upper fill (3347) that contained the Middle-Late Bronze Age pottery.
- 3.5.3 Further to the north, pit [3332] and pit [3363] contained similar fabric types providing a possible contemporary association, although it should be stressed that these did show signs of wear.

#### 4 Review of the Archaeological Fieldwork within Area C

Geoff Morley

#### 4.1 Summary

- 4.1.1 A Funerary Mound most likely of Early Bronze Age date was discovered during Strip and Map Archaeological works on the south side of the construction site. The mound was approximately 15 metres east to west and 12 metres north to south and stood just over 0.50m in height. Upon excavation 14 individual, complete and partial interments, both cremated and inhumed, were recovered from the area of the mound that was excavated. From the available evidence the cremations are likely to date from between the Early and Late Bronze Age, but it is possible that some may be as late as the Early Iron Age. The inhumations were more difficult to date, as none came with any dating evidence. As all but one was in a form of crouch position, it is supposed that they are broadly contemporary with or slightly earlier than the cremations.
- 4.1.2 The mound was constructed in two discrete phases with a regularly constructed core and a more irregular 'capping' event. This appears to have been built over an area of felled woodland, which was sealed with a form of 'platform' deposit. After this initial use and possibly taking as much as 1000 years the mound was almost completely submerged by alluvial/estuarine inundation around the late Bronze Age to Early Iron Age. At this point it appears the surrounding bank was enlarged to make it more prominent above these inundation layers and burials were inserted into the inundation deposits. After this point the only interventions appear to have been Late Iron Age/Early Roman Quarry pits sunk through these alluvial/estuarine deposits. After this the mound appears to have vanished from view beneath further alluvial or wetland inundations, and been left under marshland pasture.

#### 4.2 Introduction

4.2.1 After the intensive excavations of Area F a Strip and Map and Sample Excavation phase was undertaken, the results of this are covered in the descriptions of areas B and D and also included this area now designated 'Area C'. The focus of the archaeological mitigation then moved to this area which is to the south of the development and which had given indications during the Strip and Map phase that it may be the site of a funerary mound, see Fig 4.1. The pottery recovered from the single slot placed into the feature in this area during the strip and map phase was largely of Early to Mid Bronze Age date. The sections recorded at this time, (Fig 4.2), showed discrete layers being deposited on top of others forming a cap lying above a

mound with a thin basal layer running beneath this feature. The whole was covered by at least two major phases of alluvial/estuarine activity and it was only the very top of the mound feature that was seen initially, this was much paler in colour than the surrounding alluvial/estuarine material.

4.2.2 At this point it was decided that as human remains had been recovered from the Strip and Map phase; the whole structure of the mound would be investigated and ultimately removed as it was thought unlikely that human remains would survive the impact of the development works above.

#### 4.3 Archaeological Background (Area C)

4.3.1 As Area C falls within the extent of Area B, the Archaeological Background for this area is summarised within Chapter 3 of this assessment.

#### 4.4 Archaeological mitigation and methodology associated with Area C

- 4.4.1 The excavation of the mound structure within plot 1B.2 was undertaken according to the method statement submitted to the clients and KCCHC, (SWAT, 2009).
- 4.4.2 Initially upon discovery of the mound a slot was cut at least three-quarters of the way through the mound from the edge to the centre. This revealed around five discrete layers of deposited material all containing ash, burnt material and bone fragments. These layers were built up above a mound structure constructed of more pure material. During the Strip and Map phase, two individual remains of inhumations were recovered and a number of small features on the top of the mound were investigated, (Fig 4.3).
- 4.4.3 The area was then subject to a phase of open-area excavation for the reasons mentioned above. The methodology for this took the form of further investigation of the features on the surface of the mound, none of which provided any dating evidence, then opening radially placed 2m wide slots through the overlying alluvial/estuarine deposits and recording features cut into these as work progressed, (Fig 4.4). Once the alluvium had been cleared, the underlying mound was investigated within the framework of the above slots. The excavation of these slots was undertaken by excavating one visible phase of construction at a time and within that, one context at a time. Once all the slots had reached the primary mound 'core', the methodology was changed so the mound could then be removed in its entirety in the traditional method of excavation by quadrants.
- 4.4.4 Primarily some of the radial slots were enlarged, (Fig 4.5) to form the initial two quadrants. These were then excavated in the same manner to reduce the areas outside of the slots to the primary mound, at this point a High resolution scanner was brought in. After this, the primary mound was excavated stratigraphically down to the pre-

mound layer in the two initial quadrants. At this point the overlaying alluvium was removed from the two remaining quadrants and excavation progressed as above.

#### 4.5 Archaeological narrative

Stratigraphic Deposit Model (SDM)

- 4.5.1 A common stratigraphic sequence was recognised across the site comprising a dark alluvial layer (3432) some 0.40m thick overlying archaeological features dating from the Roman period and earlier. The upper alluvium consisted of firm dark brown clay with occasional inclusions of small pebbles and carbon flecks. This deposit covered the entire site. Pottery indicates that this deposit may be post Roman, and that Roman material was brought in from outside the site during the influx, the abrasion on the pottery may also indicate that the material was deposited after the influx as manuring or similar.
- 4.5.2 Below this was a second alluvial/estuarine deposit of paler mid orange brown to mid brown grey clay which appears to be from earlier inundations, contexts, (3384, 3514, 3529, 3539, 3540, 3548, 3549, 3552, 3553, 3581, 3582, 3634, 3643, 3662, 3670). This overlay both the bank and the mound and had a maximum depth of 0.60m.
- 4.5.3 The stratigraphic sequence below this is comprised of the construction elements of a two phase mound and surrounding bank. The secondary mound is composed of seemingly randomly dumped deposits encasing the primary mound, see Fig 4.12. The material used appears to be brought in from nearby areas and re-deposited, this is formed of contexts, (3513, 3544, 3550, 3558, 3559, 3561, 3562, 3563, 3568, 3576, 3589, 3590, 3591, 3592, 3593, 3594, 3598, 3600, 3616, 3617, 3618, 3619, 3624, 3627, 3628, 3629, 3630, 3631, 3632, 3637, 3638, 3639, 3640, 3641, 3642, 3651, 3652, 3653, 3654, 3655, 3656, 3658). The soil matrix of this, as is to be expected from re-deposited material, is very mixed. This secondary mound stands to a height of around 0.50m.
- 4.5.4 The primary mound below this has a more formal construction sequence and appears to be made of alternate layers of ash laden natural London Clay and more pure natural soil, this is formed of contexts, (3136, 3530, 3538, 3569, 3570, 3577, 3578, 3579, 3663, 3664, 3672). This is also around 0.50m in height.
- 4.5.5 Forming a 'platform' of a type and running across the site below the mound is a layer of almost pure pale to mid grey clay. This is around 0.10m in thickness and was formed from contexts, (3165, 3557, 3564, 3565, 3571, 3595, 3620, 3646). The clay had rare inclusions of small carbonised wood fragments.
- 4.5.6 Below this layer were natural and semi-natural landscape remnants. The natural London Clay geology was prominent, here a mid yellow clay mottled with blue veins.

Into this, periglacial features were seen to have formed, there also appeared to be the remains of several tree bowls, the remains of woodland clearance from before the construction of the barrow.

#### 4.6 Site Narrative

Late Iron Age - Roman Period - Period 7: Phase 1

4.6.1 The Roman period is represented on this site by a single large pit or quarry feature [3521], (Fig 4.6), and a second possible feature, [3524]. The pit feature is approximately 5m across and is approximately 0.80m in depth. The feature is flat bottomed giving the impression of it being a quarry, or similar cut feature, (Fig 4.7). The fills of this feature (3648/3554) and (3649) contains sherds that are provisionally dated to the Early Bronze Age or Late Iron Age and Early to Mid Roman material. The abrasion patterns on the pottery seem to suggest that the Mid Roman material from context (3648) may be intrusive, or introduced at the time of backfilling, natural or otherwise. The MBA/EIA material from (3648) is also heavily worn and may suggest that this is residual within the backfill material, and may possibly be washed off the mound slope. This leaves a potential date of backfill for this feature of around the Late Iron Age to Roman periods, approximately 50BC to 100 AD, suggesting that it was in use at some point earlier than the last date in that range. This feature also contained small fragments carbonised wood. The second possible feature [3524] was 2.68m by 1.05m to the edge of excavation. The cut was not prominent, but it was thought to cut through the upper alluvial/estuarine layers surrounding the barrow mound which have a provisional date of Late Bronze Age/ Early Iron Age. There is a possibility that this feature may just have been caused by a slumping event related to a possible collapse of the outer bank which eroded the alluvium away in this area. It is not certain that this feature dates from this period, but if it is a confirmed feature, the similarity of shape to [3521] makes it possible that they are contemporary.

Late Bronze Age - Early Iron Age - Period 4 Phases 1&2

4.6.2 At this period it appears from the stratigraphy and the ceramic record that at least one episode of estuarine inundation occurred and most likely, two, see Fig 4.8. Surrounding the barrow mound below the upper, darker, medieval to modern alluvium were earlier, mid grey/brown alluvial/estuarine deposits filling the space between the mound and the external bank. These deposits, (3155, 3156, 3384, 3514, 3533, 3539, 3552, 3581, 3582, 3670), contained much material dated to the Early Bronze Age, however, this is surmised as to be derived from material eroded from the

mound structure due to abrasion patterns. Context (3552) however contained 11 sherds of material from the same vessel which has been dated to the Late Bronze/Early Iron Age or c800-600BC. All had a uni-facial abrasion pattern that suggested they had been deposited in one event and were left exposed for some time before sealing. These two episodes, and other factors, see below, suggest that the inundations did not completely cover the mound and that material collected in the hollow between the mound and bank or that it was used as a site of ritual or household deposition at some time in this period. It has been noticed that significant estuarine sedimentation events have been recorded at around this period from further west along the Thames valley. Sidell and Wilkinson stated that in,

- "...Southwark and areas to the east there is widespread evidence for RSL (relative sea level) rise causing widespread inundation of lower lying areas by the end of the Bronze Age, with the previous alder carr environments of the Bronze Age being replaced by intertidal mudflats. Evidence...suggests that this process was completed by c2300 cal. BP..." (2000, p121).
- 4.6.4 It is suggested that such environments as would have existed after this period would not have been suitable for occupation or farming for some time. It is highly probable that this may explain the absence of Mid to Late Iron Age occupational residue from the immediate locality and the fact that this area is only on the periphery of occupation from this point onwards. Abandonment of the lower lying areas and nucleation on higher ground due to a, "...gradual change in the local environment towards wetter ground..." is mentioned by Pryor at this period, (2001, p413).
- 4.6.5 It has also been noticed that material of the same date has been recovered from the upper layers of the outer bank at two separate locations. From context (3523) 10 sherds from the same vessel were recovered, and this was dated to the same period, 800-600BC, context (3583) also provided an assemblage of sherds from another vessel, this time this vessel was more provisionally dated either to the Early Bronze Age or to the early Iron Age with the preference being for the Early Iron Age. These two sets of sherds were more heavily abraded than those found in the alluvium, possibly suggesting that they may have been brought there from a primary source, possibly close to contemporary settlement. These events show that maintenance of the Barrow probably still continued into the 1<sup>st</sup> Millennium BC by the simple technique of raising the outer bank above the level of the estuarine inundations. This maintenance and building up event may also have been echoed on the barrow structure itself; however, agriculture and erosion have removed all traces if so. By this period central place cemeteries such as this were not the standard form of burial rite, this had, in general, been replaced by more dispersed cemeteries and pit burials.

However, it is important to note the four burials that are located high up within these inundation sequences, (3278, 3327, 3665, 3666), two inhumations and two cremations. All of these are within 0.20m of the stripped surface and seem to lie in the latest inundation sequence recorded. It is highly possible that much more of the barrow, and further inundations once existed, but have been ploughed away or eroded, therefore these bodies would have once been much deeper buried.

- 4.6.6 Some of the internments, particularly Crouched Inhumation (3666), and partial burial (3327) are buried outside the footprint of the mound and are not cut into the natural. Stratigraphically, they are both highly set within the inundation sequences and as such—it is probable that this may date them to the Late Bronze Age/ Early Iron Age inundation, rather than the Early Bronze Age in which all the other couched burials are grouped. Characteristically inhumation was a style of internment that was beginning to be replaced by cremation from the Early Bronze Age and by the Mid Bronze Age cremation was the predominant form of internment, (Ashbee, 1960, Parker Pearson, 2005) however both did run simultaneously. This makes these inhumations an oddity and points again towards an Early Iron Age, or later, date. Cremations (3278 and 3665) are located in such close proximity to each other that it is highly possible that they are actually two separate parts of the same cremation excavated in the two phases of excavation. These are also set very highly in the inundation sequences and provisionally may date from the same period.
- 4.6.7 It appears that the maintenance of this place was continued primarily as it was still seen as a location of some importance until at least c600BC. After this point in time it is possible that the continued maintenance of this place can be attributed to a purpose other than burial, such as being land division markers, as postulated for the Later Neolithic period at Flag Fen, (Pryor, 2001). Indeed it is possible that this is how the barrow may have begun life as it appears to have no central burial.

#### Mid Bronze Age - Late Bronze Age - Period 3

4.6.8 Only a single cremation has been securely dated to this phase, it is possible that many more may be attributed to this period but very little direct dating evidence was forthcoming. A number of sherds were found accompanying a fairly discrete patch of cremated bone towards the far eastern periphery of the mound, (3657), see Fig 4.9. This was dated to the period 1550-1150/800BC and post dates the supposed primary mound construction phases. As the pottery, a Deverel-Rimbury type, was heavily abraded, it is possible that this cremation was left on the surface of the mound, or only very lightly covered, and was abraded by natural weathering action, analysis of the bone fragments may provide further details of this.

- 'Later' Early Bronze Age Period 2 Phase 3
- 4.6.9 The main periods of construction and the floruit of this structure all appear to have occurred within the relatively short time span of this period. From the substrate formed by the 'platform of Period 2 Phase 2, a small mound, (Mound 1), possibly only two metres across and around 0.50m high was constructed from possible turves and clay blocks of a regular thickness placed horizontally. As there appeared to be no central burial it would seem that this was maybe constructed as a cenotaph. After an unknown period, anything from days to years the mound was enlarged by deposition of alternate deposits of relatively pure re-deposited London Clay and clay. These deposits, (3136, 3163, 3530, 3538, 3569, 3570, 3577, 3578, 3579, 3663, 3664, 3672), had final dimensions of approximately 11.75 metres east to west and 10.25 metres north to south, fig 4.10. It is within the area of this mound that most of the interments had the potential of lying, either buried or placed on the surface of the mound. Unfortunately due to the nature of London Clay it is impossible to state the exact sequence of internment for the burials, i.e. whether interments were initially buried within the mound or laid on the surface and covered later, or buried as secondary burials as cuts backfilled with mixed materials are difficult, if not impossible to see within disturbed deposits. This sequence will hopefully become clearer with further work on the remains.
- 4.6.10 It appears that the mound was then enlarged again, Fig 4.11, this time utilising more disturbed material than that found forming Mound 2. This element of the barrow, (3157, 3158, 3159, 3160, 3161, 3513, 3544, 3550, 3558, 3559, 3561, 3562, 3563, 3568, 3576, 3589, 3590, 3591, 3592, 3593, 3594, 3598, 3600, 3616, 3617, 3618, 3619, 3624, 3627, 3628, 3629, 3630, 3631, 3632, 3637, 3638, 3639, 3640, 3641, 3642, 3651, 3652, 3653, 3654, 3655, 3656, 3658), shows signs of being dump material (Fig 4.12 and 4.13). Some of the contexts contain abraded ceramic elements possibly brought in from outside the area with a high concentration of ash and carbonised wood fragments. This could be an early element of the enlargement of the barrow mentioned above, dating to the Late Bronze Age to Early Iron Age. The secure dating for this will be reliant upon the application of absolute dating techniques. It appears that this secondary mound may have taken some time to complete as two possible pits were seen within the dumped material, [3573] and [3575], these were 0.50m and 0.40m in width respectively and had a maximum depth of 0.25m. It is unfortunate that no dateable material was recovered from either of these features. The final dimensions of this phase of the barrow were 13.50m north to south and 15.10m east to west.

- 4.6.11 Four full crouched burials, (3615, 3636, 3545 and 3675) and one cremation, (3560) were found within mounds 1 and 2. Also an extended inhumation was found within the mound just to the east of the mound centre, (3611).
- 4.6.12 Cremations (3509) and (3547) are set outside the boundaries of the mound, so it appears that they are actually interred within the estuarine transgression deposits. This is confirmed with (3666) described above, however with the two cremations, it is possible that these may have been buried in or scattered onto the surface of the outer bank, but owing to the shape of the excavated area, this was not able to be discerned at the time. It is noted that un-urned cremations such as these very often do not form a part of the usage pattern of the primary mound structure, (Ashbee, 1960). Cremations (3560) and (3657) were also buried at the very peripheries of the latest mound, however, these are probably from different periods, (3560) being later Early Bronze Age, dated by a Collared Urn found within the cut, and (3657), described above, being Mid to Late Bronze Age.

'Later' Early Bronze Age - Period 2 Phase 2

4.6.13 This period is represented by the 'platform' which lies under the barrow, fig 4.14, (3165, 3557, 3564, 3565, 3571, 3595, 3620, 3646). The pottery recovered from this appears to be in better condition than that recovered from the barrow immediately above. It is uncertain exactly what the function of this 'platform' was. It may be seen as a deliberate 'capping' event sealing features from the previous phase, see below, or as some form of substrate upon which the barrow mound was constructed. Either way it appears to have been constructed a while before the construction of the mound as the upper surface of the 'platform' showed evidence of weathering. It is possible that this weathering occurred over a very short period of time.

'Earlier' Early Bronze Age – Period 2 Phase 1

- 4.6.14 The elements making up this phase of the site's history are those which were found beneath the platform, fig 4.15, (3595) some of which are ceramically dated to the Beaker phase of the Bronze Age. This comprised around five discrete features the majority of which were artefactually sterile and mostly appear to be either the result of bioturbation or to be periglacial features.
- 4.6.15 The only features containing information on pre-mound human activity were, a single feature, (3692) which was found to contain preserved roots of a large size which may have been an uprooted tree and potentially indicates the presence of trees growing in this area prior to the Early Bronze Age. This is also backed up by the presence of a large, deliberately cut feature, (3690) which contained a significant quantity of

carbonised wood fragments. This may point to deliberate burning, possibly related to the removal of the trees, prior to the laying of the platform. Features such as these are a moderately common feature to be found below barrows, (Ashbee, 1960). A small feature was seen which cut into an area of natural periglacial disturbance, and this, (3699) contained some burnt bone fragments, and may represent a pre-mound cremation. Feature [3588] appeared to be a small pit, or possibly the terminus of a linear. This was not physically beneath the 'platform' layer, but was situated immediately beneath the outer bank of the barrow structure. The fill, context (3587) contained a single worn body sherd of a beaker vessel.

4.6.16 Fitting in with this phase, and probably related to it, are a series of postholes, (3596)/[3597], (3601)/[3602], (3603)/[3604], (3605)/[3606], (3607)/[3608], (3609)/[3610], on the western side of the barrow, fig 4.16. All were between 0.37 and 0.16m in diameter and appeared to be aligned in two rows approximately 0.35m apart. Unfortunately none of the post holes were covered by the 'platform' layer so no absolute phasing can be ascribed to them, however, the post holes are only a maximum of 0.10m in depth which means it is possible that they were truncated during cutting of the possible Roman pit [3524]. They appear to have continued beyond the bounds of the site and may have continued as far as the outer bank in this area, but this is uncertain as this area was heavily disturbed by erosion or the possible pit mentioned above, which may have also removed the outer bank, if it was within the bounds of the site, as no trace of this was seen.

### 4.7 Internments

4.7.1 The fourteen internments found during the course of this excavation fall into broadly five groups, Crouched Inhumations, Extended Inhumations, Partial Burials, Cremations with ceramics and Aceramic Cremations, each of which will be described below. For the purposes of this assessment report, the internments will be roughly group dated according to their style of burial unless independent dating evidence or secure stratigraphic dating has been recovered. This will be revised at a later date, with the help of absolute dating evidence.

#### Crouched Inhumations

4.7.2 Five burials within this mound were categorised as crouched burials, and within this number, two were of variant types. These have been categorised with the terms used by Ashbee, (1960). Three internments, (3615, 3675 and 3666) were buried in the 'flexed' style with knees brought up to around 90° to the angle of the spine. One was in a 'contracted' position with its knees brought up into the foetal position so they

almost touched the face, (3545) and the last, (3636) was in a standard 'flexed' position except that its legs were crossed, see Fig 4.17. This is not a position that can be reached naturally or without some pain and dislocation. This positioning obviously had some significance to the mourners who placed the body.

4.7.3 All of these burials were placed on their right hand sides, sometimes this is seen as an indicator of sex, but amongst the bodies that could be sexed in the laboratory, there was seen to be a mix, with, at least, (3614) being probably female. All of these burials with the exception of (3666), show some form of discolouration from burning on the surface of the bone and on the teeth, the implications of this will be discussed below.

#### Extended Inhumation

4.7.4 The single extended inhumation recovered from the barrow, (3612), was aligned with its head towards the south-west and was provisionally dated to the Roman or Sub-Roman periods because of this alignment and its posture. The grave had been disturbed in the recent past by a land drain which had removed the left upper torso and left arm. The body was laid supine with the head twisted back and to the left. There is a possibility that the burial may have been accompanied by a marker of some form, such as a pole or a stone, as at the head end of the body a post hole setting was found measuring 0.60m in diameter, this was located only a few centimetres above the head, [3622] (3623), see Fig 4.18. Unfortunately no dateable finds were recovered from the fill of the grave cut to give a clear date for this burial, however, it is now thought to date from the Early Bronze Age period due to the presence of post-mortem burning of the ends of the long bones and also the teeth which has also been seen on most of the crouched burials, (see above). This potentially makes this inhumation a very rare example of an extended inhumation from this period, (Parker Pearson, 2005).

#### Partial Burials

4.7.5 Two partial burials were recovered from the very surface of the mound, one possible cremation (3277) and a partial inhumation, (3326). Very little can be said about these burials due to the disturbance of these contexts by later, possible ploughing action, however, as they fit within the area of inundations between the barrow mound and the outer bank, these are provisionally ascribed to the Late Bronze Age, Early Iron Age period, Period 2 Phase 3. The only dating evidence from either of these is a small, 2 gram fragment of Mid Roman pottery from the fill of the cremation. This is highly worn and is most probably intrusive, but it is possible that this may date the ploughing damage.

#### Cremations with Ceramics

- 4.7.6 There were only two cremation burials that contained multiple ceramic remains from single vessels indicating that these may have been deposited with the cremated bone. The earliest, (3560), was dated to the Early Bronze Age by the inclusion of a large amount of a single Collared Urn vessel. This was laid flat at the base of a cut with the cremated bone appearing to be issuing from its mouth. Within the vessel was placed a single worked flint. The base and one side of the cut were visible owing to the cremated remains sitting on and against these. The spread of ceramic and bone, may not have filled the entire cut, but it extended for an area measuring 0.97m by 0.51m.
- 4.7.7 The second cremation, (3657) was contained within an area of approximately 0.60 x 0.40m and was provisionally dated to the Mid to Late Bronze Age by several sherds of ceramic of this date, only one of which was analysed, the rest being retained with the cremation. The pot was far more disturbed in this burial than in (3560) and was only recognised as potentially being the primary vessel by the number of sherds of what appeared to be the same vessel.

#### **Unurned Cremations**

- 4.7.8 Within the area excavated four possible unurned cremations were discovered. The earliest was (3699) which was found beneath the 'platform' which lay beneath the barrow mound. There is a slight possibility that this scatter is not actually human as the individual bone fragments were so small they were impossible to identify by standard methods, however the neat pattern of bone in a roughly circular concentration leads to the possibility that this was deposited with some respect. This is the earliest deposit of bone on the site but is not to be seen as the primary burial, but may be seen as a precursor on the same site. If it is human it is estimated that it is not an entire body as there was so little material, or it may have been a juvenile or child.
- 4.7.9 Of the remaining three cremations (3665) is within the mound area, and the two remaining examples, (3509) and (3547), are on the very limit of excavation, so it was impossible to ascertain their exact stratigraphic position. The first, (3665) was a discrete spread located towards the north-eastern edge of the mound; no dateable evidence came from this feature, but as this burial was situated very high up in the stratigraphic sequence of the inundations, it is likely to date from the Late Bronze Age/ Early Iron Age or later. The remaining two came from outside the area of the barrow mound, and it is thought, that they may have been deposits placed on the internal edge of the outer bank, however this is in the area of disturbance caused by

the probable Roman pit [3524]. From their positions, placed one above the other with a separation of around 0.50m vertically, it is likely, if they are contemporary with the other inhumations, that they were placed on the bank, the bank was raised in height, and the second was then placed in the same position. The other explanation is that they were placed within the naturally filling pit at different periods of its infilling. Unfortunately, the site was unable to be expanded to excavate this area properly to find the outer edge of the pit or bank and as they were human remains they had to be dug out unstratigraphically.

4.7.10 Two partial burials were found in the top of the mound deposits during the strip and map phase these were labelled burials A and B, this included cremation (3277) and Inhumation (3326). These were located in the top of the inundation deposits.

#### Burial A (Cremation) (3277)

4.7.11 The hollow in which the cremation sat was very large for a cremation at 1.36 x 0.86m, it was roughly oval in plan, the size may have been caused by the cremation being partially dragged by early ploughing, or possibly by the soil breaking up during machining. No finds were recovered from this feature which may date it absolutely. Only one sherd of pot was found and this was small and highly worn and dated to the Mid-Roman period. It is possible this may be directly related to the cremation, but the level of wear on the sherd suggests it is intrusive, it is stratigraphically dated to the Late Bronze Age/Early Iron Age, or later. During post-excavation work it was noticed that this burial lay in very close proximity to another (3665) and it is highly likely that they represent the same cremation, see fig 4.8 and below.

#### Burial B (Inhumation) (3326)

- 4.7.12 The bones of this inhumation were in such poor condition that nothing could be said with regard to posture or alignment of this partial inhumation, (3326) which contained fragments of arm bone and skull. No cut was seen, but the bones were excavated in their entirety and were located in an area 0.96m long and 0.78m wide. It is thought that this may have been disturbed by later ploughing which removed the remainder of the body. Stratigraphically this, along with the cremation above is dated to the Late Bronze Age/Early Iron Age, or later, as they were cut into the inundation sequences.
- 4.7.13 Twelve burials were located and removed during the excavation phase of work on this barrow and were numbered Internments 1-12.

4.7.14 This internment took the form of a scattered, unurned cremation which may have been deposited on the outer bank or within the inundation sequences. It was located on the L.O.E. so it is impossible to know if the whole cremation was recovered, however, what was seen of this cremation was spread over an area measuring only 0.23 by 0.15m. No dateable material was recovered in this context, and it is stratigraphically insecure, so this is provisionally ascribed to the early Bronze Age period, but may be Late Bronze Age or Early Iron Age.

#### Internment 2 (Cremation) (3547)

4.7.15 This internment was also a scattered, unurned cremation which lay approximately 0.50 m directly below the above cremation (3509). This cremation covered a much larger area of 1.2m by approximately 0.50m. Once again, this cremation lay on the L.O.E. and so it is uncertain whether all the remains were recovered. This cremation also had no direct dating material associated with it and is also provisionally dated to the Early Bronze Age.

## Internment 3 (Inhumation) (3545)

4.7.16 No cut was seen for this inhumation, as was common for many of the burials. This inhumation was tightly flexed with the thigh bones almost parallel to the spine, plate 4.6 and was lying on its right hand side. The body was forced into a space measuring 0.80 by 0.60m and probably was bound into this position before burial. As with a large number of the inhumations, this body showed signs of low level burning, see paragraph 4.8.6 and below, chapter 10.

#### Internment 4 (Cremation) (3560)

4.7.17 Only one side of the cut for this cremation was seen clearly, this was where the cremated bone lies up against it. From this point the cremation covered an area roughly 0.90m by 0.55m. Included within this cremation assemblage were the remains of a large Collared Urn, (SF 2), and within this was a single worked flint, (SF 3). The Collared Urn vessel provisionally dates the cremation to the Early Bronze Age between 1700 and 1550BC.

# Internment 5 (Inhumation) (3611)

4.7.18 Initially this burial was thought to be a later, historic period feature due to its position, being extended and supine, however, the osteo-archaeology report showed that this inhumation had been exposed to a low level of burning. This provisionally dates it to the Early Bronze Age and therefore contemporary with the crouched burials where

this is also the case. If this is so, this makes it a rare occurrence of an Early Bronze Age extended Inhumation, unfortunately no dating evidence was forthcoming from the fill of the grave. The skeleton was around 1.85m in length upon removal; however, no cut was seen. At the head end of the skeleton a single small cut for what may have been a post was seen. This may have been the setting for some sort of wooden or stone grave marker, or possibly may be only coincidental.

## Internment 6 (Inhumation) (3614)

4.7.19 No cut was seen for this inhumation either. This inhumation was in a crouched position with the thigh bones at an angle of greater than 90° to the spine, and was lying on its right hand side. The body occupied an area measuring 1.29 by 0.81m and appears to have been laid into the grave with no force being applied. As with a large number of the inhumations, this body showed signs of low level burning, see paragraph 4.8.6 and below, chapter 10 for this reason, this burial is provisionally dated to the Early Bronze Age despite the lack of direct dating evidence.

## Internment 7 (Inhumation) (3635)

4.7.20 No cut was visible for this inhumation, but the entirety of the inhumation was traced. This inhumation was a variant of the standard crouch burial where the thigh bones were at roughly 90° to the spine, but the legs were crossed twice (Fig 4.17). This body was also lying on its right hand side. The body was in an area measuring 1.05 by 0.50m and did not seem forced into this space. As with a large number of the inhumations, this body showed signs of low level burning, see above paragraph 4.8.6 and below, chapter 10. As mentioned above in paragraph 4.7.2, the 'double crossing' of the legs must have had some meaning to the mourners who placed the body in this position.

#### Internment 8 (Cremation) (3657)

This internment was possibly an urned cremation which covered an area of 0.65m by approximately 0.45m which appeared to lay in the lower inundation layers, this would possibly date it to the Mid Bronze Age or later. This was backed up by the presence of multiple sherds of Deverel-Rimbury ware all from one vessel, but seemingly not the entire vessel, which also dates it to this period and give a provisional calendar date of between 1550 and 1150BC.

#### Internment 9 (Cremation) (3665)

4.7.22 This cremation as an individual entity is small and unremarkable, taking up an area 0.72m by 0.60m and containing no dateable finds. There is a high probability, however, that this cremation is actually a part of 'Burial A, (3277)' from the strip and map phase, which makes it much larger but still undated. This was only recognised at the post-excavation assessment phase. All the bone was highly fragmented and contained very small amounts of burnt clay possibly indicating the method of cremation. This has been dated stratigraphically to the Late Bronze Age/ Early Iron Age or later by its position high up in the inundation sequences.

### Internment 10 (Inhumation) (3666)

4.7.23 No cut was seen for this inhumation, it was in a 'relaxed' crouched position with the thigh bones at an angle of greater than 90° to the spine, and was lying on its right hand side. The body occupied an area measuring 1.12 by 0.31m and appears to have been laid into the grave with no force being applied. Uniquely in this barrow this body showed no signs of low level burning. For this reason it is not thought to be from the Early Bronze Age, as the others appear to be, and due to the fact that it was buried high up in the alluvial/estuarine deposits, this burial is provisionally dated to the Late Bronze Age/Early Iron Age despite the lack of direct dating evidence. The comparatively fragmented state of this burial, compared to its relatively late date is put down to it being in loose, more permeable silts rather than more solid clays.

#### Internment 11 (Inhumation) (3673)

4.7.24 No cut was seen for this inhumation; it lay in a crouched position with the thigh bones at an angle of approximately 90° to the spine, and was lying on its right hand side with the head to the west. The body was laid out and measured 1.10 by 0.45m. As with a large number of the inhumations, this body showed signs of low level burning, see above paragraph 4.8.6 and below, chapter 10. As such, this burial is provisionally dated to the Early Bronze Age even though it, unfortunately, had no ceramic or other dating evidence.

#### Internment 12 (Cremation) (3699)

4.7.25 The cut for this possible cremation was only 0.25 by 0.23m in diameter and therefore must represent only a partial Unurned cremation. This burial is unique in this barrow by being the earliest, and the only one which lay under the pre-mound platform layer. This may indicate a date as early as the early Bronze Age Beaker phase, provisionally from between 2000 and 1700BC, if it is contemporary with cut feature [3588]

#### 4.8 Discussion

Background

- 4.8.1 The mound appears to be situated on the last solid ground before the land becomes estuarine marshland to the south. In the Early to Mid Bronze Age the Swale channel at this point would have been much wider and the sea may have lapped almost up to the foot of the barrow, (J Hammond pers. comm.), however, it is now some 1.4 kilometres from the sea at its nearest point. It is presumed that this is the result of silts laid down at the end of the late Bronze Age/ Early Iron Age rise in sea level.
- 4.8.2 The barrow seems to have been constructed, used and then re-built/enlarged within a very short time, maybe as little as two hundred years. Unfortunately, as little direct dating evidence was forthcoming from the features below the mound, it is difficult to state when occupation or usage of the site first began. The exception to this was a single small worn Beaker body sherd from the fill of a small pit/ linear terminus, [3588] from beneath the outer bank.
- 4.8.3 It appears that the first permanent usage of the site may have been a settled agricultural one, and that prior to this tree felling and burning took place to possibly make room for a mobile pastoral or semi-pastoral lifestyle. The evidence for this is seen in the features seen below the 'platform' of grey clay laid down prior to construction of the barrow. The main features of this period are the tree roots that remain, and the single large, deep spread of burnt wood which was mixed with rhizomes probably from onion couch grass and/or false oat grass which may indicate areas of damp open grassland. If this identification is correct, it is possible that these rhizomes may have been collected from another area and brought in to assist with the burning of the trees as it has been suggested that some forms of rhizome are particularly suitable for use as kindling, (L. Gray pers. comm.). It is from this period that a pair of posthole rows is thought to date. These appear to run towards the centre of the mound, and as such would have no use as part of the mound structure or as part of the 'setting out' for construction of the mound. The sealing of this early landscape with a 'cloak' of clay may have been a ritual aspect of the change of use of the site. An early possible cremation was also found as part of this phase.

#### The primary barrow

4.8.4 The first phase of mound construction, (Fig 4.10) was an ordered affair with horizontally stacked layers of turf and clay being laid upon each other in a confined area. This occurred in only a very limited zone in the centre of the mound, this may show the remains of an even smaller mound which preceded the main mound. After this point the mound was built up in much thicker layers. It was at this stage that the

- majority of burials were placed in the mound, as stated above, it was impossible to see cuts within the London Clay that this mound was constructed of, and so no definite stratigraphic dating was possible.
- 4.8.5 Contemporary with the construction of the mound is the outer bank that was only seen on the northern side due to the constraints by KCC on the limit of excavation. From this small area very few pottery sherds were recovered, all, in general, worn and may be derived from the same sources used for the construction of the barrow mound.

#### Inhumations within the barrow

- 4.8.6 The majority of the inhumations showed signs of low-intensity burning, as mentioned above, this was obviously not the result of intentional standard cremation activity otherwise the bones would have been far more burnt, this possibly leaves two options. The first is that after burial the bodies had flammable materials piled on top of them and were burned in situ. No comparable evidence has been found thus far for similar practices from Britain or the near Continent. This theory is backed up by the mention of ash being found in the soil matrix surrounding the bodies, (see the individual inhumation reports below). However, as the mound appears to have been made from layers of domestic refuse, there is a high possibility that this ash may come from the backfill of the burial which originated as one of these layers. If the burials were burned in situ it is felt that the grave cuts would have been more easily discerned due to the carbonised material filling the cut, all of which could not have possibly been removed, it is also thought that the surrounding soil would have been discoloured by the firing. The second possibility is that the bodies were partly burned before burial, possibly as part of a preservation process. Parker Pearson has stated that,
  - "Although the Egyptians laid out the body in a prone position for mummification, ancient mummies from other cultures around the world were preserved in a tightly flexed, foetal position, with the knees under the chin; they are known as 'mummy bundles'. There are many tightly crouched or seated burials in appearance like mummy bundles of Neolithic and Bronze Age date from across Britain and Europe which hint at body preservation having once been relatively common. ...this was the sort of mummification which could be performed at home just as it has been in recent times in societies around the world by eviscerating and drying the corpse over a slow fire and then keeping it smoked and dry in the roof space or in a purpose built building." (2005, p107)
- 4.8.7 Although this is a great assumption many of the pieces seem to fit, foetal position burials, bodies that are only slightly burned, and probably not exposed to a great heat,

- and no great coherent mass of ash found in the grave cuts. It is interesting to note that the single extended burial also shows these burning marks.
- 4.8.8 The bodies that Parker Pearson worked on do come from the absolute opposite end of the British Isles, from South Uist in the Outer Hebrides, but as Parker Pearson noted, "We do not know how widespread it (mummification) was...", (2005, p42). It is probable that, if the mummification scenario is to be believed, the bodies may have been buried in one event when this form of 'ancestor worship' fell out of favour. The date of Parker Pearson's preservation event is around 1500 BC and their later burial, 1100 BC, puts this very well within the possible date range of this barrow.
- 4.8.9 The first cremation in this mound is dated to the Early Bronze Age by the Collared Urn which was deposited with the body; this is provisionally dated to the period 2000 1500 BC. Fragments of Collared Urn ware are found, semi-abraded, from within the body of this primary mound, this together with carbonised material also found here indicates that it is highly probable there is some form of occupation occurring within the nearby vicinity in this period, and that the mound is being constructed from midden material and other occupational debris. Possible fragmentary remains of Beaker ware sherds have also been found within the primary mound pointing to there being continuous, or at least seasonal, occupation of this site for some time before the construction of the mound.

#### The second barrow

- 4.8.10 The secondary mound, (Fig 4.11) was created by even more haphazard dumping of materials which contained an even greater density of midden-type material. Within some layers to the northern side of the mound were bone, pot, and carbonised wood and ash. This dumping is seen all the way around the mound but is predominant on the northern, landward side of the mound and it is here that the related settlement is to be expected. This does not give the impression of ordered construction, but of general dumping of household waste. The pottery from this all appears to come from the same period of around 2000-1500BC and ranges in abrasion from fresh to very worn. The one exception to this is one sherd that is provisionally dated to the Mid to Late Bronze Age, but this is quite worn and may be intrusive. Some of the burials were set into this second mound and not the primary, however, none of these contained any dating evidence.
- 4.8.11 Within this outer mound was buried a single cremation burial which is set apart from the other dated cremation by its late date, it was set at the absolute extremity of the barrow and must have been dug into the slope. This burial had large but abraded fragments of pot with it which have been provisionally dated to the Deverel-Rimbury

tradition, from around 1550-1150BC and is categorised as Mid to Late Bronze Age. Given the dating ranges, with Collared Urns continuing until approximately 1500BC, there is the possibility of some overlap and this may prove to be not just a 'random' late insertion, but the last in a long line of burials in this mound, but without dating it is impossible to say any more.

### Enlargement of the outer bank

4.8.12 After a significant gap during which the barrow appears to have been all but abandoned, at some point in the Late Bronze Age/ Early Iron Age, provisionally dated by pottery to around 800-600BC, the outer bank was heightened and widened, this may have been in response to the general rise in relative sea level at around that time which appears to have inundated the barrow. It is also possible that the barrow may have been 'refurbished' at this time, a practice which has its parallels in Thanet and elsewhere, possibly coinciding with new practices and cultures arriving in the area, (Moody, 2008).

## Estuarine/Alluvial Inundation Sequences

4.8.13 The relative sea level rise that occurred at around this time is shown by the two upper alluvial/estuarine layers, which contained fragments of pottery from the same period as the enlarged bank above. Also within these layers are inhumations (3327) and (3666), and cremations (3277) and (3665), unfortunately, none of these contained any independent dating evidence.

## Post-barrow use

- 4.8.14 After the inundation sequences the next usage of this area is shown by two late pits, both provisionally dated to the Late Iron Age or Roman periods on ceramic evidence. These features appear to be much too large to be ordinary domestic waste pits and were closer to the size expected from quarry pits, however, if this is the case, what they were looking for is unknown, but both respected the central mound but possibly not the outer bank, but this is not known for sure. However if they did impact on the bank it is highly possible that this is because it was invisible at the time. Both of these features appear to cut through the above alluvial/estuarine deposition sequences, but are overlain by the darker probably alluvial 'marsh clays' which contained the entire spectrum of ceramics from Early Iron Age to possible Mid to Late Saxon which may have come from the nearby hilltop settlement, (see Area F below).
- 4.8.15 After this point in time the area appears to be abandoned altogether with the centre of settlement moving to the east to the top of the nearby hill. This would be expected

with the area possibly being a marginal wetland and therefore too damp to be of use for cultivation or settlement, the timing of this is confirmed by Rippon who states, "Although extensively settled in the Roman period, most areas experienced extensive flooding in the Early Medieval period that saw them revert to their natural condition, and it was their reclamation in the Medieval period that led to the creation of the landscape of today." (2009). It is highly likely that over the next, almost, two thousand years that this area was either unused for this reason or set out as pasture, a use that it still had up until the twentieth century.

#### 4.9 Provisional Conclusions

- 4.9.1 The conclusions that can be drawn from the data we have now are actually very few. The early landscape appears to have been covered with trees, which appear to have been cleared by burning. There seem to have been early, pre-barrow, traces of occupation and/or usage of the area within the Beaker period, some time within the range 2500-1700BC.
- 4.9.2 At some point after 2000BC a more intensive phase of usage of this site started as shown by the numerous Collared Urn fragments from the 'platform' layer below the barrow. Possibly almost immediately construction began on the mound in a very formal fashion and later in a more random style. Most of these deposits also contained fragments of Collared Urn.
- 4.9.3 The inhumations are practically un-dateable, unless Carbon-14 is requested, as no finds were directly associated with them, and as stated above, the make-up of the soil made the identification of cuts for these burials almost impossible and therefore none were dateable with reference to the mound. The greatest hint available is the general assumption that inhumations are earlier than cremations, having a currency from the Neolithic period until around 1500 by which time the creation rite is in the ascendancy. However, here, there is uncertainty as the earliest cremation is associated with a Collared Urn, and even though the use of these vessels lasted over 500 years, up until around 1500BC, if the assumption is to be followed at this point in time, this would have to put the inhumations early on in the Collared Urn phase. There is the possibility, however, that this barrow was actually constructed as a mixed rite site from the very beginning and that the two rites are actually contemporary. Closer dating will be needed though to untangle this and provide a firm chronological sequence.
- 4.9.4 Usage of the barrow definitely continued up until the Mid Bronze Age, proven by the discovery of a cremation with Deverel-Rimbury ware associated, this ware is usually thought to have a floruit around 1500-1300BC. No later burials than this have been

- proven, however, acknowledgement of the importance of this site, if not direct usage has been provisionally proven up until 600BC by evidence of rebuilding and enlargement of the outer bank. This may have been in response to the alluvial/estuarine inundation episodes of around this time.
- 4.9.5 The barrow fits in well with the general pattern of size and date range of barrows in Kent, the outstanding thing about this barrow is the number of burials located in and around it. This ranks this barrow as nationally important, (J.Hammond *pers. Comm.*). It is quite usual that barrows such as this are not isolated but grouped in clusters or cemeteries. It is therefore highly possible that many more barrows remain to be located in this area that are now hidden deep within the alluvial/estuarine silting layers. It is possible that this one was only seen above these layers by being the largest remaining of the group. It is also unfortunate that it is not exactly certain what class of barrow this belongs to as it was not possible to excavate the whole area to ascertain if the outer mound actually continued around the entire mound, or if it was a partial mound or had breaks in it, it is also possible that there may have been a ditch around the outside of this, but this was not seen.

# 4.10 Assessment of Archaeological Potential

4.10.1 The above reported archaeological excavations in Area C of the Neats Court development site have confirmed the presence of intense and localised prehistoric occupation and usage of this area of the south western part of the Isle of Sheppey. This when put together with the other areas of the development shows a continuum of usage which ranges from the Neolithic to the Early Medieval period. In light of this, it is recommended that further archaeological assessment focus on the recommendations of the artefact specialists, in order to supplement local assemblages recorded within the surrounding area. It is also recommended that as a secure chronological sequence was not able to be obtained by excavation, that absolute dating of some form is undertaken on the human remains to facilitate the creation of a secure burial sequence that will confirm the chronological relationship of inhumations to cremations within this barrow, this can then be related to similar monuments in the area.

# 5 Review of the Archaeological Fieldwork within Area D

David Britchfield

#### 5.1 Summary

- 5.1.1 Archaeological investigations within the eastern extent of the proposed development site revealed a simple stratigraphic deposit model comprising natural London Clay underlying the existing topsoil. The Strip, map and Sample methodology adopted for this area recorded the presence of a relatively extensive Early Medieval field system, a small Early Bronze Age circular enclosure, a Middle-Late Bronze Age clay extraction quarry as well as the scattered remains of a late prehistoric and Roman cremation cemetery.
- 5.1.2 Archaeological investigations in this area revealed a total of 13 ditches (Linears), 14 pits and two post holes indicative of an agrarian settlement located on the higher and drier ground within proximity to the lower lying river and salt marsh. Cremation burials and an inhumation were present on the boundary between Area D and Areas E and F, which are dealt with individually within Chapter 11.
- 5.2.3 In additional to the confirmed archaeological features recorded within this area, an additional 60 anomalies were investigated which proved to be natural features such as tree boles and animal burrows.

#### 5.2 Archaeological Background (Area D)

- 5.2.1 Archaeological investigations within Area D (Fig. 5.1) comprised a series of geoarchaeological test pitting (see section 1.3) followed by limited trial trenching. A total of 21 trenches were excavated within Area D, each measuring approximately 30m x 2m in width (c.1260sqm) giving a representative sample of approximately 2.4% of the site.
- 5.2.2 Five trenches excavated during the course of the evaluation positively identified archaeological features within Area D. To the north, two ditches revealed the possible presence of an east-west aligned track-way that followed the alignment of the modern boundary (Trench 44 2007a:23). No positive dating was obtained from either of these features. Trench 48, further to the south, produced possible ditches thought to be post-medieval or modern features (2007a:23) although the ephemeral nature of these features would seem to suggest that they represent nothing more than natural disturbance.
- 5.2.3 Trench 52 contained a ditch of 'probable recent origin' (2007a:23) while Trench 53, located within the southern extent of Area D, contained a single Romano-British cremation burial dated somewhere between the 1<sup>st</sup> and 2<sup>nd</sup> centuries. The 'modern'

ditch recorded within Trench 52 continued through Trench 53, as did two other ditches although no further information is provided within the evaluation report. Trench 54 within the southern extent of Area D produced a pit and a ditch, the latter of which produced a single sherd of Roman pottery.

## 5.3 Archaeological mitigation and methodology associated with Area D

- 5.3.1 In accordance with the Archaeological Project Design, Area D was subject to an intensive topsoil strip, followed by the mapping and sampling of archaeological features exposed. Mechanical excavation ceased at the natural London Clay whereby inspection of the upper surface was carried out by an experienced archaeologist.
- 3.3.2 Archaeological mitigation for Area D was based on the results of the evaluation which determined there would be no allowance for preservation of archaeological deposits insitu. Proposed development plans comprised a large scale cut and fill operation in order to provide a level construction platform for future development. Any archaeological features present on site would therefore be destroyed during proposed works.

# 5.4 Summary of Results

- 5.4.1 A common stratigraphic deposit model was recorded within Area D comprising topsoil directly overlying the natural London Clay. Archaeological features were thus present at a depth of approximately 0.30m below the former land surface.
- 5.4.2 Archaeological features within this area were sparse. In fact the primary characteristic as far as this area is concerned is focused on the presence of a north-south orientated field system that provides a physical barrier between the lower wetter marsh and the higher drier settlement recorded within Area F (see below). A total of 13 linear features were recorded within Area D, which formed a solid and partially segmented field system indicative of agrarian landscape management. Interestingly, the character and nature of this linear network varied somewhat. Within the northern extent of Area D, Linears 1-7 (inclusive) were shallower than their contemporaries within the south. The general profile and the nature of the fill lead the team to suggest that rather than representing an actual physically cut ditch we may in fact be looking at a well established hedgerow. Further to the south, the cuts seemed more deliberate but this could be expected as it would appear that the southern extent of the linear network can be characterised more as enclosures rather than field boundaries. Directly adjacent to the southern extent of Area D Linears 11 and 12 appear to respect each other with a deliberate gap dividing the two. This may represent the northern corner of an enclosure that continues beyond the southern extent of the proposed

development site. Similarly, Linear 9 and Linear 10 posses that same perpendicular proximity, which, when combined with other contemporary linear features forms a series of boundaries, gates and possible droveways all established and maintained throughout the Early Medieval periods.

5.4.3 In addition to the obvious field system, Area D produced a small prehistoric circular enclosure and adjacent clay extraction pit, along with a series of dispersed Roman cremations and an inhumation. The later will be dealt with separately in Chapter 11 below.

# 5.5 Archaeological Narrative

Period 2: Early Bronze Age

- 5.5.1 Early Bronze Age features within area D (Fig. 5.2) are restricted to a single feature comprising a partially recut ditch most likely associated with some form of burial ritual. Nine sections cut through this feature gave an average width of 1.1m, slightly oversized on the western extent, with an average depth of approximately 0.5m. The curvilinear enclosure ditch [3265, 3261, 3295, 3292, 3289, 3287, 3285, 3283 & 3273] containing a uniform fill consisted of compact yellow brown clayey silts suggesting a slow natural filling rather than deliberate filling of the feature. Collard Urn sherds from the ditch appear to have been originally associated with a burial context, which suggest the ring-ditch may have formed as the outer enclosure to a small cemetery (contemporary with the Area C burial mound) serving separate family groups, rather than separate communities (Macpherson-Grant *pers. comm.*). No evidence for a burial mound existed and despite an intense cleaning exercise no features were visible within the ring ditch. Burials associated with a mound, should it have existed, would have slowly eroded away. The feature was not visible prior to the removal of topsoil.
- 5.5.2 A single isolated pit located within the central extent of Area D measured 0.71m in diameter with a depth of 0.17m. The steep sides and undulating base of this feature gave way to a fill consisting of mid orange brown silty clay containing a moderate frequency of charcoal flecks and a base from a ceramic vessel dated to within Phase 2 of the Early Bronze Age (Fig. 5.3)..

#### Period 3: Middle-Late Bronze Age

5.5.2 Middle-Late Bronze Age activity within Area D (Fig. 5.4) is limited to the excavation of a large pit, although it is suggested that the Early Bronze Age ring ditch (mentioned above) may have still been in use. The irregular shaped pit measured over 5m in width with a depth of 0.72m [3016]. Three fills consisted of a compact mid grey silt (3229), sealed by mid yellow brown clay (3228) and light grey brown silty

clay (3227). The size of the feature, coupled with the apparent slow filling suggested a relatively extended use, although the absence of refuse would seem to rule out a domestic use. It is therefore suggested that this phase of occupation centres around localised clay extraction.

# Period 11: Early Medieval Period

5.2.3 By far the most dominant phase of archaeological settlement within the higher areas of the proposed development site is witnessed during the Early Medieval period. This could not be more obvious than within Area F to the immediate east where there is direct evidence for relatively extensive settlement throughout this period. That settlement pattern continues, albeit on a smaller scale, within Area D. While the main focus of settlement is located on the higher eastern ground, the lower gently sloping fields to the west and to the south provided an ideal environment for animal management. Features include staggered or interrupted ditches, droveways set out at right-angles, coupled with enclosure ditches and features that can be attributed with elements of animal husbandry. Such features would typically comprise collection enclosures, such as that offered by Linear 11 and Linear 12, a funnel (or 'crush') formed by Linears 8 and 9 used for the droving, batching and sorting of the livestock (Fig. 5.5). It is suggested that the primary focus of this specific area of the site would have been associated with land divisions comprising the management and control of domesticated livestock within a co-axial system of land division. Domestic occupation was focused to the east (Area F – see below).

# 6 Review of the Archaeological Fieldwork within Area E

David Britchfield

### 6.1 Summary

- 6.1.1 Archaeological investigations within the far eastern extent of the proposed development site (Fig. 6.1) revealed a simple stratigraphic deposit model comprising natural London Clay underlying the existing topsoil. The Strip, map and Sample methodology adopted for Area E recorded the presence of a relatively dispersed Roman cremation cemetery and pit/ditch complex (Fig. 6.2), along with a large prehistoric quarry (Fig. 6.3).
- 6.1.2 Archaeological investigations in this area revealed a total of 28 undated (and most likely natural) shallow pits along with isolated Roman cremation and an area of intensive clay extraction. Other than that, agrarian settlement that is so prominent within the adjacent Area F (and even Area D) is not at all represented within Area E.
- 6.2.3 This brief chapter will therefore focus on two particular areas; the prehistoric quarry and the Roman pit complex. Cremation burial groups are fully covered within Chapter 11 below (Boast).

# 6.2 Archaeological Background (Area E)

- 6.2.1 Archaeological investigations within Area E comprised a series of geoarchaeological test pitting (see section 1.3) followed by limited trial trenching. A total of 8 trenches were excavated within Area E, each measuring approximately 30m x 2m in width (c.480sqm) giving a representative sample of approximately 1.6% of the site.
- 6.2.2 One trench excavated during the course of the evaluation within this area positively identified archaeological features. Two disturbed cremation burials were revealed below a shallow layer of topsoil within Trench 65, both of which dated to the 2<sup>nd</sup> century and contained cremated human bone (2007a:25). The lack of other similar deposits within surrounding trenches was not surprising as excavations carried out by CgMs Consulting on the A249 link road also revealed widely scattered cremation groups. This is discussed further below (see 11.2.3)

# 6.3 Archaeological mitigation and methodology associated with Area E

6.3.1 In accordance with the Archaeological Project Design, Area E was subject to an intensive topsoil strip, followed by the mapping and sampling of archaeological features exposed. Mechanical excavation ceased at the natural London Clay whereby inspection of the upper surface was carried out by an experienced archaeologist.

6.3.2 Archaeological mitigation for Area E was based on the results of the evaluation, which determined there would be no allowance for preservation of archaeological deposits insitu. Proposed development plans comprised a large scale cut and fill operation in order to provide a level construction platform for future development. Any archaeological features present on site would therefore be destroyed during proposed works.

# 6.4 Summary of Results

- 6.4.1 As previously mentioned, all cremations within this area have been subject to individual and group analysis, which is detailed by Boast in Chapter 11 below.
- 6.4.2 A common stratigraphic deposit model was recorded within Area E comprising topsoil directly overlying the natural London Clay. Archaeological features were thus present at a depth of approximately 0.20m below the former land surface.
- 6.4.3 Once again archaeological features within the area were sparse with obvious concentrations focussed on two areas. To the north a series of intercutting pits, dated to the Roman period, while directly adjacent to the southern boundary a prehistoric quarry dominated the landscape.
- 6.4.4 Isolated features were investigated within the area, the majority of which proved to be either natural root boles or deposits of geological stone. Initial investigations characterised these features after which detailed excavation and recording was abandoned.

# 6.5 Archaeological Narrative

Period 4: Late Bronze Age-Early Iron Age

- 6.5.1 The main focus of activity for the period was located within the southern extent of Area E directly adjacent to the site boundary. From the outset it was clear that this series of intercutting features was dominated by a large open pit measuring 21m x 16m and with a depth exceeding 3m in parts. The primary cut [456] consisted of multiple fills (457), (458), (459), (482), (491), (492), (493), (494), (496), (497) and (498) that comprised low energy laminated silts and clays the feature had been allowed to back fill naturally. The sheer size and scale of such a feature initially suggested localised clay extraction. The feature appeared to have slumped around the western and northern extents [460] most likely as a result of trampling.
- 6.5.2 Smaller pits [329], [441], [443] and [445] were located around the periphery of the large quarry pit and are most likely associated with it, although remain undated. To the east however, similar ovoid pits can be attributed to this period [148], [156], [152] and [172], albeit slightly later in date (Phase 2).

#### Period 7: Early-Late Roman

- 6.5.3 Located within the far north-eastern extent of the proposed development site a closely grouped cluster of four ditches, seven pits and two possible post holes were relatively isolated although do draw similar parallels to archaeological features discovered within Zone B by CgMs Consulting (2007). Four segmented ditches [125], [127], [179], and [233] were orientated NE-SW and had an average width of 1.31m with depths ranging from 0.12m to 0.35m. Fills comprised compacted dark brown clay (124 & 126) and dark brown grey clay (179 & 222).
- 6.5.4 Directly adjacent, an irregular large pit [181/326] measured approximately 6m in diameter with a maximum depth of 0.34m. The single fill comprised compact brown silty clay that contained fragments of pottery dated to the mid 3rd century (429). A series of later (Phase 2) intercutting pits truncated the fill of the larger, earlier feature while two dispersed post holes [256 & 321] provided the possibility for structural remains.
- 6.5.5 An additional elongated pit [342] associated with the previously mentioned quarry is also assigned with this period, although the absence of contemporary features within this area may suggest that partially backfilled prehistoric features were subsequently filled by later occupation on the site.

# 7 Review of the Archaeological Fieldwork within Area F

David Britchfield

#### 7.1 Summary

- 7.1.1 Area F was situated directly to the south (and west) of Area F and the east of Area D (Fig. 7.1). As with these aforementioned areas, archaeological investigations within Area F revealed a simple stratigraphic deposit model comprising natural London Clay underlying the existing topsoil. The Strip, map and Sample methodology adopted for Area F recorded the presence of an extensive Early Medieval settlement, comprising enclosures and structures (Fig. 7.2). This area is the focal point of occupation within the (immediate) surrounding landscape.
- 7.1.2 This chapter will focus on the initial assessment of features within Area F and should be read in close conjunction with the ceramic assessment (Chapter 8) and selected Figures (Appendix 4). References to each will be made throughout this chapter.

# 7.2 Archaeological Background (Area F)

- 7.2.1 Archaeological investigations by Oxford Archaeology within Area F comprised a series of limited trial trenching. A total of six trenches were excavated within Area F, each measuring approximately 30m x 2m in width (c.360sqm) giving a representative sample of approximately 1.5% of the site.
- 7.2.2 Five out of the six trenches, excavated during the course of the evaluation within this area, positively identified archaeological features. Trench 66, within the northern extent of Area F, contained a north-south orientated ditch containing Romano-British pottery, a high degree of oyster shell as well as animal bone and fired clay. Within the western extent of Area F, Trench 59 contained eight large pits and a small gully. One of the features exposed within this trench was examined. Pottery securely dating the feature to the late 12<sup>th</sup>-13<sup>th</sup> century was obtained (2007a). Directly adjacent, Trench 60 contained seven archaeological anomalies, three of which appeared to have been examined. The results from this trench have been omitted from the evaluation report.
- 7.2.3 Located centrally within Area F, Trench 67 recorded the presence of two parallel eastwest aligned ditches, one of which was examined and produced medieval pottery dating from the 11<sup>th</sup>-13<sup>th</sup> century. An additional six features were present within this trench, although only one was thoroughly investigated and contained Iron Age/Roman pottery (2007a:25).
- 7.2.4 Trench 71 contained 10 potential archaeological features, out of which only four were examined. Features examined included an east-west aligned ditch securely dated to the 12<sup>th</sup>-13<sup>th</sup> century, a well preserved and articulated cattle burial and two north-

- south orientated ditches, one of which could be assigned to the medieval period. Small circular features present within the trench (7106, 7113, 7116 and 7120), which would appear to represent small pits or post holes were left unexamined.
- 7.2.5 In summary the evaluation within Area F produced a total of 25 potential archaeological features, of which 11 were investigated (44%).

# 7.3 Archaeological mitigation and methodology associated with Area E

- 7.3.1 In accordance with the Archaeological Project Design, Area F was subject to an intensive topsoil strip by SWAT Archaeology, followed by the mapping and sampling of archaeological features exposed. Mechanical excavation ceased at the natural London Clay whereby inspection of the upper surface was carried out by an experienced archaeologist.
- 7.3.2 Archaeological mitigation for Area F was based on the results of the evaluation which determined there would be no allowance for preservation of archaeological deposits insitu. Proposed development plans comprised a large scale cut and fill operation in order to provide a level construction platform for future development. Any archaeological features present on site would therefore be destroyed during proposed works.

# 7.4 Summary of Results

- 7.4.1 A common stratigraphic deposit model was recorded within Area F comprising topsoil directly overlying the natural London Clay. Archaeological features were thus present at a depth of approximately 0.20m below the former land surface.
- 7.4.2 Archaeological investigations within Area F have identified three distinct areas: a double-ditched enclosure with a high frequency of internal features, a potential domestic/communal multi-phased timber structure and amorphous peripheral anomalies (Fig. 7.3).
- 7.4.3 From the outset, the enclosure and structure were clear. The rectangular shape in plan, coupled with distinctly dark shell-rich fill provided clear evidence for human occupation on the high plateau of Area F. The evaluation trench (Trench 67) excavated by Oxford Archaeology (Wheaton 2007a) had clearly indicated the presence of parallel linear features along with large pits, which at the time were interpreted as large tree boles and potential modern field boundaries (2007a:25). This, however, can now be discounted. The double-ditched enclosure can be clearly seen (Fig. 7.4) with internal divisions, structures evident from post holes in the north-western extent of the enclosure and circular coral areas to the immediate south.
- 7.4.4 As with the western enclosure, features within the eastern extent of Area F were instantly recognised as being of considerable national importance. The archaeological

evaluation had highlighted this area as an archaeological hotspot, with features ranging from an east-west orientated linear feature, a partially articulated cattle burial and a series of unexcavated pits (2007a:26). Once again, distinct patterns are clear. Two sets of parallel ditches can be recognised, with connecting cross ditches, pits and frequent (structural) post holes.

7.4.5 The distinct nature and characteristics indicative of the eastern and western settlement areas tend to phase out towards the southwest. Within this area the anomalies become more amorphous and indistinct and the distribution of surface artefacts such as pottery, bone and shell becomes rare. Examination of approximately 50% of these features revealed the presence of natural tree boles rather than archaeological features. It is suggested at this stage that this area of the natural plateau may have undergone some kind of tree clearing exercise predating the adjacent settlement.

#### 7.5 Archaeological Narrative

- 7.5.1 This section of the chapter will focus on the stratigraphic relationships between features within Area F. As with previous chapters within this report, it is set out in chronological Period, Phases and in some cases Sub-Phases. This is deemed necessary due to the complexity of the archaeological record for this area. An overall period summary, which is led by the ceramic assessment, is provided in section 8.4.107-8.4.125.
- 7.5.2 It is imperative that this section be read in conjunction with the pottery assessment and illustrations, which cover isolated prehistoric and Roman features within this area. In order to remain concise, Linear features within this area have been assigned a designation letter, i.e. **Linear X**, which is shown in **bold**.

# Period 11: Early Medieval – Medieval (Phase 1)

- 7.5.3 The evidence from Area F stems from a complicated sequence of inter-cutting ditches and other features (Figure 7.5). The justification for the suggested likely sequence is based first on an examination of the topographic relationships of the various linears recorded and second on the dating and condition of the pottery from them (See Section 8.4.84-8.4.91). For this and the other two main phases of Period 11 the archaeological evidence is presented first, followed by the pottery-based rationale for their dating.
- 7.5.4 The key to resolving the Area F sequence lies in the curious nature of **Linear JJ-Linear C** (Figs. 7.9, 7.11). The alignment is, mostly, totally alien to the main eastwest axis of both the Eastern Structure's and Western Enclosure's ditches. It is,

however, rather obviously snaking around the large 'dark soil zone' (960) – and this is principally seen as the enclosing off and containment, perhaps even draining, of a wet zone (a process repeated rather more compactly by Linear D in Period 11 Phase 2). It is unlikely to be a Late Saxon feature because of the obvious entrance-type relationship between Linear C's eastern tip and the western tip of the Eastern Structure's outer ditch Linear S. That said it could possibly be an early Saxon ditch delineating a new intended structural zone – the Eastern Structure(s) – and initially sealing off, perhaps even partially draining, the wet zone and adjacent areas. Despite a probable/potential lack of continuity, the placement of the Eastern Structure(s) over the same Period 9 building(s) zone does imply awareness of previous activity and/or renewed occupation in a favoured place. Even with, arguably, c.150-200 years of abandonment some Period 9 structural remains may have still been visually extant – and the function of Linear JJ-C, albeit rather irregularly, may have been to initially demarcate and 'tidy-up' the whole area preparatory to the construction of the original Eastern Structure.

- 7.5.5 What other linears are likely to belong to this initial phase? The straggly nature of the eastern extension of Linear H, Linear M at Contexts (795), (1305) and (1072) mirrors the form of the odd-shaped pit entity (981) immediately eastward jointly perhaps another entrance-type feature. Its nature is also broadly similar to the Linear LL, Linear EE, Linear DD, Linear CC and perhaps the earlier phase(s) of Linear BB. These linears, partly because of the way Linear BB extends off-site beyond the Eastern Structure and partly because of their straighter and generally thinner nature (compared with the Eastern Structure's main ditches) are seen as part of a field/hedge-boundary ditch. The early field-boundary layout extended across this area and included Linear H and in some way must have included the inner north-south ditch Linear Q or an equivalent boundary aspect.
- 7.5.6 At this initial stage there would have been no need for Linear B or Linear D; the sinuous Linear JJ-C closed off the northern side at Linear C. At the same time Linear S and Linear T were laid out deliberately enclosing where the Eastern Structure was to stand immediately adjacent on its south side to the east-west field-boundary linear(s). Not immediately perhaps, but a little time later, work was begun on the Structure's foundation trenches. This scenario makes sense of the layout differences between the western ends of Linear S, Linear RR and Linear FF/GG and the overlap by Linear OO of Linear CC. The ends of the structural Linear RR and Linear GG/FF are virtually identical in their end-of-linear northward 'flick' in alignment and the separate trenches of Linear GG and Linear FF are mirrored

more-or-less in the form of Linear RR at Contexts (103/104). If the outer ditches (Linear S or Linear CC etc.) had been dug at the same time one would tend to expect the western end of Linear S to have the same alignment as Linear RR, and no overlap/cut of Linear OO by foundation trench Linear CC. Re these latter ditches, there is no need to expect a significant difference in time between digging both – the overlap could be no more than due to weather/soil conditions and some slippage. At this time the space between the western end of the Eastern Structure and the sinuous Linear JJ-C remained open – with a secondary drainage gully, Linear E, being dug at some time during this phase. There is little in the ceramics to gainsay this scenario except a large dump of later twelfth century pottery from Context (1017) but this zone looks disturbed by later re-cuts thus this dump is likely to be out of place.

- 7.5.7 Summarising the likely event-sequence for Phase 1 (Fig. 7.4):
  - 1. Linear JJ-C is cut possibly to serve as an east-west drainage ditch, definitely as a demarcating element enclosing to the west the 'wet zone' hollow (960) and the new construction zone to the east.
  - 2. Possibly fairly soon after certainly within this phase the short **Linear E** is cut to serve as an additional ditch draining the area in front of the Eastern Structure's west-facing entrance.
  - 3. A little while later **Linear BB**, **Linear LL**, **Linear H** and **Linear M** are cut jointly serving as a field-boundary and, in the eastern part of the area, as the southern boundary of the new structural zone. This across-site linear is provided with a southern entrance, leading into the eastern enclosure zone, between the eastern end of the short **Linear M** and the western end of **Linear LL**.
  - 4. At the same time, **Linear S** and **Linear T** are cut to serve as the northern boundary of the eastern structural zone.
  - 5. A short time later, the eastern zone inner **Linear V**, **Linear OO** and **Linear FF** are cut to provide the foundation trenches for the Eastern Structure.
- 7.5.8 It is clear from the pottery assessment that this western north-south field-ditch sequence was likely to have been in place from the late eleventh century onwards and remained so throughout all four phases of Period 11. This is also a logical expectation that these linear segments could have been in place from the beginning of Period 11. Assuming temporarily that all these western boundary linears have a Phase 1 origin: -

Phase 1 Linear R apparently cuts Phase 2 Linear B – which it should not.

Phase 1 Linear A apparently cuts Phases 1 or 2 Linear N and Linear G – which it should not if these elements were in any way contemporary.

Phase 1 Linear Q apparently cuts Phase 2 Linear H – which it should not.

7.5.9 So, since the proposed Phase 1 and Phase 2 sequence makes sense both topographically and ceramically – the chronological placement of Linear A, Linear R and Linear Q has to be re-aligned in accordance with them. The ceramic evidence indicates that the Area D field-system was laid out during Phase 1. This is likely to have been early within the overall phase as the western end of the initial sinuous drainage Linear JJ-Linear C terminates just short of Linear Q. This implies that Linear Q was already in existence. Since the pottery from Linear SS indicates a Phase 1 date for this ditch segment and, by implication of similar alignment, for Linear R it is likely that these and Linear Q are all contemporary. With Linear R terminating a short way north of Linear N and Linear Q abuts Linear G on its south side – Linear G and Linear N should also be contemporary – particularly since the western-end of both these linears does not make sense unless they extend under and beyond Linear A. This means that during Phases 1-2 at least the western end of the Western Enclosure was open during the use-span of the potential structure G-N. In turn this means – and supported by the worn condition of the pottery from G-N - that Linear A should represent a Phase 3, or even Phase 4, closing-off of this end of the Western Enclosure zone. That Linear A is likely to be an additional and later entity is further supported by the recovery of a later, Medieval, sherd from Context (1329). Separately, unless the archaeological evidence is unequivocal, it is unlikely that the western end of Linear H pre-dates Linear Q – particularly since it does not appear to extend beyond it.

#### Period 11: Early Medieval – Medieval (Phase 2 and Phase 3)

- 7.5.10 The Eastern Structure and associated enclosing linear and southern field-boundary linears remain in use (Fig. 7.5). The enclosing of the 'dark soil' zone (960) and possible utility/barn zone immediately to the west of it was consolidated by the digging of Linear D, Linear B and Linear I. The Phase 1 entrance, represented by Area F Eastern Structure southern 'ditch' segment [Contexts (990), (844)] and east end Linear M, now replaced by Linear I to probably form a wider southern entrance between east terminal Linear I and Eastern Structure's west end post-pit [Context (1032)] and 'equivalent' to the existing width of the northern entrance. On the basis of the pottery from Linear I this should have been between c.1125-1150 AD, certainly no later and probably early within that range.
- 7.5.11 According to the ceramic assessment, occupation continued through into Phase 3 (Fig. 7.6), with the eastern and western compounds remaining in use during most of this period (see Section (8.4.94-8.4.99).

# Period 11: Early Medieval – Medieval (Phase 4)

7.5.12 Archeologically, a new element is the Area F Western field-boundary ditch **Linear A** (Fig. 7.7). This is seen as a late rationalisation of the west end of the Western Enclosure by demolishing the 'barn' and completing the north-south ditch-linkage in this area – perhaps as part of a wider property/ownership land-use re-alignment following the end of use of the Eastern Structure. Whether the east-west Area F field-boundary **Linear BB**, **Linear I** and Area D field-system remained in use is uncertain. The only late, Medieval, pottery from Area F is from **Linear A**, **Linear Q** and the Area E Quarry – there is none from the rest of Area D. This all suggests a major rearrangement of land-use in the area. Another feature that may belong to this phase, or later, is the large Area F Pit (1441) simply because it cuts **Linear H** (Phase 2/3).

# 8 Ceramic Assessment

Nigel MacPherson-Grant

#### 8.1 Introduction

- 8.1.1 An overall total of 7759 sherds (weighing: 54kgs.621gms) were recovered from Phases I and II of this excavation. The overall assemblage is very definitely multiperiod with multiple phases of Earlier Prehistoric, Later Prehistoric and Historic Period activity represented. Within the overall area this activity was variably widespread with notably few instances where the activity of a particular period was confined to only one zone. Since some site Areas witnessed long-term multi-period occupation eg Areas A and F there is an inevitable fairly high degree of residuality resulting in reduced sherd sizes and frequently highly abraded pottery. Since some Later Prehistoric potting traditions remained more-or-less the same over long periods this has frequently made the firm allocation of highly worn sherds to any particular period uncertain.
- 8.1.2 Despite these difficulties the site has produced regionally useful and interesting information particularly from its Early Bronze Age, Late Iron Age, Mid Saxon and Early Medieval phases. For the Early Bronze Age although finds of Early Bronze Age Collared Urn style pottery from cemetery contexts are not particularly unusual, the recovery of similar material from domestic occupation within a post-Beaker Early Bronze Age landscape of this date is rare and important. For the Late Iron Age the recovery of *bricquetage*-ceramic, definitely implies that salt was being produced nearby. Until recently it was assumed that the main, or only, source of salt for settlements bordering the northern coast of Kent was from the Upchurch area of the North Kent marshes. This is clearly not so and requires a re-assessment of the intertribal management of salt-production and its trade during the Late Iron Age.
- 8.1.3 The unexpectedly high number of sherds from imported Mid Saxon Ipswich Ware vessels, in line with the equally high numbers from ecclesiastical centres within the region, suggests that the Neats Court settlement benefited from a similar and direct relationship with the monastery at Minster (Sheppey). That there appears to be a mid or slightly later, ninth century break in occupational continuity is almost certainly the result of Viking-phase harassment along the shores of the Thames Estuary. All this is important consolidation of rather slim historical data for the period.

# 8.2 Analytical methodology

- 8.2.1 The pottery from all Phase I and Phase II contexts has been identified and the Site Archive provided with a detailed Area- and context-based sherd identification, quantification and dating Pottery Record. This primary phase of analysis, combined with an examination of the Context Record, has allowed for the site's excavated features to be allocated, where feasible, to their respective archaeological Periods and to provide a foundation for the present pottery Assessment Report. This Report consists of, dependent upon archaeological significance, a detailed period-, phase-, context- and condition-based analysis of the pottery recovered from individual periods. Each Period identified is provided with a list of contexts producing **definite** or **probable** identifications, a phase or period discussion (application dependent upon whether a particular period is sub-divided archaeologically or ceramic ally) and an overall *Period summary* drawing together and précising points made in the more detailed discussion sections. In addition, each period is provided with lists of definitely locatable contexts and general Area-zones where activity (but no detectable features) is implied by the presence of residual sherds. This accord with the colourcoded plan locations and legends accompanying the overall report. In addition, as a signpost to any other researcher – a list is provided per period of illustratable elements.
- 8.2.2 In view of the last aspect it should be stressed that partly dependent upon varying recovery factors, partly on the relative level of regional and site-based academic importance certain periods have received a varying greater or less level of assessment as a bi-product of whether they will/will not be published. Unless advised differently it is, at this stage, envisaged that all Periods 1-4 (Neolithic-Earliest Iron Age), all Periods 6-7 Cremation burials, the Late Roman Period 7 Phase 3, and Periods 8-11 will be published and illustrated in detail. In the interim, the period sherd totals from Phases I and II of the excavation have been combined to provide the following:

# 8.3 Summary of recorded periods, sherd quantities and implications

<b>PERIODS</b>	SHERDS	INTERPRETATION
LPM	30	Edge-settlement discards, manure scatters or
		c.21AD machine-smear
PM	5	Manure scatters and (?) minor settlement-fringe
		activity

M	9	Settlement ends/shifts c.1200-1225 AD, no later
		than c.1250 AD
EM	635	Settlement renewal from c.1050/1075 AD
LS	1 + (?) 49	Uncertain whether settlement continued between
		c.850-1050 AD
MLS	39	Settlement ends c.850-875 AD (Vikings over-
		winter 854)
EMS	4	Settlement/settlement-fringe activity from about
		c.650 AD
LR	116	Reduction c.250/275 AD, renewal c.325 AD, ends
		c.400 AD
MR	1753	Cremation burials end c.150/175 AD, settlement
		expansion
ER	1688	Settlement - shift of activity-focus, cremation
		burials begin c.50/75 AD
B/ER	177	Settlement continues - associated with salt-
		production c.25-50 or 75 AD
LIA	667	Settlement continues
MIA-LIA	243	Settlement start-date from c.150 BC
MIA	-	-
EIA-MIA	-	-
EIA	86	Settlement-fringe activity between c.800-600 BC
LBA	(?)	Uncertain
MBA-LBA	85	Settlement between c.1550-1150 BC
MBA	18	Settlement-fringe activity and (?) cremation
		burials between c.1500-1300 BC
EBA	375	Activity, settlement and burial between c.2200-
		1550 BC
LN	-	-
MN	-	-
EN	-	-

8.3.1 In addition a number of less-certainly identified sherds could only be more broadly allocated – 31 that are probably but not certainly of Earlier Prehistoric date, 509 which could only be broadly classified as Later Prehistoric (c.1500-50 BC) and 88 which are certainly post-prehistoric.

## 8.4 Period Summaries

Period 1: Early-Mid Neolithic

Potential site phase: Early Neolithic:

Area contexts:

Possible example from = Area E Quarry Context 622 – one rim sherd

**Uncertain examples from =** 

Area E Quarry Contexts 461/481 (1 sherd)

Area E Other features Contexts 149 (9 sherds), 193 (1 sherd)

Area F Eastern Structure Contexts 715/716 (1 sherd), 1735 (1 sherd)

Area F Inter-compound ditch Context 904 (1 sherd)

None from Phase II contexts

## Potential site phase: Middle Neolithic:

Area contexts:

**Possible example from** = Area D Ring-ditch *Context 3260* - single small, moderately worn sherd from ? bowl in Peterborough Ware tradition

None obvious from Phase I contexts

# Potential site phase: Late Neolithic:

No obvious examples from any Phase I or Phase II contexts/areas

#### Period summary

- 8.4.1 All the above sherds are small, mostly fairly heavily worn and residual. All have fabric and manufacturing characteristics that *could* allow them to be broadly allocated to the Early-Middle Neolithic. Most are plain bodysherds and their type of coarse flint-tempering does also occur among assemblages of Middle Bronze-Earliest Iron Age date. Since both Mid Bronze Age ceramic is definitely present, and Earliest Iron Age almost certainly, in moderate quantities from this site, it is felt that most of these sherds are more probably derived from these phases of activity. However it is worth noting that the two most likely elements mentioned below do have Early and Middle Neolithic manufacturing characteristics that have been recognised elsewhere from the region.
- 8.4.2 The first example is a possible Earlier Neolithic simple bowl rim from Area E Quarry *Context 622.* It has a simple rounded rim with a burnished surface. Part of this

burnished surface skin has flaked away axially along the rim – a tendency noted on a number of plain bowl rims from the Earlier Neolithic assemblage from the Court Stairs causewayed enclosure at Ramsgate, Thanet. This characteristic has not yet been noted on any other regional material of later date – although there is no obvious reason why it could not occur later.

- 8.4.3 The second example a possible Middle Neolithic Peterborough-type bowl sherd from Area D Ring-ditch *Context 3260* is a little more diagnostic. It is only moderately worn and made in a coarsely flint-tempered fabric that has been externally decorated with bold finger-pinches above or below a possibly deliberate set of paired finger-nail impressions. The fabric appears to have a fairly streaky 'squidged' appearance due to rather excessive compression of the clay during preparatory kneading and is a manufacturing tendency that has been noted elsewhere on some Middle Neolithic pottery from Castle Hill, Folkestone (Macpherson-Grant 1990, 60). Although a later perhaps MBA date is not entirely impossible, this particular combination of fabric characteristics and decoration types does suggest a bowl made in the Mortlake style of the Peterborough Ware tradition.
- 8.4.4 There are no readily apparent examples of Late Neolithic Grooved Ware among the grog-tempered sherds recovered from this site. However, the definite comb-decorated Beaker sherd from beneath the Area C Mound (see Period 2 Phase 1) does confirm that this low-lying estuarine-edge or marshland area was occupied or used as a resource zone during, at least, the Early Bronze Age. Although this cannot be used to confirm Neolithic activity at this site, it is worth emphasising that Earlier Neolithic pottery has been recovered from the inter-tidal buried land-surface at Minnis Bay, Birchington in Thanet and several large sherds from Middle Neolithic Peterboroughtype bowls are trawling discoveries made off-shore near Whitstable. All of these were once low-lying salt-marsh or creek-edge locations during these periods – so it is perfectly reasonable to expect at least a degree of occupation or usage in the same low-lying areas along the southern shore of Sheppey island. Further, very tentative, confirmation of activity in the present locale is possibly provided by the single small and heavily worn sherd from Area E Context 193, which accompanied a small assemblage of Late Neolithic/Early Bronze Age type flint knapping waste. If the sherd is genuinely residual in-context, and not intrusive, it could stem from earlier activity. More generally though, the very low count of recovered flintwork containing a near-total absence of Neolithic types, does indicate that any earlier pre-Bronze Age

activity in the immediate area may have been fairly low-key, certainly during the early Neolithic – marginally less so perhaps during the Middle and Late Neolithic.

Period 2: Early Bronze Age

Phase 1: Beaker and Food Vessel - earlier pre-cemetery activity:

#### Area contexts:

Beaker:

## **Definite examples from:**

Area C Mound Context 3646 (SF9) - single comb-decorated sherd

#### **Near-definite examples from:**

Area C Mound Contexts =

3159 (SF 20) – bodysherd, dual-tone firing, paired fingernail impressions ? from late 'potbekker'-type coarseware storage jar

3588 – single small worn rim scrap, reduced

Area E Quarry Contexts =

622 – 1 plain dual-tone fired bodysherd

629-630-3 sherds = 2 vessels = 2 from *Context* 629, one of which equals sherd from *Context* 630, both with horizontal lines of fingernail decoration.

Area F 'damp zone' *Context 960 -* 1 sherd, decorated with random paired fingernail impressions

#### Possible examples from:

Area C Mound *Contexts 3157* - worn base sherd from small-diameter vessel; *3162* - small worn scrap.

Area D Context 3037 - 2 sherds - base, bodysherd

Area E Quarry *Context 459* – plain bodysherd, fairly small, thin oxidised exterior skin, fairly fine moderate grog and flint temper, fairly worn

Area F Western Enclosure zone *Context 1934* – base sherd, oxidised, medium-fine grog and sparse-moderate flint tempering, moderately worn

#### Food Vessel:

#### **Near-definite example from:**

Area C Mound Context 3548 – single worn rim sherd from fairly large vessel

#### Possible example from:

Area C Mound *Context 3583* - small assemblage highly abraded sherds, 2-3 vessels represented - one sherd with traces of stabbed decoration

Area E Quarry *Context 288* – 3 small fairly worn sherds, 1 rim scrap with ? Impress-decorated ridge (just below rim – **not Collared Urn**)

#### Phase discussion

- 8.4.5 The single comb-decorated Area C Beaker sherd (SF 9) from the pre-mound 'platform' Context 3646 is markedly more worn than the single fairly large Collared Urn sherd from the same context. It is definitely residual in-context and should stem from pre-cemetery activity. Another similarly worn sherd, from Context 3588 below the early-phase bank, is a rim scrap from a flaring-rimmed vessel. Although grogtempered, it is too thin-walled to be either Food Vessel or Collared Urn – and it is almost certainly from another Beaker. Other near-definite or possible sherds of earlier Early Bronze Age Beaker and Food Vessel-type pottery were also recovered from the Area C Mound (Contexts 3157, 3159, 3162, 3548 and 3583) including a fingernaildecorated Beaker sherd, possibly from a large late-style? 'Potbekker'-type coarseware storage jar. None of this additional material is associated - as contemporary depositions or residual introductions - with any of the crouched inhumation burials. All come from a variety of contexts - outer layers of the mound itself, alluvial layers or from within the associated early-phase bank. Interestingly, most are fairly similarly worn and again, generally, in marked contrast to the majority of the mostly fresh Collared Urn material also recovered. Elsewhere, other probable Beaker sherds were recovered from the Area E Quarry (sherds from two late-style fingernail decorated coarseware vessels) and Area F (again from a rusticated coarseware vessel). All of these should be broadly contemporary.
- 8.4.6 A few others less certain plain base sherds were recorded from Areas C, D and F. Their fabric type and condition suggests that they may be fairly considerably residual in context and more likely to be broadly contemporary with the above than later. They are almost certainly **not** coequal with the majority of Collared Urn-style vessels recovered. The types of decoration and vessel probably represented for the first set above suggests that some, if not all, of this second group are derived from domestic occupation. Possible confirmation of this may be represented by finds of worked flint from Area E. A small pit 193/194 contained a cluster of waste flakes of Late Neolithic/Early Bronze Age type and another context, 315 near the Quarry produced a barbed-and-tanged arrowhead.
- 8.4.7 The few near-definite or likely examples of Food Vessel recovered mostly stem from the Area C Mound although there may be one decorated rim scrap from the Area E

Quarry. For those from Area C, their worn condition, again compared with that of the recovered Collared Urn sherds, suggests that they also *may* stem from domestic activity pre-dating the creation of the cemetery.

# Specific contexts that can be reasonably allocated, broadly, to the above phase (Period 2 Phase 1):

Area E = Small pit 193/194 and, **possibly**, the Quarry complex

# General Area-based activity implied by presence of residual sherds from:

Area C = Pre-mound context 3646

Area D = in area of Context 3037

Area F = in area of 'damp zone' Context 960 (Western enclosure)

# For use with Collared Urn phases (2-3):

**Note:** On the basis of sherds from the Area C Mound sequence there are 5 obvious fabric types:

Fabric 1 = purely grog-tempered (sometimes with very sparse flint) – majority fabric type in most contexts, majority principally bi-tone externally oxidised

Fabric 2 = noticeably coarse-grogged (2 vessels, pre-mound Context 3646, mound context 3657)

Fabric 3 = purely grog-tempered – atypically fine (not Beaker, almost 'Belgic'-style quality), well-crushed and mixed, solely from Context *3648 Slot A* 

Fabric 4 = Grog-tempered with sparse-moderate flint (1 vessel, Contexts 3517, 3548)

Fabric 5 = Grog-and-organic-tempered (1 vessel, Context 3161)

In addition – for temporary analytical purposes there are 2 variants :

Fabric 1A - variant of Fabric 1 – most egs. In reduced fabrics with grog leached out

Fabric 5A – variant Fabric 5 – most egs. In reduced fabrics with grog leached out

Only examples Fabrics 2-5, 1A and 5A indicated below

### Phase 2: Collared Urn - activity immediately prior to (use) of Area C cemetery

Area Contexts:

# **Definite examples from:**

Area C pre-mound *Contexts* =

3595 – 7 bodysherds, most small, 1 large, all only slightly worn, 1 split and slightly more worn, 2 decorated collar base sherds (? same vessel), 2 egs same-vessel equations

3646 – 1 bodysherd, fairly large, fresh

#### Phase discussion

8.4.8 The sherds from *Contexts 3595* and *3646*, underlying the mound sequence, confirm that they stem from activity prior to the preparation of the mound area for use as a cemetery. Five-six vessels are represented, two by small slightly worn sherds, 2 by fairly large fresh sherds. The more worn examples indicate breakage and loss a moderate time, the fresh ones only a very short time, before the preparation process. These factors, together with the number of vessels represented, suggest that they are more likely to derive from domestic activity than non-secular – possibly from, or associated with, some of the features also recorded as pre-dating the cemetery.

# Phase 3: Collared Urn - broadly contemporary with, or directly associated with, the use of the Area C Mound cremation cemetery

Area contexts:

# **Definite examples from =**

Area B 'Pond' Contexts =

- 3341 6 small conjoining sherds from same cord-decorated Collared Urn rim moderately worn overall
- 3350 5 sherds (some conjoining) from same cord-decorated Collared Urn rim-collar partprofile – fairly heavy unifacial wear
- 3359 1 small near-fresh cord-decorated Collared Urn rim (Note Unstratified)

Area C Mound Contexts =

- UN, 3136, 3136A-B, 3155, 3157, 3159 (SF 22), 3160-2, 3330, 3384, 3409, 3432, 3517, 3539, 3540-1, 3544, 3548, 3550, 3558, 3560 (SF 2), 3577, 3600, 3624, 3627, 3648A, 3655, 3657, 3659, 3660. Variable sherd quantities per context, mostly fairly fresh bodysherds and some rim, collar sherds. Overall between 18-20 different vessels, cremation vessel from Context 3560 most complete
- **2+** obvious same-vessel equations -3517 with 3548, 3595 with 3600 possibly also sherds from 3159 and 3161-3162
- Any examples of markedly more worn Collared Urn sherds **may** stem from pre-mound Collared Urn activity

Area D Contexts =

3037 – Single small worn base sherd

3148 - Single small fairly worn bodysherd

- Area D ring-ditch *Contexts* =
- 3260 4 small sherds, one decorated, 3 plain bodysherds (1 Fabric 4), 3 only fairly worn (1 with unifacial wear), one heavily worn and ? lightly re-fired
- 3290 3 fairly small decorated collar sherds, one only slightly worn, 2 conjoining with fairly heavy unifacial wear
- Area E Quarry *Context 623* 6 small bodysherds, 3 same vessel, moderately worn, semi-leached Fabric 5A, 1 cord-decorated; 3 Fabric 1A, heavy unifacial wear,

# Possible examples from =

- Area A = UN 1 bodysherd, thick-walled, dual-tone firing, fine grog, sandy fabric, fairly fresh
- Area C Mound = Context 3648 Slot A (Roman pit this could be 'Belgic' = Fabric 3, although some Collared Urn can be quite fine)
- Area D = Context 3198 one small fairly worn bodysherd
- Area E Quarry Contexts =
- 341/342 one small bodysherd, worn, semi-leached Fabric 5A
- 335/336 2 small bodysherds, same vessel, slightly worn, lightly leached Fabric 1A
- 461/481 1 base sherd, Fabric 1A, moderate-sized, fairly worn; 2 ?base/collar-flange sherds, Fabric 1A, thin external oxidisation, heavy unifacial wear; 4 bodysherds, 1 Fabric 1A, fairly small, bi-tone firing, slightly leached, moderate unifacial wear; 3 Fabric 4, 1 bi-tone fired, 1 worn fairly heavily overall, 2 with fairly heavy unifacial wear.
- 482 6 bodysherds, 1 very slightly leached Fabric 1A, bi-toned firing, moderately worn (may = 1 from 461/481); 2 Fabric 1A, small, one heavily worn; 2 Fabric 5A, fairly heavily worn (1 ? with remnant cord-impressions ? = 484); 1 Fabric 4, moderate-sized, heavy bifacial wear.
- 484 13 bodysherds, 5 Fabric 1A, 2 heavily leached, bi-toned, same vessel, 3 small very worn; 8 Fabric 5A, 3 moderate-sized, 1 heavy bifacial wear, 1 ? With remnant cordimpressions ? = 482)
- 486 1 bodysherd, fairly large, Fabric 1A, thin external oxidisation, heavy unifacial wear only
- 523 1 bodysherd, heavily worn
- 629 4 bodysherds, 1 coarse Fabric 1A, fairly heavily worn; 3 less worn, Fabric 4, 2 same vessel with ? lost cordon or collar base; 1 moderate-sized, buff oxidisation.
- 636 1 shoulder-neck bodysherd, markedly closed form, coarse grog, sparse flint (? Fabric 1), ? dual-tone firing, moderately worn
- 639 2 bodysherds, small, 1 Fabric 4, oxidised, slightly worn; 1 Fabric 5A, heavy unifacial wear

#### Phase discussion

- 8.4.9 Definite Collared Urn material was recovered from Areas B-D and the Area E Quarry. The sherds from the pre-cemetery phase of the Area C Mound, Area B 'Pond', Area D non-burial contexts and those from the Area E Quarry are presumably, though not necessarily, derived from domestic activity – those from the Area C Mound itself and from the Area D ring-ditch are all from non-secular burial contexts. It is worth stressing that despite the presence of purely or predominantly grog-tempered and externally or completely oxidised sherds, and at least one base and several bodysherds from apparently small-medium diameter vessels, all potentially suggesting Beaker-period ceramic - there is a complete absence of comb-decorated sherds among those allocated to the Collared Urn tradition. Although it is recognized that many later Early Bronze Age vessels of Collared Urn type do have fabric and firing trends that can be similar to Beakers (Gibson 1986, 42-3), as a general rule, there is a fundamental difference in potting trends between the two traditions. Quite apart from differences in form and decoration, Collared Urn vessels are frequently thicker-walled and have less compact poorer quality lower-fired fabrics than Beakers - sometimes with quite large poorly-crushed grog only loosely held together within the fabric's matrix.
- 8.4.10 Utterly typical examples of Collared Urn were recorded from Area B 'Pond' zone Contexts 3341, 3350, 3359 and Area C Mound Phase 6 Cremation 3560 (SF 2). These are all rim sherds from jars with closed-form slightly everted or simple rims, all internally-bevelled and with, externally, long slightly concave or straight collars which are markedly undercut or concave at their bases. At least 2, possibly three, have restorable rim to deep collar base part-profiles, and all 4 with traces of cordimpressed decoration – mostly externally on the collar but in the case of 3359 and 3560 on the inner-rim bevel as well. In most examples the external decoration consists of close-spaced horizontal and diagonal lines - the former as a below-rim multiple-lined border to the decorated collar panel (3359), the latter forming filled (3560) and, less certainly, open unfilled (3350) chevrons. Internally, the corded decoration is horizontal and applied as one or more lines along the inner-rim bevel – three on 3359, a variable one or more on 3560. Most of these appear to be from bipartite urns - those with only a straight-forward deep and overhanging collar. However the slight under-collar curve on apparently plain undecorated sherds from a large jar from Area C Context 3544 may come from a tripartite jar – one with a very

broad fairly shallow but markedly concave zone between the collar and shoulder. Other undecorated rim and collar sherds were recorded from Area C Mound contexts 3159, 3384, 3432, 3544 and 3655. Base sherds are represented by only two instances - with several fresh and conjoining fragments from 3560 (SF 2) and a much worn sherd from 3136.

- 8.4.11 Overall, between 11-13 different vessels appear to be represented from the Area C Mound sequence. None are complete and although that from *Context 3560* is the most intact the majority are represented by only a handful of sherds. The fragmentary condition of these coupled with their degrees of wear suggests that any urn burials represented have been disturbed and the fragments from them re-deposited. However, although the majority of sherds are small, many are individually in good condition, their size more a bi-product of soft friable fabrics and low firing temperatures than the result of disturbance and breakage followed by long-term exposure and weathering. In particular, some of the plain bodysherds from *Contexts 3159* and *3161* are moderate or fairly large-sized. These aspects imply that some of the material moved only a relatively short distance from its original location and that most of it subsequently endured only short- or moderate-term periods of exposure.
- 8.4.12 The sherds from Area B are a little odd in that only three rim sherds, two of them moderate-sized, were recovered domestic contexts tend to produce principally bodysherds. So that, although they appear to come from post-pits and related features a domestic function for the Area B features *may* not be applicable. Alternatively these sherds are re-deposited from adjacent higher locations. Whilst this might account for the worn condition of one rim, of the remainder one is fairly fresh and the other has heavy unifacial wear, suggesting its damage is more likely to be derived post-loss lying one side up in semi-static ground conditions rather than during any alluvial or agricultural shift from another location. If the latter *does* apply it has to be from a nearby location grogged fabrics, particularly the more under-fired later EBA types, do not weather well long-term.
- 8.4.13 Sherds were also recovered from the Area D ring-ditch *Contexts 3260* and *3290*. They are only small or moderate-sized and variably worn and although they could be redeposited from earlier activity their condition suggests that they almost certainly stem from disturbed cremation burials. Two other sherds were recorded from Area D, both from non ring-ditch contexts. Although these are plain bodysherds their fabric characteristics are so close to those from the Area C Mound it is highly unlikely they

belong to any other period. The single small worn base sherd from *Context 3037* is in a context containing both earlier probable Beaker sherds and a later but highly worn MBA sherd. All this material may be residual in a later context, but the identifications for the EBA Collared Urn and MBA sherds are firm and, even if all residual, can only imply derivation from contemporary activity. The single sherd from *Post-pit 3148* is again small and fairly worn. Even if this sherd is also residual, both these contexts are sufficiently far away from the Area D ring-ditch to imply that, rather than their being dragged into position following agricultural denudation of the ring-ditch, they may well stem from domestic activity or, just possibly, be derived from contemporary manure scatters.

- 8.4.14 The Area E Quarry produced both a few fairly definite Collared Urn-type sherds but also moderate quantities of a particular fabric type (Area C Mound series Fabric 1A) which were difficult to place chronologically during primary fabric identification and dating. This was epitomised by the occurrence of heavily weathered and deeply-pitted sherds, mostly reduced, sometimes oxidised, and all apparently lacking obvious diagnostic formal or decorational traits. The non-linear pitting of sherd surfaces sometimes found on fairly poorly-fired pottery is mostly due to the water-carried acidic erosion or leaching of calcareous inclusions such as chalk and shell. Posterosion, various types of voids are left in pot surfaces - frequently flat-bottomed shallow depressions or, in the fabric core, thin linear voids for shell-tempered wares, frequently deep circular or ovoidal pits of various sizes for chalk-tempered wares. Other than the very different linear voids occurring in organic-tempered wares, voids associated with other inclusions types are relatively infrequent. The present examples were not, originally, shell-tempered and there is very little chalk in the local clays so, if chalk was occurring as a natural or deliberately added inclusion, the pots had to be made off-island. Since these all appeared to be 'low-grade', probably prehistoric domestic wares, they were almost certainly made using island clays.
- 8.4.15 During assessments of site-area distributions Fabric 1A has come into chronological focus. Most examples are from the Area E Quarry with a few sherds from the Area C Mound sequence. Closer examination of the more weathered examples of grog-tempered Collared Urn sherds from the latter location showed that they tended to have slightly pitted surfaces due to erosion of the deliberately added presumably softer grog inclusions. Initial examination of the material from the Area E Quarry suggested that some sherds were *probably* from EBA Collared Urns but despite the likelihood allocation was uncertain. Detailed comparison of these sherds from the

Mound and the Quarry showed they were all from very similar grog-tempered, sometimes grog-and-flint or grog-and-organic-tempered, fabrics (Fabrics 4-5 - and 5A for leached examples). More conclusively, one small scrappy Quarry sherd (from *Context 623*) had definite traces of cord-impressed decoration, and two other very worn bodysherds almost certainly from the same vessel but from two different contexts (482 and 484) appear to have linear lines – almost certainly eroded cord-impressions.

- 8.4.16 These Fabric 1A sherds and their variations are important for several reasons. First the fabric and firing trend similarities between the two site areas and particularly the decorated sherd from 623, undeniably confirm that the pitted leached material from the Quarry is from EBA Collared Urns. Second and assuming that there are no differences in grog-type represented the general lack of wear and this weathering tendency among the Collared Urn sherds from the Area C Mound sequence suggests that most of those sherds, even if disturbed and re-distributed, did *not* suffer long-term exposure before re-seal. Third the presence of over 30 sherds from the Area E Quarry, with only 4 obvious same-vessel equations, does imply derivation from domestic occupation although it is a little odd that so few other Collared Urn-type sherds were recovered from the neighbouring Areas D-F.
- 8.4.17 Most of the much smaller quantity of specifically mixed-tempered, grog-and-moderately flint-tempered sherds from the Area E Quarry, in Fabrics 4 or 5 are, on the basis of the Area C Mound sequence, almost certainly also of EBA date. These should be broadly contemporary with the site's currency of Collared Urns, although a few may be better classified as later, MBA, Urn types in reality from storage and cooking vessels.
- 8.4.18 Finally there is one leached Fabric IA-type bodysherd from Area F *Context 2132*. It is highly worn as is an associated probable MBA-LBA sherd. Although it is clearly residual in a later linear feature these sherds are from the same zone, within the southwestern part of Area F, that appears to contain a number of probable MBA-LBA pits. The recovery of the present sherd from this location, together with similar sherds from the nearby Area E Quarry, reinforces the likelihood of at least moderate-scale later EBA domestic activity in this general area.

Summary of the fired clay finds from the Area C Mound sequence

8.4.19 One unusual fired clay object was associated with the Phase 3 cremation burial 3560 (SF 2). This is a small sub-ovoidal disc of clay, approximately 1.50 cms in diameter, flat on one side, shallowly domed on the other. The latter side carries a fine textile impression – slightly worn but clearly visible – the cross-weave made of twisted thread – fine enough to suggest an inner garment or fine dress. The disc is a little too irregular to suggest deliberate manufacture and the impression and inclusion with the burial is probably, but not certainly, accidental. No other fired clay fragments were recorded from this context.

8.4.20 At this point it is also worth emphasising that for an apparently purely burial context, daub or fired clay lumps of various sizes and condition occur in an unusually high number of contexts. Admitted some may stem from cremation pyres but some fragments appear to be faced and some appear to have wattle impressions. In view of the above, it is possible that some of these are re-deposited from some of the Phase 1 pre-mound activity.

# Specific contexts that can be reasonably allocated to this phase (Period 2 Phase 3):

Area B 'Pond' Contexts Pit 3341, post-pit 3350

Area C Mound cemetery contexts

Area D = Ring-ditch Contexts 3260, 3290 and ? post-pit Context 3148

# General Area-based activity implied by presence of residual sherds from:

Area D in zone around/adjacent to Pit 2037

Area E Quarry complex

Area F south-western zone

# Illustratable pottery providing confirmation of activity during Period 2:

Phase!: Beaker and Food Vessel - earlier pre-cemetery activity:

Comb-decorated Beaker sherd from Area C pre-mound Context 3646

Probable Beaker rim sherd from Area C Mound context 3588

Probable late-style 'rusticated' *potbekker-type* Beaker bodysherd from Area C Mound context 3159 (fill of 3275)

Two probable late-style Beaker fingernail-decorated bodysherds from Area E Quarry

Probable late-style 'rusticated' Beaker bodysherd from Area F

Probable Food Vessel decorated rim sherd from Area C Mound context 3548

Phase 2 : Collared Urn - Area C activity immediately preceding construction burial mound :

Collar-base sherd(s) from impress-decorated Collared Urn from Area C pre-mound Context

3595

Phase 3: Collared Urn - Area C cremation cemetery phase:

Undecorated collar-base Collared Urn from Context 3157

Undecorated rim Collared Urn from Context 3155

Collar-base sherd from ? Undecorated Collared Urn from Context 3159

Rim and collar sherds from stab-decorated Collared Urn from Context 3384

Collar-base sherds from undecorated Collared Urn from Context 3544

Collar-base sherds from impress-decorated Collared Urns from Contexts 3157 and 3600

Stab-decorated collar-base sherd Collared Urn from Context 3595

Near-complete profile cord-decorated Collared Urn from Context 3560 SF 2 - associated with small sub-circular clay disc with fine-weave (cloth) impression

Worn rim sherd from ?undecorated Collared Urn from Context 3655

Base from Collared Urn from Context 3657

Domestic activity broadly co-equal with the use of Area C burial mound as a cremation cemetery

Decorated Collared urn rims from Area B 'Pond' Contexts 3341, 3350 and (residual) 3359

Three cord-decorated Collared Urn collar sherds from Area D ring-ditch Contexts 3260 and 3290

## Period summary

8.4.21 The first phase equates with any Late Neolithic or Early Bronze Age activity that is likely to have pre-dated the creation of a cemetery in Area C. This is a reasonable implication based principally on the fairly worn condition of the single fairly fine quality comb-decorated Beaker sherd recovered from *Context 3646* definitely predating the Area C burial mound. Its presence in this position automatically implies some earlier, possibly domestic, activity, at least in Area C - since no other ceramic from the overall site is obviously contemporary with it. It's fairly well-prepared fabric, thin body-wall, reasonably well-executed zoned decoration and even, oxidised, firing suggests that although it is unlikely to be from the earliest phase of Beakers, it could still be relatively early. As such, it should be the earliest Beaker sherd recorded from the site and, initially, is placed within the span c.2200-1900 BC. Not so easily dated, are a further small quantity of mostly fairly heavily worn probable Beaker sherds recovered from other site locations. Most of these are typified by the presence

of fingernail decoration and are likely to be from coarseware Beakers. Some of these may be broadly contemporary with the comb-decorated sherd but at least one may be from a large late-style 'potbekker' jar. In addition to the above, the Area C Mound also produced at least one near-definite Food Vessel sherd. Again this sherd is highly worn compared with associated Collared Urn sherds - and should therefore be residual. A small cluster of similarly worn sherds may represent another – but there are no other likely candidates from the rest of the site. The distribution of these Beaker and Food Vessel sherds, coupled with that for LN/EBA-type flint artefacts, indicates that initial Early Bronze Age domestic activity, although not obviously intense, was probably fairly widespread across the whole site area - particularly in its eastern part around the so-called 'Quarry' zone. Conversely, recognisable examples of probable or potential Food Vessels are rare from across the whole site. Food Vessels were current between c.2000-1700 BC and those here, together with some of the coarseware Beakers, may be late examples in use shortly prior to c.1700. However, the highly worn sherd from the Area C Mound - with very few others elsewhere - could reflect an alternative scenario. That is, that the majority of both vessel types were broadly contemporary and that the low count of stylistically later Food Vessels is a genuine reflection of a reduction of activity throughout the whole site area, perhaps fairly early within the span c.1900-1700 BC – or at least a fair time before the local adoption of the Collared Urn tradition.

- 8.4.22 The second phase is represented by at least two contexts producing Collared Urn-style sherds from *beneath* the Area C Mound. One, *Context 3595*, contained a small number of sherds from 6 different vessels. Several were near-fresh and unworn, representing contemporary breakage and discard, the others only slightly or moderately worn. The number of vessels represented and their associated sherd sizes indicates that they may well derive from pre-mound domestic occupation possibly associated with some of the other features recorded from beneath the mound area. Their differences in wear-pattern suggest loss and disposal only a moderate period of time before final seal. That process need not have been immediately prior to the area being prepared for use as a cemetery but in the absence of any obvious artefactual evidence for a major phase of pre-mound occupation is unlikely to have been significantly earlier. Obviously some of the Collared Urn sherds from other site-Areas are likely to be contemporary with this phase.
- 8.4.23 The third phase is equivalent to the creation and use of the Area C cemetery. On the basis of the low count of pre-mound sherds the cemetery was probably first

constructed fairly early within the life of its associated settlement and as a result the wide spread of Collared Urn sherds from Areas B, D, E Quarry and possibly Area F should represent activity broadly concurrent with the use of the cemetery. Although it is obvious that all this material derives from domestic activity, very few contexts can be confidently signposted as representing that activity. The specifically, rim sherds only, recovered from the Area B 'Pond' zone are a little unexpected but may be no more than a recovery bias. Irrespective their presence, whether deposited or redeposited, does firmly imply a settlement activity-focus in that zone or close to it. Another, albeit rather thinly represented, may be centred on post-pit 3148 in the central-southern part of Area D – and possibly extending into the south-western zone of Area F and around the Area E Quarry (which remained open as a feature in the local landscape throughout this period). Area D also produced a ring-ditch cemetery. The lack of features in its immediate area does tend to confirm that the Collared Urn sherds from its ditch are probably all derived from burials deposited during its use rather than being re-deposited from earlier/later domestic or agricultural activity. This indicates construction and use at some point during either the second or third subphase. Its relatively close siting to the larger Area C cemetery (only 350 metres away) suggests that either both cemeteries were contemporary, serving separate family groups - rather than separate communities - or more probably that they were built at different times. Initially, accommodating the dating applied to Phase 1 and until radiocarbon determinations have been completed for the Area C cemetery's skeletons and cremations – an initial placement for Phases 2-3 to between c.1800-1500 BC is suggested.

# Period 3: Middle Bronze Age

#### 1. MBA Deverel-Rimbury-type ceramic from:

Area contexts:

# **Definite examples from =**

Area B =

Compound = All contexts

'Pond' area = *Context 3332* (one small, fairly worn thick-walled bodysherd), *3359* (one bodysherd, small, worn), *3381* (fineware rim, ?globular urn, fairly worn)

Area C Mound = Contexts 3648, 3657, 3661

Area D contexts =

Other features = Contexts 3037, 3228 and 3229

Area E Quarry contexts = 484 (1 knob-lugged sherd), 492 (large decorated storage-jar sherd, conjoins with 1 sherd from 493), 493

Area F Other features Context 1957 – bodysherd with cordon or lug-handle, fairly worn

# Possible examples from =

Area B 'Pond' = 3332, 3341, 3347, 3359, 3363

Area C Mound = Contexts 3156, 3159, 3330, 3523 – these may be MBA/LBA or LBA-EIA

Area D contexts =

Ring-ditch = *Context 3260* 

Other = Contexts 3041, 3216, 3236

Area E Quarry = *Contexts 459, 481, 482, 493* (one sherd each), *624* (5 sherds, same vessel), *636* (one small worn bodysherd)

Area E Linears etc. = Context 480

Area F contexts =

Eastern structure zone = Contexts 919, 1792

Western Enclosure zone = *Contexts 792, 960* (15 sherds, not obviously same pots), 1134,1515, 1542,1953, 2132

# 2. MBA-LBA transition-type ceramic:

Area contexts:

#### **Definite example from =**

Area B 'Pond' Context 3375 – 1 rim, near-fresh, medium-diameter, hooked-rim jar

## **Probable examples from =**

Area B Compound = *Context 019* assemblage

Area D =  $Context \ 3228/3229$ 

## Period discussion

8.4.24 The cluster of uncertain and irregularly-shaped features in Area B Compound all produced coarsely flint-tempered of Middle Bronze Age type. The recovered assemblage is not large, but the topographic spread of source features, the mixed size and condition-range of the recovered sherds (including a few burnt sherds), together with the fairly high number of vessels represented, is all indicative of domestic occupation of some duration. The majority of elements are plain bodysherds with only a few diagnostic formal elements – a fineware bowl rim from *Feature 005/006*, a fineware shoulder sherd from *Feature 007*, a coarseware jar rim from *Feature 013/014* and a coarseware jar part-profile from *Post-pit 019/020*. The latter context is

the most useful - containing approximately 50 frequently fairly large sometimes conjoining sherds, some fairly fresh, a few lightly burnt - and all representing a contemporary discard group. The part-profile is from a simple barrel-form jar, it's simple rim decorated with spaced finger-tip impressions. The fabric, form and decoration are quite typical of many regional MBA Deverel-Rimbury-type assemblages but could occur among those of the following period - the MBA/LBA transition. The remaining three are not quite so closely datable. The sherd from 007 is from a fineware jar with a sub-carinated shoulder type that is a variation of the more specifically-moulded off-set shoulders normally found on Deverel-Rimbury-type globular urns. Although it could occur among some MBA globular urn assemblages it could, again, occur among those of MBA/LBA transition date. Allocation to vessel type for the fineware rim scrap from 005 is less certain – but is probably from another globular urn. The simple coarseware jar rim from 013 is not immediately typical of Deverel-Rimbury assemblages but does occur as a relatively late variant type among some Kentish MBA assemblages. Most of the recovered sherds are purely flinttempered but the large assemblage from 019 also contained mixed-temper, grog-andflint filled, fabrics. According to recent work along the line of the Channel Tunnel Rail-link the use of mixed-temper fabrics appears to be a characteristic of MBA/LBA transition assemblages. Summarising, the recovered Area B ceramic data suggests that both the MBA (c.1550-1350 BC) and the MBA/LBA transition (c.1350-1150 BC) periods are represented. Ceramic ally this may seem so. However, only in the northern extension of the site is there any indication of inter-cutting features (Contexts 033 and 034) that might suggest long-term occupation spanning both periods. As a result, and since manufacturing trends throughout most of the overall assemblage appear relatively homogenous, it is suggested that the Area B features probably represent no more than one main phase of occupation. Superficially, this can be confidently dated to between c1550-1150 BC. More specifically the rather minimal range of recognisable cultural traits suggests a date between c.1400-1200 BC.

8.4.25 As with the Compound area, the ceramic evidence from the Area B 'Pond' zone is also a little ambiguous. There is one definite example of a sherd from a thick-walled coarsely flint-tempered storage jar of MBA Deverel-Rimbury type from *Context* 3332, less certain is another coarseware sherd from 3359 and there is also a moderately worn rim sherd from a very thin-walled closed-form fineware jar – almost certainly from an MBA-type globular urn although variants of the form also occur during the MBA-LBA transition. The first two are fairly heavily worn and should be

residual in-context. The fineware rim is only moderately worn and is the only sherd from the large hollow 3381. In addition, there is a near-fresh rim sherd from a coarseware hooked-rim jar - made in a mixed-temper, grog and flint, fabric. The latter's fabric and form is considered to epitomise the MBA-LBA transition, c.1350-1150 BC. Finally there are a number of plain flint-tempered bodysherds from Contexts 3332, 3341, 3347, 3359 and 3363. Some are fairly heavily worn, some fresh - and none can be dated more closely than to the MBA-EIA periods. Other than these, and excluding a thin scatter of Roman and later material, three second millennium BC ceramic traditions are represented - EBA Collared Urn, MBA Deverel-Rimbury and MBA-LBA transition hooked-rim jars. These, together with the less-diagnostic sherds, all come from only a relatively thin scatter of features. However the presence of the Collared Urn sherds is accounted for, the two later traditions are chronologically close, with no clear indicators of significantly later activity. Since the plain bodysherd debris is very much of the type that would derive from domestic occupation it is assumed that most of these stem from the same phase or phases of activity that produced both the MBA and MBA-LBA elements. Since, in turn, very few of the recorded features inter-cut it is suggested that all the post-EBA pottery comes from only one main phase of occupation, which like the activity in the Area B Compound zone, may also be datable to between c.1400-1200 BC.

- 8.4.26 The Area C Mound also produced a moderate quantity of principally flint-tempered sherds. Three of these represent 3 definite MBA Deverel-Rimbury-type vessels a fineware globular jar from *Context 3648* and 2 coarseware barrel or bucket jars from *Contexts 3657* and *3661*. The sherd from *3657* is large but has heavy unifacial wear, the others fairly small and moderately worn. If these are from cremation urns they have been disturbed and re-distributed. The remaining sherds are less diagnostic, with manufacturing characteristics that only allow for a broader MBA-EIA placement (the Area C Mound sequence is detailed separately).
- 8.4.27 The Area D ring-ditch *Context 3260* produced only one small moderately worn flint-tempered scrap. This context, like ring-ditch context *3290*, contained principally EBA Collared Urn sherds. These are presumably, though not necessarily, all derived from plough-disturbed cremation burials. The present *3260* sherd is rather undiagnostic but could also derive from a later burial its presence in-context signposting the possibility that this cemetery *may* have been used for burial during this period. Only one other Area D feature can be definitely allocated to this period a large irregular pit (*Contexts 3228-3229*) that produced sherds from 1 fineware and 2 thick-walled

coarseware storage jars. Most sherds are fresh and should represent undisturbed contemporary rubbish. Another single but fairly worn sherd from *Context 3216* may be from another contemporary feature. Other fairly large sherds from the same vessel but, along with earlier Collared Urn sherds, residual in *Context 3037* confirm MBA activity in this part Area D – as may another single worn sherd from *3041*. As with Area B, MBA Deverel-Rimbury-type ceramic is definitely present but, again, the fabric evidence from the irregular pit *3228/3229* – with at least one mixed-temper base sherd – tends to confirm the likely dating applied to both Area B activity zones - i.e. c.1400-1200 BC.

- 8.4.28 The Area E Quarry produced at least two obvious sherds of MBA Deverel-Rimbury-type a fairly large fresh sherd from a soot-encrusted coarseware barrel jar with fingernail-decorated rim and an applied cordon from *Context 492* (with a conjoining sherd from *Context 493*) and a knob-lugged jar, fairly worn and apparently residual in a later context, 484, containing fresher LBA or more probably EIA material. A few probably contemporary plain bodysherds may be present in the Quarry's overall assemblage (e.g. one from layer 482) but are not so readily recognisable.
- 8.4.29 The Area F sherds are all very worn and residual. The majority come from contexts in the Western Enclosure zone, with only one from the area of the Eastern Structure. Only the worn cordon or lugged sherd from Context 1597 is typologically typical the bulk remainder, plain coarse-gritted bodysherds, could occur in later assemblages. However, they are mostly noticeably more worn than the larger quantity of examples with characteristics that are recognisably of LBA, more probably EIA, and date. Since, just as with the adjacent Area E Quarry, this latter type occurs in greater quantity than those of probable MBA type, it is reasonable to assume that the same trend applies to this Area. The similarly worn cluster of MBA-type sherds from the 'dark soil zone' Context 960 indicates that if it was not actually created during the MBA was a pre-existing feature of the localscape into which discarded domestic material tended to collect. Two sherds, one each from the round pits Contexts 1953 and 1957, come from fairly closely-related similarly-shaped pits in the same southwestern corner of Area F. Although the single small sherd from 1953 could be residual in a later feature its relative closeness to 1957, with its larger less worn definitely MBA sherd (and single probably intrusive highly abraded Mid Roman sherd), does imply that these and some of the other features in this zone are of MBA date.

# Specific contexts that can be reasonably allocated to this period (Period 3):

Area B Compound contexts

Area B 'Pond' contexts = Pit/post-pit 3332, Post-pit 3347, Pit 3363, possibly Hollow 3381

Area D contexts = Irregular pit 3228/3229,? post-pit/pit 3216 and possibly ring-ditch 3260

Area F (Western enclosure zone) Contexts Pits 1953, 1957

#### General Area-based activity implied by presence of residual sherds from:

Area C Mound

Area D northern and central zones

Area E Quarry (assumed still open on basis of infill's containing EIA and later pottery)

Area F (Western enclosure zone) – perhaps centred around Context 960

# Illustratable pottery providing confirmation of activity during Period 3:

MBA Deverel-Rimbury type ceramic:

Probable Globular Urn rim from Area B 'Pond' Context 3341

Globular Urn rim from Area C Mound Context 3648

Cordoned and decorated barrel jar rim from Area E Quarry Context 492

Knob-lug (with full-body parallel) from Area E Quarry Context 484

MBA/LBA transition type ceramic:

Rim from hooked-rim jar from Area B 'Pond' Context 3375

#### Period summary

8.4.30 Both the MBA Deverel-Rimbury and the MBA/LBA transition are represented by typical ceramic characterisers – a small number of the first (from Areas B-F), only one for the second (Area B 'Pond' zone) and, overall, a moderate number that could belong to either period. As recovered, this *could* mean that there was occupation during both periods, either continuous or semi-continuous. However it is felt that, if the first alternative was applicable to the excavated site area, there ought to be a higher quantity of epitomising formal and bodysherd elements. Whilst it *may* apply within the adjacent landscape, the on-site evidence, particularly as represented by the material from the Area B Compound zone, could equally well indicate that only a single main phase of occupation is represented. For this Area, even though it has been suggested that some or all of the material is re-deposited from adjacent higher ground, the number of conjoining or same-vessel sherds from *Context 019/020*, and their condition indicate, at least for this context, the opposite. In addition the majority of sherds from this location are all broadly contemporary – and some only marginally

worn. Even if the contextual evidence is uncertain, the predominance of sherds of the same cultural type, together with their condition, should indicate an area of domestic occupation. On the basis of the latter - and even if the collective site evidence does reflect either long-term or separate phases of activity during these periods - it is felt wiser for the time being to indicate only a general phase of activity, arguably between **c.1400-1200 BC**. Obviously not all the material need be immediately contemporary but, as a general trend, the Area B Compound appears to be part of, or adjacent to, a main settlement zone – with other subsidiary activity areas – one particularly among a series of larger pits in the south-western corner of Area F and the Area E Quarry and, to a lesser degree, also in Area B 'Pond' and Area D. Deverel-Rimbury –style pottery was definitely recorded from the Area C cemetery but is uncertainly derived - from either cremation burials or ancestor ceremonies. There is even less evidence from the Area D ring-ditch – continuity into this period is likely but has to be assumed.

Period 4: Late Bronze Age – Early Iron Age

# Phase 1: Late Bronze Age:

Area contexts:

No examples

### Phase discussion

8.4.31 As indicated for the previous period there was definite MBA and MBA/LBA transition activity in various parts of the overall site, at some point between c.1550-1150 BC – with sufficient evidence indicating occupation of moderate duration in the Area B Compound zone – together with some, though not necessarily contemporary, activity in Area F. Although it is possible that a few of the more diagnostic formal elements recovered - of broadly late second and early first millennium type - *could* indicate further, continuous or sporadic activity during the subsequent LBA, it is felt that any genuinely significant phase of occupation during this period would have left more tangible traces – irrespective of the only partial excavation of the Areas B-C alluvial levels. Conversely, both Areas C and E have produced a number of definite EIA-type sherds datable to between c.800-600 BC. Their presence, coupled with the low count of possible LBA types, does imply a break in activity, or settlement shift, somewhere between c.1300 or 1200-800 BC.

# General Area-based activity implied by presence of residual sherds from:

Area E Quarry (assumed still open on basis of infills containing EIA and later pottery)

# Phase 2: Earliest Iron Age:

Area contexts:

# **Definite examples from =**

Area C Mound Context 3533 Slot B

Area E contexts =

Quarry = *Contexts 459, 484,496/498,497* 

Other features =  $Context\ 151$ 

# Probable examples from =

Area B 'Pond' Context 3332

Area D Bund Context 526

Area E contexts =

Quarry = Contexts 274, 461/481, 494, 496, 497, 637

Other features = *Contexts* 149, 155, 157, 163

Area F contexts =

Eastern structural zone = Contexts 1009, 1067, 1323, 1768

Western Enclosure zone = Contexts 960, 1327, 1329, 1525, 1846, 1886, 1934, 1942, 2025

# Phase discussion

- 8.4.32 There are no Area A (*Context 535 SF 80* previously thought to be of this date is LIA), and very few Area B or D examples that can be confidently allocated to this period. Those few definite examples from Area C are dealt with separately.
- 8.4.33 Definite and probable examples of this date from the Area E Quarry are listed above. These are isolated according to manufacturing traits that are typical of regional Earliest Iron Age assemblages although a few elements could also occur in earlier, LBA, assemblages. With the exception of 459, 461/481, 484 all are from contexts containing purely flint-tempered material. Other similar Quarry sherd-groups were recorded from: Contexts 272/449, 274, ?486, 491, 492, 493, 621, 622, 624/506, 629, 630, 631, 636, 639 and 654. Many of the sherds from these could easily occur in EIA assemblages but are less obviously diagnostic. Despite this caveat, the relatively high frequency of definite EIA-types, apparently occurring in a number of different contexts frequently with less diagnostic elements, suggests that the great majority of flint-tempered material from the Quarry is of LBA-EIA, more probably EIA, date.
- 8.4.33 Again for Area E, some or all of the small cluster of pits/post-pits immediately northeast of the Quarry can be allocated to this period. Of these, *Context 151/152* produced

several near-fresh sherds of EIA type including 2 from the same vessel, one large sherd from a fairly typical thin-walled, profuse fairly fine flint-tempered and largediametered coarseware storage jar and a flint-tempered glauconitic sandy ware fineware sherd. This fabric type stems from Greensand Beds along the northern edge of the Weald in particular, in the upper Medway valley. Pre-900 BC examples have not been recorded to date whereas EIA assemblages from that area definitely include vessels made from glauconitic sandy clays. There is some evidence for traded or acquired vessels from this general area - a small fineware cup from Highstead, Chislet Period 2 Enclosure A24. The present site is nearer to the mouth of the Medway and this sherd may well have come from the same/similar source. This pit is one of a line of 4 post-pits – 148,155/156 (with a few scrappy EIA-type sherds) and 172. These should all be contemporary. This post line appears to 'cut through' a scatter of smaller post-pits – of which 149/150, 157/158 and 163/164. Although that from 163/164 could be EIA, most are rather worn and undiagnostic, and could be a little earlier. Their conjunction with the post-line indicated suggests they may be from a probably earlier sub-phase of the same occupation-band represented by the post-line - or earlier but still within the main activity range associated with the Quarry and Area F.

8.4.34 Although, in relation to the Area E Quarry, Area F produced the next highest Area sherd-total for this period, in terms of comparative source-feature distributions, it is the highest from the overall site. Again, although a few may be of either LBA or LIA date, the majority should be of EIA date. There are very few formally diagnostic elements, most are variably worn plain bodysherds. As with the previous period, the majority stem from Western Enclosure-zone contexts. Most are residual but a few, whether residual or broadly contemporary, are from contexts producing, as recovered, no later ceramic. The first is from pit Context 1934 - five small scrappy sherds, some from the same vessels, *probably* of EIA date although they could, but not typically, be MBA-LBA. This pit is from the same general zone as the possibly MBA pit 1952 so could be of the same date. The second is a fairly large sherd with some fairly heavy unifacial damage. Its profuse flint-temper and large diameter is more typical of EIA manufacturing trends. It comes from a fairly large rectangular pit close to the 'dark soil zone' Context 960. This type of pit has been recorded from at least one other broadly contemporary Kentish site - Highstead, near Chislet (Area B, possibly late Period 2) dated to between 900-600 BC. In this case the sherd, although damaged, is large and heavy and unlikely to have 'travelled' far - so could be from an EIA feature.

Summary of less diagnostic Later Prehistoric elements

- 8.4.35 An approximate total of 420 flint-tempered sherds fall into this category with approximate site-area frequencies of Area A 12 sherds, Area B 32 sherds, Areas C and D 92 sherds, Area E 199 sherds, Area F 82 sherds. None of these sherds can be confidently allocated to any particular period although there is an experience-based preference to place most between the MBA and EIA (c.1550-60 BC). Of those that fall into this category, and in terms of intuition-based preferential period placement, this total can be sub-divided into MBA 13 sherds, a fairly narrow MBA-LBA placement of 52 sherds, a broader MBA-EIA placement of 167 sherds and EIA 14 sherds. The remaining fairly small total of 170 sherds cannot be preferentially placed and could date to anywhere between c.1150-50 BC. Overall a very few sherds *may* be of Neolithic or Early Bronze Age date, a small quantity may be indigenous LIA but the over-riding manufacturing-trait emphasis is for a pre-c.600 BC dating for the majority. In terms of site-area these totals indicate that for:
- **Area A:** Other than those sherds which are obviously of indigenous Late Iron Age –type, only 6 were possibly of pre-LIA date and of these only 1-2 were sufficiently worn to suggest derivation from significantly earlier activity. As recovered, this suggests that Area A may have been outside the main focii of later second or early first millennium BC activity.
- **Area B:** Uncertainly identified sherds from this area almost certainly stem solely from activity associated with the later MBA settlement-zone in the Compound area.
- **Area C:** The relatively small number of non-Early Bronze Age flint-tempered sherds from this area all stem from the definite MBA and/or MBA-LBA activity directly associated with burial and ancestor ceremonies, definite EIA presence that *may* have an ancestor-related aspect or, more probably, be the bi-product of agricultural activity throughout much of the site area. The few later, probable LIA sherds, should stem from similar activity.
- **Area D:** Phase I contexts produced only a few flint-tempered sherds one is residual in the later, Mid Roman, context 2211, and another residual in the Early Medieval context 480. The latter may be MBA and derived from activity broadly contemporary with the Area B occupation zone and Area D's ring-ditch cemetery. Two, from the Bund context 526, if not residual, may be of EIA date. A few other scraps from *Context 328*

are residual and indeterminate as are any from Phase II contexts. All this material should stem from MBA, EIA or later Iron Age occupational or agricultural activity.

Area E: The majority of sherds are from layers within the Quarry with only a small quantity from other non-Quarry contexts - a few sherds residual in the Roman pit sequence, one superficially MBA-type *possibly* intrusive into the LN/EBA pit 193, and a few from the cluster of pits/post-pits immediately north-east of the Quarry. The datable evidence from the Quarry indicates that most of this sherd-category is likely to be of LBA-EIA, if not almost entirely of EIA, date with only a small quantity of MBA-type and perhaps a few indigenous LIA. The fresh condition of these sherds indicates the use of the Quarry as a convenient hollow for the short-distance disposal of domestic rubbish from nearby occupation (but see also Summary for Quarry and Area F Context 960).

Area F: Most sherds from this site-area are residual in later features – a few LIA or Roman, most of post-Roman date. As recovered, there is a marked bias towards the plethora of features in the western half of the site – and all those from features *not* containing post-prehistoric pottery are from this zone. Overall, there appears to be a relatively small MBA component - noticeably centred on the 'dark soil zone' *Context 960* - with a larger quantity more broadly allocated to the MBA-EIA. Based on the evidence from the adjacent Quarry, most of the latter are likely to be of EIA date. Most of these are fairly heavily worn, small and clearly abraded from, perhaps fairly frequent, redeposition and exposure – however those less worn or moderate-large sized examples are unlikely to have been moved far from their original loss or discard point. These should all stem from domestic, or at least settlement-fringe, activity within or immediately adjacent to this site-area.

## Specific contexts that can be reasonably allocated to this phase (Period 4 Phase 2):

Area E pit/post-pit alignment *Contexts 148,151/152, 155/156, 172* and *possibly* some/all smaller post-pits in same area (eg. 149/150, 157/158, 163/164)

Area F (western enclosure zone) pit *Context 2024* 

# General Area-based activity implied by presence of residual sherds from:

Area E Quarry (assumed still open on basis of infills containing EIA and later pottery)

Area F (western enclosure zone)

# Illustratable pottery providing confirmation of activity during Period 4:

Cable thumb-press decorated rim from Area C Mound Context 3552

Coarseware jar rim from Area E Quarry Context 274

Angle-shouldered fineware bowl sherd and coarseware jar rim from Area E Quarry Context 459

Fineware bowl and coarseware jar rims from Area E Quarry Context 484

Finger-tip decorated coarseware jar cordon, finger-tip decorated coarseware jar shoulder sherds from Area E Quarry Context 484

Incised-decorated (spiral/'eye' pattern) part-profile rim-shoulder sherd from Area E Quarry Context 496/498

Reconstruction EIA-type profuse-gritted base from Area E Quarry Context 497

# Period summary

- 8.4.36 For this period, diagnostic material comes from only two site Areas a single sherd from a red-finished (iron-oxide slipped/painted) fineware bowl from Area C *Context* 3533 Slot B and a number of typical coarseware sherds (including sherds from a jar with a basal 'skin' of profuse flint grits) from Area E mostly from the Quarry but also from a number of adjacent features. However to this seemingly low count should be added a larger number of near-definite examples principally from the Area E Quarry and the western zone of Area F with a few other examples from Areas B ('Pond') and D. In addition, a review of less-diagnostic sherds suggests that the same Areas E and F were within or adjacent to the main activity zone for this period.
- 8.4.37 The end of this period is followed by little or no obvious on-site or peripheral activity until probably late within the Mid-Late Iron Age. The recovered evidence for the latter is slight but implies a degree of pre-'Belgic' activity perhaps no earlier than c.150-100 BC or slightly later. Overall this represents a time-space of approximately 400-500 years when the whole site zone was technically 'fallow' but may have been wholly or partially maintained as pastureland.

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# NO OBVIOUS EARLY-MID OR MIDDLE IRON AGE ACTIVITY

Between c.700/600~BC - c.200/150~BC a variable time-lapse of between approximately 550-400 years

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Period 5: Mid-Late Iron Age

Area contexts =

# **Definite examples from =**

Area A contexts = 516, 533/531, 535,, 615

# Possible examples from =

Area A contexts =

UN, 346, 386, 416-418, 503, 512, 528-534, 535/538, 549, 602

Area D context 2213

Area E contexts Pit 429 and Ouarry contexts 273, 461/481, 482, 484, 636, 654

Area F contexts = 960, 1067, 1108, 1351, 1386, 1449, 1475, 1591, 1627, 1646, 1792, 1886, 1930/1931, 1942, 1974/1976, 2233, 2313

#### Period discussion

- 8.4.38 It was initially thought that there might have been a late Middle Iron Age phase of occupation, ie between c.400-200 BC. This possibility was stimulated by the presence of a small quantity of glauconitic sandy ware sherds. These are mostly residual in C1 AD pre- or Conquest-period contexts (eg. Context 615) but there are also a few, associated with flint-tempered fabrics, from possibly undisturbed contemporary deposits containing no 'Belgic'-style or later pottery (eg. Contexts 636 and 654). Glauconitic sands stem from the Greensand Beds along the north-eastern edge of the Weald and in this northern part of the county come from deposits in the upper Medway valley. Pre-first millennium instances of traded or exchanged Medway-area glauconitic sandy wares are unknown to date and although these sherds could be from earlier first millennium BC vessels similar to, for example, the small cup from Highstead, near Chislet (Couldrey 2007, Fig.72, 192), occurrences east of the river Medway appear to be rare before c.300 BC.
- 8.4.39 Here, *Context 615* epitomises the problem its two earliest potentially MIA-type sherds are virtually unworn and one of them large. The latter is from a large-diameter thick-walled round-shouldered sub-fineware vessel possibly a globular-bodied or S-profiled jar of MIA or MIA-LIA type. It is associated with a fineware shoulder sherd in greensand ware, very highly burnished and with a neatly re-worked cut-down rim transforming it, from possibly an S-profiled jar, into a bowl-from. Regionally, burnishes of this highly glossy type are normally associated with later IA and more particularly MIA material (especially those with La Tene-style visually

contrasting two-tone burnished or un-burnished finishes of C4-C3 BC date) - but they can also occur on MIA-LIA finewares. In addition, whilst known regional or interregional examples of traded MIA greensand wares (eg. Little Waltham, Essex, Drury 1978) are relatively rare, MIA-LIA examples are more frequent -eg. from Birchington (Thanet), Bigbury (Canterbury), Folkestone and a number of other locations, irrespective of whether they stem from Medway Valley or other greensand sources (eg. the Folkestone end of the Holmesdale valley). Whilst the above reasonably suggests that there *may* be some MIA activity, the attribution is far from certain and, since there is no circumstantial or contextual evidence to the contrary, the relevant sherds are considered to be of indigenous Mid-Late Iron Age date – particularly in view of the following aspects.

8.4.40 The settlement represented by material from the following LIA Period 6 phases, 'Belgic' and Conquest-period AD, is likely to have had an earlier indigenous MIA-LIA foundation since some Area A contexts datable to this period, eg. Context 516, produced a few relatively unworn but residual thick-walled flint-tempered bodysherds. The only little-worn condition and manufacturing characteristics of these indicates that they are derived from earlier MIA-LIA style coarseware storage-jars. Context 533/531 produced a sherd in a greensand fabric from a fineware vessel with incised curvilinear decoration. Again its condition suggests it is not radically residual in a context dated to between c.25 BC-50 AD and therefore, rather than being of MIA, is more probably of MIA-LIA date - and probably prior to the full local adoption of incoming LIA 'Belgic' style pottery, ie. arguably pre-c.75 or 50 BC. The pottery from another context, the near-complete lower-body of a flint-tempered storage- or cooking-jar from 535, epitomises the problem of allocating material that lacks diagnostic formal elements but has recognisable, but dual or multi-period, manufacturing characteristics. During primary dating the degree of flint tempering and grit-scoriated surface finish of this vessel suggested that it might be of Earliest Iron Age date – but there no other definite examples of this date were recovered from Area A - and since this type of finish does also occur on some MIA-LIA jars, it is now felt this example is more likely to be of this later date. A few other contexts may be contemporary with this period – Area A549, Area E Quarry contexts 273-274, 482 and Area F 1351, 1792 and 2313.

Specific contexts that can be allocated to this period:

Area A Pit 535

Specific contexts that may be allocatable to this period:

Area A Context 549

General Area-based activity implied by presence of residual sherds from:

Area E Quarry zone

Area F

Period summary

8.4.41 Although the recovered evidence is rather slim there is sufficient to indicate that there

was a renewal of occupation almost certainly fairly late within this period - arguably

between c.150-100 BC. Most of the activity is centred in Area A, or more probably

adjacent to it, with a thinner scatter from other Areas – particularly Area F. In terms

of ceramic styles, the initial phase of this occupation was principally pre-'Belgic' in

character using primarily indigenous-style flint-tempered pottery and including

amongst its finer-quality drinking and best-occasion wares, one or two possibly

traded curvilinear-decorated jars. 'Belgic'-style grog-tempered pottery arrived in the

south-east of England around c.100 BC or shortly after - the new style only being

adopted fully by most settlements between c.75-50 BC.

Period 6: Late Iron Age

Contexts datable to pre-c.50/25 BC:

Area contexts:

Possible examples from =

Area A contexts = Un, 503, 602

Area F contexts = 1595, 2132

Despite likelihood indigenous pre-'Belgic' roots current level evidence suggesting 'Belgic'

activity from as early as c.100 or 75 BC slim.

A few softer-fired coarser-made grog-tempered sherds residual in later contexts (Un, 503,

602, possibly 1595 and 2132) perhaps date to this period but definitely no contexts

datable to earliest phases - between c.100-50 BC or slightly later. Only one formal

element was recovered that could, on basis of primitively, belong to this phase - a

large base and lower body sherd from a pedestal jar unstratified from Area IMG,

rather crude, flat base (Thompson 1982 Form A8) rather than commoner wheel made

foot-ringed A1 type

Contexts more likely to date to between c.25 BC-25 AD:

Area contexts:

98

# **Definite examples from =**

Area A contexts =

*UN*, 346, 380, 382, 392, 394, 396, 416/418, 417, 502, 503, 512, 514-517, 528/531, 529/532, 533/531, 534, 535/538, 542, 557, 568, 602, 605, 615, 623/504

Area C context 2167

Area D contexts = Cremation 8, Cremation 12 (residual sherds) and Context 473/525

Area E contexts =

Cremation 11 (residual sherd)

Roman pit context = 181/182

Quarry complex contexts = 273, 288, 459, 482, 484, 615, 639

Area F contexts = 201, 755, 1134, 1393, 1429, 1449, 1454, 1475, 1481, 1513, 1539, 1563, 1588, 1595, 1646, 1711, 1716, 1886, 1890, 1930/1931, 1974/1976, 2019, 2132, 2140, 2147, 2215, 2239

# Possible example from =

Area C Mound context =  $2648 \, Slot \, A$  (5 sherds which may be EBA Collared Urn)

# Contexts more likely to date to between c.25-75 AD:

Area contexts:

# **Definite examples from =**

Area A contexts = Contexts UN, 346, 396, 417, 421, 502, 512, 514-515, 528, 529/531-532, 531, 534, 557, 568, 575, 581/582, 592, 594, 600, 603, 615

Area B Pond context 2333

Area D contexts = Cremation 22 and Contexts 453, 2211, 2217

Area E contexts =

Cremation 5

Residual sherds in Cremation 7, Cremation 14

Roman pit contexts = 124, 181/182, 434

Quarry complex contexts = 288, 615

Area F contexts = Cremation 20 and Contexts 1515, 1710, 1878, 2132, 2233

### Possible examples from =

Area C Mound contexts = 2113, 2119, 2161, 2305, 2350, 2648 and 2359 ? may be indigenous LIA

Briquetage:

# **Definite examples from =**

Area A contexts =

502-503, 512, 514-516, 529/531, 575, 592, 594, 600 and 602-603 mostly un-weathered - 514, 575, 592, 594, 600 and 603 between 10-30 fairly large pieces each.

Area B = UN

Area F contexts = 956, 1449, 1507/1518, 1510, 1539, 1650, 1974/1976, 1992, 2144

Possible examples from = Area C Mound Context 2165, Area E Cremation 14, Area F

Context 962

#### Period discussion

- 8.4.42 Despite the near-definite likelihood of indigenous pre-'Belgic' roots the current level of evidence suggesting 'Belgic' activity from as early as c.100 or 75 BC is slim. A few softer-fired coarser-made grog-tempered sherds residual in later contexts (*Un*, 503, 602, possibly 1595 and 2132) may date to this period but there are definitely no contexts that are datable to the earliest phases of regional 'Belgic'activity. Only one formal element was recovered that could, on the basis of its primitively, belong to this phase a single large base and lower body sherd from a large pedestal jar, unstratified from *Area A*, with a rather crude flat base (Thompson 1982 Form A8) rather than the commoner wheelmade foot-ringed A1 type.
- 8.4.43 A number of other contexts, however, can be dated more confidently to between c.25 BC and around 25 AD or slightly later - or contain material of that date. These are Area A Contexts 514-517, 529/532, 533/531, 602, 605 and 623/504 with 515, 517 and 602, in particular, producing a number of fresh and unworn part-profiles including one from a bead-rim jar. The majority of the material from these is made in indigenous LIA-style flint-tempered fabrics, with a small percentage of 'Belgic'-style grog-tempered fabrics. There are also smaller quantities of indigenous-type LIA sandy wares and LIA/B transition tradition-intermix wares in mixed-temper flint-andgrog tempered fabrics. However, despite the predominant presence of LIA fabric types, there is a near-complete absence of indigenous-style Late Iron Age forms – all fineware and coarseware rims and decoration are typically 'Belgic' in style, implying a date after c.50 or 25 BC. Whatever the original scale of indigenous LIA occupation, it is suggested that from the third or last quarter of the first century BC the settlement began to increase in size or, at the least, centred the discard of its domestic rubbish in the area excavated. Under-pinning this potential is a sherd from a Gallo-Belgic import in the Conquest-period Context 502. It is part of a handle from a ribbed Hofheim-style flagon in a fine micaceous fabric, made in Central Gaul and dated to c.25 BC-14 AD

(Rigby and Freestone Fabric Group 1, possibly mica-coated Fabric Group 1C; Rigby and Freestone 1989). The sherd is residual in a context dated to c.25-50 AD or slightly later but is highly worn and indicating that its acquisition date was considerably earlier – at the least very early within the first century AD or earlier still. Not all the contexts listed above need be pre-O AD - some are almost certainly later.

- 8.4.44 From Area A 14 contexts can be dated to the c.25-75 AD Conquest-period phase a number of them represented by little worn contemporary discard groups. These subdivide into those that are more likely to pre-date the immediate Conquest years (Contexts 502, 515, 529/531-532, 533/531, 557, 568, 575, 594, 600-601 and 603), and those that post-date - where the applied emphasis is between c.50-75 AD (Contexts 396, 417, 581/582 and 592) or slightly later. Several other contexts may belong in the latter group – but the dating is less certain. For both groups the dating emphasese are based partly on the relative proportions of handmade, compared with turntable or wheel-made, native wares and partly on the presence of bricquetage. Excluding 'Belgic'-style purely grogged wares (which remain relatively low in quantity), these native wares include a variety of fabric types – purely flint-tempered, more sparsely flint-tempered sandy and fine sandy, flint-and-grog-tempered and fine sandy, wares. Some of these have first century BC indigenous pre-'Belgic' roots, the finer (sparser) flint and/or sandy fabrics developing as a response to the influence of imported wheel-thrown finewares - initially handmade perhaps during the earlier first century AD, then handmade and finished on turntables during the second quarter of the first, becoming increasingly and competantly wheel-made and Romanising around midcentury and thereafter until their variable demise by c.75 AD or slightly later. With the first group of contexts the proportion of wheelmade vessels is low and most are handmade or, with the finer native wares, turntable finished – eg.a nice part-profile from a small cup or beaker form from 557. Other than the productional quality of the wares themselves and their obviously contemporary association with bricquetage, supporting evidence for activity during this phase is probably provided by a sherd from Context 515. This is from an imported Gallo-Belgic white ware flagon, partially burnt but unworn. The sherd is not obviously intrusive and, if genuinely contemporary with the context's predominantly native-style and pre-Romanising assemblage, could be of Tibero-Claudian date and between c.15-50 AD.
- 8.4.45 Overall, contextual confirmation of occupation continuing into the third quarter of the century is slimmer and mostly confined to residual examples. For the coarsewares a small quantity of wheelmade fine and coarser sandy wares, one or two instances of

more finely-produced siltier grog-tempered fabrics, and a few sherds from North Kent 'Thameside' shell-tempered cooking or storage-jars. For the finewares - a small number of North Kent Upchurch-type tablewares, mostly beakers, including fragments from two thin-walled finely-made girth-beakers, one dating just possibly from as early as c.25 AD more probably to between c.50-75 AD (Monaghan 1987 Type 2F) - and at least one of the cremation burials produced a confirmably early samian vessel (see below). However two contexts, 417 and 421, variably contained a fairly high proportion of wheelmade flint-tempered wares and may date to this phase or very slightly later. Their B/ER native components are hard-fired, wheel-thrown 'Belgic'-style bead-rimmed jars and fineware types. The sherds have varying degrees of uni- or bifacial damage.suggesting a moderate degree of exposure pre- or postdiscard but are also associated with two Gallo-Belgic-style sherds from an uncertainly allocated London or St. Albans cream-white beaker with spaced-dot (or ring-and-dot) barbotine decoration and datable to c.50-75 AD. These fragments are basically fresh but delicately-made quality fineware imports like these are likely to be cared for and have a longer-than-normal use-span. In Canterbury the evidence for discard dates for most earlier-mid first century AD white wares centres around c.70-80 AD. The latest element from this context is a moderate-sized Upchurch sherd (c.75-125/150 AD), which is fresh with only some minor edge and surface abrasion. It is either intrusive or its discard close in date to final context seal. Irrespective, the main factor is that occupation continued throughout the Conquest-period - albeit perhaps with either a slight decrease in localised activity or a shift in discard patterns during the third quarter of the century.

8.4.46 The material requires more detailed assessment, but several contexts produced thin fragments that *may* be from chaff-tempered vessels, others contained fragments from thin slabs or 'tiles' (both organic-tempered and purely grog-tempered), subcylindrical twists of clay, and non-organic tempered fragments of puddled clay. *Context 506* contained 4 fragments from a thick and fairly large, originally ovoid, slab – 'yellow'-buff colour and slightly green partial vitrification.

### Specific contexts that can be allocated to this period:

Area A contexts =

General layer contexts 346, 502-503

Ditch 516 contexts 512, 514-517, 557

Pit 528/531 contexts 529/532, 533/531

Pit 534 contexts 535/538

Irregular feature 542

Post-pit/pit 568

Linear feature 615

Other contexts = 575, 581/582, 592, 594, 600, 602-3, 605, 615 and 623/504

(Of the above *Contexts 502-503, 512, 514-516, 529/531, 575, 592, 594, 600* and *602-603* all produced mostly fresh, un-weathered fragments of bricquetage and of these, *514, 575, 592, 594, 600* and *603* produced between 10-30 fairly large pieces each).

The earliest Conquest-period AD-Early Roman cremations dated to between c.25-75 AD or slightly later.

Area D = Cremation 22

Area E = Cremation 5

Area F = Cremation 20

# General Area-based activity implied by presence of residual sherds from:

Area E Quarry and Area F zone

# Illustratable pottery providing confirmation of activity during Period 6:

Pottery from the Cremation Groups

#### Period summary

8.4.47 Although any recovered evidence for 'Belgic' activity prior to **c.50-25 BC** is slight, the settlement established adjacent to Area A during the last period almost certainly continued into this period. From the mid or later first century BC there appears to be a slight increase in activity represented by material broadly datable to between c.50 BC-25 AD – which is not well-defined contextually and mostly represented by residual elements. This is followed by a marked surge in pottery datable to between **c.25-75 AD**, and frequently associated with bricquetage, indicating not only a shift in activity-focus but also a probable expansion of the original settlement area. The relationship between this surge in activity and the presence of bricquetage is unlikely to be coincidental – and should represent an increase in the associated settlement's wealth and importance – a likelihood underpinned by the presence of a worn ribbed handle from a large Central Gaulish Hofheim-type flagon, residual in the Conquest-period *Context 502* but a vessel type normally only found on high status sites (pers.comm. Malcolm Lyne). Elsewhere within the overall site contemporary activity

is only thinly represented - apart from a moderate concentration of sherds from Area F.

8.4.48 Despite the frequently good sherd evidence from Area A (fresh part-profiles etc), the material is not regionally unique. In addition it is sometimes derived from rather poorly defined and nebulous features. If it had come from a better set of contexts full publication and illustration would be recommended – especially since there is some evidence for a stratigraphied sequence within a fairly narrow bricquetage-accompanied date band. Although the pre-25 AD ceramic could warrant a separate phase, it is clear that the main and most important phase is around the Conquest-period and, although it may be possible at publication stage to define pre- or post-Conquest AD contexts, it is felt at this stage - in view of all aspects - that the evidence should be treated as a single period.

# Briquetage.

8.4.49 This aspect is important. Upto now, Late Iron Age or Early Roman salt production has only been recorded from the Upchurch area of the North Kent marshes and from Romney Marsh. This new material from Sheppey is unexpected. Although no contextual evidence for production was recovered, the near-total absence of any typical salt-containers ('chaff-tempered ware'), coupled with the fresh condition of the fairly large fragments of bricquetage recovered, does imply production in the adjacent area - rather than relatively large-scale importation. At present the scale of this production is obviously unknown but its presence on the island, rather than on the mainland opposite, may indicate no more than island-, therefore community-, therefore possibly tribal-, based self-sufficiency in salt-production. Since there is some regional evidence that a number of at least earlier-mid first millennium BC Kentish coastal settlements were self-sufficient in salt-production (and/or acted as source areas for a wider inter-settlement zone), this new find, although later, may reflect the same basic trend and signpost the possibility that further estuarine saltproduction locations of this date may remain to be discovered. Although none of the present material warrants illustration, the relative value of this find needs to be emphasized as a contribution to studies of, at least, Late Iron Age inter-tribal exchange networks. In addition, the regional dating evidence for the occurrence of Conquest-period-Early Roman traded salt-containers implies, irrespective of area, a general start-date of between c.25-50 AD, possibly slightly earlier. This date trend needs to be set against the local coarsewares and Gallo-Belgic imports from the present assemblage - to consolidate or modify the dating currently applied.

Period 7: Early-Late Roman

Phase 1: Early Roman:

Area contexts:

Definite examples of contexts ending in ER pottery =

Area A = Contexts 512, 533/531, 570, 602, 615.

Area C Mound = Contexts 2554, 2648

Area D = Cremations 8, 12-13 and Contexts 477, 2016

Area E =

Cremations 1-4, 10-11, 14, 17-19

Quarry complex = Contexts 482, 615, 627 and non-Quarry context 219

Area F = Cremation 9 and Contexts 201, 836, 956, 1067, 1393, 1410, 1768, 1890

#### Phase discussion:

- 8.4.50 Material dating to this period comes from all Areas, particularly Areas A and F. However, the high sherd count recorded for this period in the introductory table above is misleading, since over 790 sherds stem from contemporary cremation burials with fewer than 270 sherds derived from occupational activities and most of these appear to be residual. Again other than the cremation burials very few features can be considered to represent undisturbed contexts. Only a small number of contexts (421, 528/531 and 534) superficially appear to be contemporary and most are from the upper or late fills of Conquest-period features. A few, *may*, with detailed assessment at final publication stage be detectable but the overall recovered quantities do suggest either a slight reduction in activity or a shift in activity-zones and rubbish disposal habits.
- 8.4.51 One of the few contexts that appears to be specifically Early Roman in date is one of possibly two pits on the south-west edge of the Area C Earlier Prehistoric burial mound *Pit 3552*. This contained a number of relatively unworn moderately sandy ware sherds from the part-profile of a possible Monaghan Type 2F girth-beaker and here probably datable to c.50/75-100 AD. If the burial mound could survive into the Modern period as a low and very vestigial feature it was probably marginally higher during the Roman period. By that period any sical function it had may have been no more than as a boundary marker within the local landscape so that the presence of these pits may be due to the latter rather than to the local survival of any ancestor-memories

- 8.4.52 One other feature or group of features that was certainly in existence by this period is the pit complex on the north-eastern edge of Area E. They consist of field-ditch segments and post-holes centred around a series of pits – and obviously set into the corner of part of a field-system. Other than the short *Linear 304/305* – which appears to have a slightly earlier fill date between c.200-250 AD – all the other contexts have final fill dates centreing 250/275 AD. There is no obvious Late Roman pottery from any of these features. Only one context – short Linear 179 - has purely Mid Roman pottery - all the others contain residual Conquest-period AD and Early Roman pottery (Site Periods 6 and 7 Phase 1). The basal fill Context 429 of the probable large quarry-type pit Context 181 produced sufficient residual LIA 'Belgic'-style material, including a Gallo-Belgic imported sherd, to indicate that it may have been open from the Conquest-period onward. Even though this could suggest that Quarry 181 was in place before the field-system was established - the locational relationship between these features is so specific that it is unlikely any seriously pre-date each other and a layout date between c.50-75 AD r at least the second half of the first century is likely. The amount of pottery from them suggests that they represent a convenient settlement-fringe rubbish disposal area tucked away in the corner of field-system. Much of the pottery – particularly the LC2-MC3 AD component – is heavily worn indicating disposal and relatively long-term exposure in open contexts. In terms of discard ratios - the later first-earlier second century quantities are relatively low compared to the Mid Roman quantities recovered - and discard levels increase after c.150/175 AD with the majority occurring during the third century AD.
- 8.4.53 Of the pottery for this phase, kitchenware's predominate, mostly from local or further afield North Kent sources a few harder-fired 'Thameside' shelly ware storage-jars, a few Romanising native grog-tempered wares, mostly sandy and fine sandy wares (the latter including some BB2-types) but also a small quantity of Canterbury sandy grey ware products. Tablewares are mostly from Kentish sources a few Upchurch-type girth or carinated beakers, some jars and at least one flask together with a few pink-buff flagons some from Canterbury.
- 8.4.54 Other than those from the cremation groups, the relatively thin scatter of sherds from non-burial imported finewares includes Southern Gaulish samian, mostly Flavian vessels (69-100 AD) but also one of Central Gaulish Trajanic (100-125 AD) date. In addition there is one probably Flavian-Trajanic mortarium from Verulamium (Hartley 1982 Fabric 8). Specifically from the cremation burials are Southern Gaulish samian vessels a possibly Neronian Form Dr.36 bowl (*Cremation 13*), a Flavian Form Dr.27 cup 69-100 AD, stamped? 'TRITUS' (*Cremation 12*), a Flavian-period Form Dr.18 dish by Patricius 5a La Graufesenque, made between c.85-110 AD and stamped

'OFPATRC' (*Cremation 3*) and *Cremation 10* produced a Central Gaulish Form Dr.18/31 dish, c.90-120 AD, stamped 'PAB.IANVS' - possibly a new stamp (*pers.comm*. Malcolm Lyne).

# Specific contexts that can be allocated to this period:

Area C Mound Context 3554

Area E Roman pit complex – all features shown on original Figure 5B

The Early Roman cremation group dated to between c.75-150 AD.

Area D = Cremations 8, 12-13

Area E = Cremations 1-4, 10-11, 14, 17-19

Area F = Cremation 9

# General Area-based activity implied by presence of residual sherds from:

Area A

Area F

# Illustratable pottery providing confirmation of activity during Period 7 Phase 1:

Pottery from the Cremation Groups

#### Phase 2: Mid Roman:

Area contexts:

#### **Definite examples from =**

Area A contexts = 421, 502-503, 528/531, 534, 535/538, 557, 592, 600

Area B context 2333

Area C Mound contexts = 2119, 2137, 2159, 2161, 2165, 2169, 2198, 2277, 2315, 2432, 2554

Area D contexts = Cremations 6 and 25, Contexts 463, 2211

Area E contexts =

Cremations 4, 7, 15-16

Roman Pit complex = Contexts 124, 179/180, 224/225, 229, 231, 232+234, 235/236, 239/240, 302, 304, 429, 432, 434

Quarry complex contexts = 288, 341/342

Other feature contexts = 113, 173, 177/178

Area F contexts = 887, 942, 1095, 1106, 1128, 1440, 1438, 1447, 1539, 1625, 1627, 1792, 1886, 1930/1931, 1932/1933, 1942, 1946, 1956, 1957, 1974/1976, 1980, 1992, 2019, 2140, 2231, 2239, 2241

#### Phase discussion:

- 8.4.55 The distribution of pottery representing this phase is widespread but with activity focii centred on Area A (manifesting partly as residual material in later Roman features), Area F (again residual but here mostly in Early Medieval contexts) and a clustered series of pits and linear features in Area E. The latter appears to be the main surviving undisturbed zone of Mid Roman activity.
- 8.4.56 The reduction in sherd quantities recorded for the previous period is unlikely to represent a major break in occupation in the general area - more probably a shift in activity focii. An assessment of date-spans for the 770-odd non-burial Mid Roman sherds recovered reflects a steady increase in discarded pottery during the mid-later second century followed by a marked surge in frequencies datable to between approximately 175-275 AD. This trend appears to be confirmed by the number of obvious or probable contemporary discard-deposits – only Context 173 appears to be datable to between 150-200 AD compared with 4 contexts from the Area E pit group -181/182, 429, 432, 434 - and possibly one from Area F, Context 887, datable to between 200-250 or, at least pre-275 AD. To some extent this trend is reflected in the low quantities of imports that can be allocated to either phase – 5 sherds, 4 of Central Gaulish samian (mostly Hadrianic) and 1 Nene Valley colour-coated beaker (which might be late C2-EC3 AD) for the first and 10 for the second – 7 sherds of Eastern Gaulish samian (mostly Trier but including 1 Rheinzabern Curle 21 bowl) and 2 from Central Gaulish 'Rhenish' ware colour-coated beakers. In addition, for this later phase, there is an uncertainly identified sherd from a Rheims/Seine Valley white sandy ware flagon or jar. None of the coarseware material for either of these phases is particularly remarkable, mostly because of its frequently reduced condition, in part probably due - with reference to the inter-period accumulations represented by the assemblages from 429, 432, 434 and possibly 181/182 – weathering and exposure in large features that remained open to receive rubbish over long periods. The great majority are N.Kent fine and coarse sandy kitchen ware cooking-pots, jars and bowls, fairly plentiful BB2-type dishes, some Upchurch-type jars but relatively few Native Coarse Ware vessels. The much smaller quantities of regionally-made tablewares are mostly represented by Upchurch-type ware beakers, bowls and flagons or flasks – in addition to the few continental finewares already mentioned. An interesting impression that still requires statistical confirmation is that the is a far higher proportion of Upchurch-type products of late C1 to mid or later C2 AD than there are for late C2 to mid C3 AD or later. This predominantly coarseware assemblage is characterized by the high presence of 'scorched', sintered or variably hard-fired

vessels with oxidized red-orange, red-brown fabrics or grey cores with a thin oxidised sometimes mauvey-red/brown skin – a trend that regionally started in the increasingly harder-fired wares of the later second century but becoming technically and visually manifest on a regular basis during the third century and into the earlier fourth. Its main currency was between c.200-250 AD but still occurred fairly regularly in regional assemblages of c.250-300 AD – and then more sporadically until its demise around 350 AD (Pollard 1995, 702-703). It is the combination, in the quoted assemblages, of these scorched wares with a number of datable forms that indicate a marked increase in later second-earlier or mid third century activity in the nearby settlement. Three of these contexts, 432 and 434 (with sherds from the same latest element(s) in each) and 887 are datable to c.225-250 AD (certainly the first half of the century), two – 181/182 and 429 – have slightly later emphasese indicating a c.250-275 AD date

- 8.4.57 The Mid-Late Roman ceramic interface, from c.250 or 275-300 AD, is uncertainly represented by material from the Area E pit group *Contexts 179-182*, 232/234 and 382. Allocation here is based on a combination of latest-element condition and necessity the dating trends that can be applied to hard-fired scorched sandy ware sherds. In addition, there are one or two sherds that have slightly later third century date emphasese a flanged-rim sandy ware bowl cf.Monaghan 1987 Type 5A, dated c.225-275/300 AD and an Oxfordshire mortaria (Hartley 1982 Fabric 3) which, although it could be fourth century, might have arrived during the second half of the third. Couple the last point with the fact that, other than those that are obviously Late Roman (below), none of the contexts producing scorched wares contain either Late Roman-type grogged ware or potentially early Oxfordshire imports and a degree of on-site continuity during this phase is a possibility.
- 8.4.58 Alternatively, an aspect that must be considered during final dating and interpretation of third-fourth century activity is the poor condition of much of the recovered earlier and Mid Roman pottery. Superficially, the condition of many of the second century cremation burial vessels and much of the material from later second and third century contexts, could suggest reduction due to the obviously considerable degree of disturbance during post-Roman Saxon-Early Medieval activity or the effects of more recent ploughing. Although these factors may be partly responsible, the evidence from definite Late Roman contexts could suggest otherwise. Most of the fourth century assemblages contained residual sherds some of them highly worn so that in conjunction with the frequently abraded state of sherds from contexts dated to

between c.200-250 AD or slightly later, the visual impression given is of a 'band' of frequently severely abraded third century material across the immediate area. Although interpretation of this impression is partly dependent upon context- and soiltype, the implication is that there *may* have been a change in land-use – the abrasion and wear being acquired either during site-clearance processes prior to a period of agricultural activity (arable or pasture) or during the subsequent Late Roman phase. *If* this interpretation is valid, any potential break in occupation could have occurred between c.250-300 AD, possibly continuing into the early fourth century.

# Specific contexts that can be allocated to this period:

Area D Context 463

Area D Context 2169

Area D Context 2211

Area E Roman pit complex

Area E Quarry Area E Quarry remained open during this period – main quantity from *Context* 288

Area E Context 113

Area E Context 173

Area E Context 177/178

Area F Context 960 was open to receive material during this period

Area F Context 1475

Area F Context 1886

Area F Context 1930/1931

The Mid Roman group of cremations dated to between c.150-200 possibly to 250 AD.

Area D = Cremations 6, 25

Area E = Cremations 4, 7, 15-16

# General Area-based activity implied by presence of residual sherds from:

Area A

Area F

# Illustratable pottery providing confirmation of activity during Period 7 Phase 1:

Pottery from the Cremation Groups

### Phase 3: Late Roman:

Area contexts:

## **Definite examples from =**

Area A contexts:

Pit/Post-pits contexts = 380, 382, 409, 579/580

Field-boundary ditch linear contexts = 388, 390, 392, 394, 416-418

### Phase discussion

- 8.4.59 Activity during this phase, occurring as either definite re-use of the land or as direct continuity from the previous phase, appears to be confined solely to Area A and mostly its eastern half. The pits or post-pits *Contexts 380, 382* and *409* and field-boundary *Contexts 388, 391, 392* and *417, 418* all produced pottery that is undeniably of this date. In most cases the relevant elements consist of moderate-large sized fairly fresh sherds, with several instances of inter-context same-vessel equations. Only two features, *388* and *391*, are devoid of earlier residual material all the others contain Early-Mid Roman or earlier sherds, mostly small, worn and abraded and very definitely residual. The same-vessel equations are between *Context 391* and the *Linears 394* and *416/418* and their mutually near-fresh condition confirms that these are all from contemporary rubbish deposits. Superficially all these contexts can be dated to this phase but, based on content, they appear to fall into two main groups.
- 8.4.60 The first group, represented by the pits or post-pits 380, 382 and 409, is principally dated by the presence of unworn scorched local sandy wares vessels occurring alongside a few imported Alice Holt grey fine sandy ware and Oxfordshire ware vessels. As already indicated, scorched wares are principally a third century phenomenon decreasing in frequency between 300-350 AD. Early Alice Holt ware (late first-early second century) is extremely rare in Kent (Pollard 1995, 695), so any occurrences at Neats Court can all be dated to its main currency range during the fourth-early fifth centuries. In addition, although the few associated handmade grog-tempered sherds could encourage a later dating (their main currency appears to be from c.350 AD; Pollard 1995, 702) ), they can occur as early as c.275 AD but in Canterbury at least are rare from contexts datable to c.275-300 AD. Therefore, only a fairly broad date range of between c.275/300-400 AD can be applied to this group.
- 8.4.61 It is reasonable to assume that some of this first group stems from contexts that were genuinely earlier than the linears producing the second group. This point may be valid since some of the pottery from this second group comes from ditches that pre-date each other *Linear 389/407 Context 388* is cut by the same right-angled *Linear*

390/391-416. In addition, even though there are same-vessel equations between near-fresh sherds from the latter linear and *Linear 392/394*, their differing alignments indicate different dates of layout. This indicates that one linear must have been backfilled at the same time as the new one was cut and had rubbish thrown into it. All this implies that the later years of the Late Roman period may have witnessed fairly intense activity.

8.4.62 The second group, derived from the small pit 579/580 and the *Linears 388, 390/391*, 392/394 and 416/418, again includes grog-tempered wares and both fine sandy Alice Holt and sandy 'Alice Holt'-type grey wares. In addition there is also an interesting range of other typically Late Roman imported and regional fine and coarse wares. The former are represented by imports from the Oxfordshire, Essex, and German Mayen potteries. From Oxfordshire are one red colour-coated and two parchment ware mortarium, a stamp-decorated dish and a brown colour-coated bowl (including forms M22, C49 and C83, Young 1974). From Essex are a number of sherds scattered through various contexts from the same large-diameter and thick-walled coarsely grog-tempered storage jar (pers.comm. Malcolm Lyne). The Mayen (Eifelkeramik) sherd from Context 388 is large, slightly chipped but otherwise fresh and from a Form R1 lid-seated jar. Regional Kentish wares include a small quantity of unusual Thamesside Upchurch-type grey ware vessels – one large fragment and one other from two dishes with their flat everted rims decorated with combed wavy lines, a wide bowl form with unusually thickened rim and a jar or beaker with a probable pale brown colour-coat. There are also a few sherds in a fine oxidized ware probably related to 'streak-burnished' ware (cf.Pollard 1995, 708 and Green 1995, 742) datable from c.275 but here probably c.350-400 AD, and a probable BB2-type fine sandy ware flanged-rim bowl (cf.Monaghan 1987 Type 5A5.2, c.300-350/375 AD). Another relatively unusual product is represented by fairly large fresh sherds from Contexts 391 and 394 - from the same small Portchester D-type hooked-rimmed and rillbodied jar. These are not from a true cream-coloured Portchester-D vessel but from an accurately copied Kentish equivalent - possibly made at Preston near Canterbury (pers.comm. Malcolm Lyne). Finally there are a number of jars and dishes in a variety of grog-tempered wares, including the harsh white grogged (kaolinitic) fabrics typical of the Late Roman period. These include large sherds from an everted-rim cooking pot and a storage-jar with crudely applied Black Burnished ware-type panelled and trellised decoration – together with several simple-rimmed bowls.

8.4.63 Important for dating this last group is the presence of the Portchester D-type and German Mayen wares. Tilford/Portchester D-type wares and their emulates are datable from 325 AD but their main currency is from 350-400 AD or later. According to Redknap (1995, 737-740), very little or no Mayen ware was imported into Britain before c.320 AD - most examples arriving during the second half of the fourth century. The presence of these suggests a mid-late fourth century, or later, date for this whole group. However whilst there are, among the associated grogged wares, manufacturing trends that *do* reflect a decline in quality – none have the small diameters and crude lumpy surfaces of the very latest earlier-mid fifth century examples that have been recorded from Canterbury, those sure indicators of a general breakdown in social morale and effort. It is the absence of these from the excavated area, together with the absence of any confirmed Early Saxon material, that initially encourages a date between c.350-425 AD – with suggested cessation of activity at some point *before* 425 AD, rather than during the second quarter of the fifth century.

# Specific contexts that can be allocated to this period:

Area A Pit/Post-pit Context 380

Area A Post-pit Context 382

Area A Field-boundary ditch Linear 385/393/411 Contexts 392, 394

Area A Field-boundary ditch Linear 389/407 Context 388

Area A Field-boundary ditch Linear Context 390/391

Area A Pit/Post-pit Context 409

Area A Field-boundary ditch *Linear 416 Contexts 416/418, 417* 

Area A Pit Context 579/580

### General Area-based activity implied by presence of residual sherds from:

None

# Illustratable pottery providing confirmation of activity during Period 7:

Phase 1 Early Roman:

Phase 2 Mid Roman:

Phase 3 Late Roman:

All Area A:

Oxfordshire red colour-coated mortaria from General soil layer 346

Oxfordshire Parchment Ware M22 mortaria from General soil layer 346

Grog-tempered ware BB2-type cooking-pot from General soil layer 346

North Kent Thamesside fine sandy ware jar from General soil layer 346

German Mayen ware lid-seated jar from Linear Context 388

Late Upchurch-type bowl from *Linear Context 391* 

Oxfordshire red colour-coated stamp-decorated C83 bowl from Linear Context 394

Oxfordshire brown colour-coated beaker from Linear Context 394

Alice Holt grey fine sandy ware jar from Linear Context 394

Alice Holt grey fine sandy ware bowl from Linear Context 394

Late Upchurch-type ware bowl with combed wavy-line decoration from *Linear Context 394* 

Unusual? brown colour-coated Upchurch-type ware jar or bowl rim from Linear Context 394

Portchester-D type/Preston rilled-body jar from Linear Context 394

Hard-fired fine sandy ware pedestal base Linear Context 394

Coarse sandy ware dish from Linear Context 394

Grog-tempered ware jar from Linear Context 394

Alice Holt grey fine sandy ware jar from *Linear Context* 416/417

Grog-tempered ware bowl from *Linear Context 416/417* 

BB2-type bowl from *Linear Context* 416/418

Grog-tempered ware dish rim Pit 579/580

### Period summary

8.4.64 It is unlikely that the broadly Conquest-period AD surge of activity associated in Area A with the native, non-Roman, production of salt in the vicinity ended abruptly following the Conquest. However, although it is clear from the presence of residual sherds that a degree of occupation continued into the Early Roman period, their relatively low quantities coupled with the definite lack of features datable to that period, do suggest either a reduction in activity or a localised shift in land-use emphasese. As recorded, this general trend seems to apply to the overall site with, other than the cremation burials, only the corner of the Area E field-system allocatable to Phase 1. This field-system clearly remained in use throughout Phases 1 and 2, but its position on the edge of the main site area, coupled with the virtual absence of features and only a variably low-moderate scatter of residual pottery from the rest of the site, emphasises the sense that the main site was peripheral to any areas of contemporary occupation. The likelihood that it was principally maintained as either fallow or grazing land is strengthened by the scatter of cremation burials from this zone, isolated or clustered as probably family groups across Areas D-F. The dating given for these burials indicates that this whole area remained on the fringes of any main settlement zone throughout the later first, second and most of the third century AD. Despite this sense of marginality, the markedly increased quantities of Mid Roman particularly late second-third century pottery, discarded into open ditches and pits in the Area E field system should reflect an increase, if not in wealth, at least in the size of the adjacent settlement. However, by the mid or later third century AD, this field-system appears to have gone out of use. No categorically Late Roman pottery was recovered from it, suggesting that either the associated settlement shifted location - or there was a change in land-use. That the latter is probably more likely is indicated by the presence of moderate quantities of third century Mid Roman pottery residual in the series of Phase 3 Late Roman field ditches and pits or post-pits recorded from the eastern half of Area A. At least two-three phases are represented in this small zone - all indicating a period of relatively intense activity throughout most of the fourth, possibly into the early fifth, century AD.

Period 8: Early Saxon

# Phase 1: C5-C6 AD activity:

Area contexts:

# No obvious examples

Phase summary

8.4.65 It is perfectly reasonable to expect activity of this date at this site – partly because of its location near to a crossing-point to the mainland which was obviously of longterm, inter-period, social importance, and more particularly because Late Roman settlement in this region does fairly frequently produce evidence of Early Saxon occupation. However, there are no obvious examples from the recovered pottery assemblage that can be used to confirm Saxon activity prior to c.550/575 AD.

### Phase 2: C6-C7 AD activity:

Area contexts:

# **Definite examples from:**

Area A *UN* – small bodysherd, possibly decorated (single small circular impression from stick-end/comb-tip impression), fairly fresh

Area E Other features *Context 151* – small bodysherd, fairly worn

Area F Eastern Structure *Contexts 919*- small bodysherd, fairly worn; 1672 – small bodysherd, moderate unifacial damage; 1818 – small bodysherd, fairly worn

Area F Looped enclosure Context 1085 – medium-sized bodysherd, near-fresh

Area F Other features *Context 1878* – small bodysherd, thick-walled (? base or from large water-carrier), fairly heavy unifacial wear.

## Probable examples from=

- Area E Quarry *Context 335/336* two small fragmentary bodysherds, moderately worn, one unifacially
- Area E Other features *Context 169* 1 bodysherd, light external burnish, CAT EMS1-type fabric with organic, fresh

### Phase summary

8.4.66 For the second late C6-C7 AD phase there are 7 definite and 3 probable identifications – unfortunately all bodysherds. Arguably the earliest example is a sherd from Area E Context 169. Its partially sandy fabric with some organic inclusions would not be out of place within, broadly, the later sixth-early seventh century phase of the Canterbury Saxon sequence. Its recovery fairly close to other Area E contexts, and themselves not too far from those Area F contexts producing definite C7AD organic-tempered sherds tends to confirm its allocation. The majority of the other sherds are purely organic-tempered with fine silty matrices - although one sherd from Context 919 has a sandy matrix and another from 1084 has sparse fairly coarse grits. Within the Canterbury sequence organic-tempered fabrics noticeably increased in frequency from c.575 AD onwards, gaining ground until they were predominant in contexts dated to the mid-late seventh century. The same sequence indicated that from c.675 AD organic-tempered fabrics became increasingly sandier or contained coarse stone grits – prior to the commencement of the Canterbury sandy ware industry around c.750 AD. Although the two sherds indicated could be earlier, ie between c.550-650 AD, it is possible that here they may belong to this later phase. Irrespective, there is no doubt of seventh-century activity. Other than a single Unstratified sherd from Area A, all examples are confined to the eastern part of the site - Areas E-F, with most coming from contexts associated with/adjacent to Area F's Eastern structure. Of the latter, most are worn and all are residual. One comes from one of the Eastern structure's large potential axial post-pits, 1820. It is the latest element but is worn and should be residual. Another, from a feature on the south side of the structural area, 1672, is again the latest element and is only moderately worn. This sherd need not be seriously residual and may stem from a seventh century feature. Another sherd, again from the south side of the structural area, is residual in the cess-pit 1877 – the latter initially, but firmly, dated by its 3 Ipswich Ware sherds to the Mid Saxon period (Period 9). One final sherd, the rather gritty 1084 example, is from the loop 'enclosure' south of the Western enclosure. This sherd is moderatesized and virtually fresh. The feature itself is later but the sherd's condition suggests

derivation from an earlier but very adjacent feature cut through by this linear.

Features associated with residual sherds implying likely activity zones of C8-C9 AD date:

Area F Eastern Structure axial post-pit 1820

Area F Eastern Structure south side Context 1672

Area F Cess-pit 1877 in zone south of the Eastern Structure

Area F inter-compound ditch at Context 1084 on south side of Western Enclosure

General Area-based activity implied by presence of residual sherds from:

Area A

Area E

Period summary

8.4.66 There is no recognisable C5-C6 AD Early Saxon pottery and, although it is a

reasonable expectation for the location, unless there is undeniable metal-find evidence

from the overall site or general locale for the period c.450-550 AD, the possibility of

pre-late sixth or seventh century Saxon activity at the eastern end of the site, or from

any other Area, cannot be confirmed.

8.4.67 For the second phase, activity is definite – possibly low-key in Area A but with a

specific focus in Area E and, more particularly, Area F. Although all of the organic-

tempered sherds representing this phase are clearly residual, their main concentration

in the latter Area, mostly from the area of the Eastern structure, definitely indicates

derivation from an earlier phase of occupation, either underlying that structure or

from within the immediate vicinity. This occupation can be dated to the seventh

century AD, may be coincident with the mid -seventh foundation and early years of

the monastery at Minster, and therefore initially datable to between c.650-700 AD –

perhaps from slightly earlier.

Period 9: Mid Saxon

Phase 1: Later C7-mid C8 AD activity

Area contexts:

**Definite example Continental import =** 

Area F Other features Context 960 - 1 NFR import, wheelmade, bowl/jar bodysherd,

roulette-decorated, fairly fresh

**Definite examples local coarsewares =** 

117

- Area F Eastern structure *Context* 710/712 1 thick-walled bodysherd, coarse-gritted, fairly small, some edge wear
- Area F Other features *Context* 772 1 fairly small rim sherd, gritty fabric, slightly chipped, fresh
- Area F Looped southern 'enclosure' ditch *Context 1351* moderate-sized bodysherd, gritty fabric, fairly thick-walled, some unifacial wear

#### Phase discussion

- 8.4.68 The three earliest elements within this overall phase are all from Area F one from the Eastern Structure zone and three from features in the area of the Western Enclosure. The first is a bodysherd from a rather crude coarsely-gritted jar from the Eastern Structure's outer southern ditch *Context 710* its fabric characteristics fairly typical of material from the Canterbury Saxon sequence occurring between c.675-725 or 750 AD. The second is a rim from a small similarly gritted coarseware jar from the short linear feature *Context 772* and datable to between c.650-700 AD, possibly as late as c.725. The third is a roulette-decorated bodysherd from a wheelmade imported vessel recovered from the large 'dark' soil area *Context 960*. It is closely similar to a North French Merovingian bowl from the Canterbury sequence with likely manufacturing date between c.675-725 AD (Canterbury Marlowe Theatre Pit 260 No.216 in Macpherson-Grant 1995, Fig.370).
- 8.4.69 The first sherd, from 710, is residual but, although fairly battered not seriously so and should be derived from features underlying the Eastern Structure's southern ditch sequence. The second, from 772, is barely worn and may be only moderately residual in one of two *probably* Late Saxon features with a possibly similar function located immediately outside the eastern end of the outer southern ditch of the Western Enclosure. If residual, its fresh condition suggests derivation from adjacent features, perhaps those pre-dating the construction of the Western Enclosure's southern ditches. The fairly fresh condition of the import suggests that it is not seriously residual or re-distributed. Even though its loss-date as a potentially cared-for quality vessel may be later, its presence in the 'dark'-filled feature 960 implies that this feature, long-existent on an inter-period basis as a feature within the landscape, confirms that it was still in existence and receiving domestic rubbish during the late C7 or early C8 AD.
- 8.4.70 Despite the low recovered sherd evidence for the preceding seventh-century and above, their presence and condition almost solely from Area F and frequently

showing only minimal post-loss damage - firmly implies derivation from occupation in the immediate area, and almost certainly from features underlying the later Eastern and Western enclosures. In addition, the imported sherd from 960 confirms a moderate degree of wealth and the establishment of fairly wide-ranging trading contacts as early as c.700 AD – or perhaps from the mid seventh if any probable ferry-point near to Neats Court benefited from the development of the abbey at Minster.

# Phase 2: Mid C8-mid C9 AD activity

Area contexts:

### **Definite examples Ipswich Ware =**

Area A Context 587 – 1 small near-fresh bodysherd

Area E Quarry complex Context 335/336 - 1 small heavily worn bodysherd

Area F Eastern structural zone *Contexts* =

779 – 1 fairly small bodysherd, fairly fresh

982 – 1 moderate-sized bodysherd, fresh, one edge slightly worn

1009 – 1 moderate-sized bodysherd, chipped slightly worn

1017 – 1 fairly small sherd, slight unifacial damage, basically fairly fresh

1108 – 3 bodysherds, 3 vessels, 1 large with one edge slightly wear -burred slight edge, 1 fairly small with some unifacial damage, 1 small moderately worn

1117 – 4 bodysherds, same vessel, 2 fairly small, 2 scrappy, fragmentary and worn

1878 – 3 bodysherds, same vessel, burnt, some chipping otherwise fairly fresh; 1879 – 1 spouted pitcher bodysherd, stamp-decorated, moderate-sized, fairly fresh.

Area F Inter-compound ditch *Contexts* 834 - 3 bodysherds, 3 vessels, 2 chipped and slightly worn, 1 with moderate edge-wear; 1312 - 1 rim sherd, small, fresh

Area F Western Enclosure ditch Context 738 – 1 fairly large bodysherd, slight edge wear

Area F Other features Contexts =

808 – 1 bodysherd, fairly large, some unifacial wear, some edge-burring

1411 – 1 bodysherd, fairly small, moderate unifacial wear

1475 – 1 bodysherd, fairly small, fairly fresh but slight edge and unifacial wear

1648 – 1 base sherd, fairly large, heavily worn and burred edges

1682 – 1 bodysherd, small, moderately worn, fairly heavily burred edges

# Possible examples Ipswich Ware =

- Area F Eastern structure *Context 1109* 1 small heavily worn bodysherd, poorly-mixed fabric not obviously Romanising native or Roman, ? Ipswich/Thetford
- Area F Western enclosure *Context 771* 1 fairly small jar rim sherd, chipped, slight edgeburring

### **Definite examples local coarsewares =**

- Area F Western enclosure ditch Context 738 fairly small rim sherd, fairly fresh
- Area F Looped southern 'enclosure' ditch *Context 1351* moderate-sized bodysherd, gritty fabric, fairly thick-walled, some unifacial wear

### Phase discussion

- 8.4.71 There is a larger body of material for this sub-phase represented by mainly imported but also a few local coarse wares. For the first category are sherds from between 18-20 imported East Anglian Ipswich Ware vessels. With the exception of 1 sherd from Area A and 1 from the Area E Quarry complex, adjacent to Area F all of these sherds come from Area F. Of the latter, a number are battered and worn and clearly residual in later contexts, their condition tending to confirm the relative intensity of later activity in Area F. Of these only 2 *may* be from the same vessel 1 from *Pit 1008* and 1 from ditch *Context 1108* (respectively, from the west end and outer northern ditch of the Eastern Structure) and a distance of approximately 30 metres. However some are more informative:
- 1. The most important of these are four sherds from the *Cess-pit 1877* with its worn and residual C7 AD organic-tempered sherd 3 from the same vessel, chipped and burnt but otherwise fresh and one, virtually unworn, from a large stamp-decorated spouted pitcher. There is no later material from this feature and the condition of these sherds and the pit's location not only confirms its Mid Saxon date but also the implications of all the other later seventh to eighth-ninth century sherds recovered from Area F.
- 2. Other fresh and not seriously re-distributed sherds from Eastern Structure contexts are sherds from *Contexts* 779, 1017 and 1108. Most are fairly small but the 3 from 1109 include one large bodysherd whose size and only slightly worn condition can only indicate derivation from a very nearby feature arguably perhaps *Contexts* 1707, 1783 or 1787.
- 3. Relatively unworn Ipswich sherds from the inter-compound 'dog-leg' ditch include a jar rim fragment from the short 'gully' 1313 and 2 of the *three* sherds from ditch segment

- 834. No other sherds of this general date appear to come from this long feature but these two contexts are close together so that 1313 might just be a pre-ditch feature with the sherds from 834 perhaps derived from activity associated with the potentially earlier *Pit* 1307.
- 4. Two sherds, one Ipswich and one a local shell-tempered coarseware rim are residual in *Context 737* toward the eastern end of the Western Enclosure's south side inner ditch. The shelly ware rim is discussed further below but the Ipswich sherd is large and only slightly worn and the shelly sherd fresh. Their location brings them within the likely activity-focus represented by features pre-dating the construction of the Enclosure's southern ditches.
- 5. Other only moderately worn sherds from non-ditch features in the Western Enclosure zone include one each from *Contexts 808*, *1411* and *1475* at present only the latter may be informative it is the latest element from an odd-shaped feature inside the southern ditches and west of the 'dark soil' feature *960*. Its moderate-sized sherd has some surface wear but is comparatively unworn and *may* imply that *1475* is of Mid Saxon date.
- 8.4.72 All the above Ipswich Ware sherds can be initially dated to their general production range of c.750-850 AD. None have direct associations suggesting that they could be more closely dated to either the second half of the eighth or the first half of the ninth centuries AD. However, the sea-borne importation of Ipswich pottery may have been partially interrupted after 832 AD the first documented Viking raid and it *may* be reasonable to expect that the majority of the recorded sherds mostly date between c.750-830 AD.
- 8.4.73 Sherds representing the second category, local coarsewares, are much fewer only four. The first, from *Context 1351*, is a medium-sized bodysherd from another grittempered medium-diameter, fairly thick-walled coarseware jar. Although it is handmade and gritty, like the two coarseware sherds from Phase 1, it is harder-fired and better-produced than these or most later seventh-earlier eighth century examples from the Canterbury sequence. There, gritty fabrics are infrequent after c.750/775 AD so that this relatively well-made example with its slight shoulder-upper body ridging, similar to those on some contemporary Ipswich vessels, suggests a date within the second half of the eighth century. It is definitely residual in the curvilinear Early Medieval ditch feature that snakes across the Western Enclosure zone and is cut by

the two southern ditches of the Western Enclosure. However its size and only slight unifacial wear again suggests derivation from an earlier adjacent feature. The second, the shelly ware jar rim from 738, is associated with a large Ipswich sherd, both unworn or only slightly. The coarseware rim has good parallels from published regional assemblages (eg. Canterbury and a broadly contemporary Mid Saxon 'strand' location at Sandtun, near Hythe) datable to between c.750-850 AD or shortly after. The remaining two sherds are both from Area E Quarry Context 484 and from the same vessel. The pot was made using a fine greensand clay and, superficially, is virtually identical to sherds from confirmed Late Iron Age contexts in Area A. The same Area E context produced sherds similar to those from Area A associated, as there, with some LIA 'Belgic' grog-tempered sherds and also Roman elements. The only difference between these LIA greensand sherds and the present two is that the latter are thinner walled with a soil-erosion/weathering-trend very similar to MLS Canterbury sandy ware sherds recovered from sites on heavy clay subsoils. In addition, the rim is everted and thinned in a manner virtually identical to these later C8-mid C9 AD Canterbury products – and basically unlike indigenous LIA types. A detailed review of greensand sherds from the Quarry-zone and other Areas indicates that most should be of MIA-LIA or LIA date and the few that might potentially be of Mid Saxon date are too eroded or too lacking in defining characteristics to include with any confidence.

### Specific contexts that can be allocated to this period (Period 9):

Area F Cess-pit 1877

# Specific contexts that may be allocatable to this period:

Area F Feature 1475

# Features possibly associated with residual sherd concentrations implying likely activity zones of C8-C9 AD date:

- Area F Eastern Structure northern outer ditch segment 1108 Features 1707, 1763, 1767, 1822
- Area F Eastern Structure south side north-south linears 1714, 1739 and maybe some of adjacent associated features
- Area F Inter-compound ditch zone where it cuts eastern ditch Western Enclosure and is cut by terminal of its northern ditch *Features 1307, 1313*
- Area F East terminal zone Western Enclosure's southern ditches Features 725, 772, 788, Linear 795, 1070

## General Area-based activity implied by presence of residual sherds from:

Area A

Area E

# Illustratable pottery providing confirmation of activity during Period 9:

Coarse-gritted jar rim from Area F Western Enclosure southern ditch Context 722

Bodysherd from Flemish/North French roulette-decorated bowl from Area F Western Enclosure 'dark zone' Context 960

Shell-tempered coarseware jar rim from Area F Western Enclosure ditch Context 738

Bodysherd from spouted and stamp-decorated Ipswich Ware pitcher from Area F Eastern Structure zone *Context 1879* 

Rim from local coarseware jar from Area E Quarry Context 484

## Period summary

8.4.74 There is no doubt regarding the evidence for occupation during this overall period. It is slimly but definitely represented by typical later seventh-mid eighth century grittempered coarsewares for the first phase. It is markedly more represented for the second – principally by sherds from imported Ipswich Ware jars and pitchers but also a few coarsewares. On the basis of the Ipswich sherds, the period c.750-850 AD is likely to have witnessed a fairly considerable increase in wealth and activity - an increase reflected in the similar numbers of Ipswich vessels represented in excavations within the Minster Abbey precincts. Assuming the trade-interruption scenario is correct, this could place most of this surge in activity and its implied relative wealth between c.750-830 AD. Alternatively, if there is a context-function or discard-based relationship that ties the technically later knife-trimmed sandy ware sherd from 756 and the Ipswich sherds from Contexts 834 and 1313 (3, above) to the same activity-focus, a later ninth-century date for them both may be indicated (see **Period 10**). Elsewhere, within the overall site, the presence of one C7 AD organictempered sherd and one Ipswich Ware sherd from Area A does indicate a degree of activity in other areas of the site contemporary with the main activity-zone in Area F.

Period 10: Late Saxon

# Phase 1: Mid C9-Mid C10 AD (c.850-950 AD):

Area contexts:

### **Definite example from =**

Area F Northern outer ditch east end *Linear B Context* 756 = 1 sandy ware jar bodysherd, knife-trimmed, fairly small, fairly heavily worn

## Probable example from =

Eastern Structure ditch *Context* 711/712 – 2 shelly ware bodysherds, same vessel, fairly small, moderate unifacial wear

### Phase discussion:

8.4.75 These are the only 2-3 sherds that can, with any confidence, be allocated to the Late Saxon or more specifically to the mid ninth-mid tenth century AD. However, by comparison with other recognised regional ceramic trends and the on-site **lack** of a continuation of the obvious mid eighth-mid ninth century surge in activity - their manufacturing characteristics suggest that they are more likely to be earlier-mid ninth century products rather than later. Although this means that they *could* go into Period 9 Phase 2, it is technically sensible at this Assessment stage - and possibly even in the final publication - to keep them and the following 'Phase 2' examples in a Period 10 placement as discussion points emphasising the lack of continuity and any associated dating problems.

### Phase 2: Mid C10-Mid C11 AD (c.950-1050/1075 AD):

Area contexts:

# Possible examples from =

Area F Contexts =

Inter-compound sinuous Linear JJ-C context =

808 =

1 Canterbury sandy ware bowl rim sherd, fairly small, fairly heavily worn

1 bodysherd shell-filled ware, small, fairly fresh, slight unifacial wear

1 bodysherd shell-filled sandy ware, fairly small, fairly fresh

Western Enclosure ditch contexts =

Context 738 – 2 small shell-filled ware bodysherds, same vessel, fairly worn

Context 822 – 1 Canterbury sandy ware jar rim, moderate-sized, fairly worn

Western Enclosure other features =

Context 962 – 2 sandy ware jar rim sherds, conjoining, moderate-sized, slightly worn

Context 1449 = 1 bodysherd Canterbury sandy ware, small, moderate unifacial wear, possible faint traces knife-trimming (See also Period 11 Sub-phase 1)

Phase discussion:

All the above sherds could, due to longevity of production trends, be dated anywhere between c.950-1100 AD – see **Period summary** 

# Features possibly associated with residual sherds implying likely activity zones of C9-C10 AD date:

Area F Eastern Structure ditch Context 711/712

Area F Northern outer ditch east end Linear B Context 756

### Illustratable pottery providing confirmation of activity during Period 4:

Reconstruction based on contemporary regional parallels of shelly ware jar residual in Context 711/712

Reconstruction based on contemporary regional parallels of knife-trimmed sandy ware jar residual in *Linear B Context* 756

# Period summary

8.4.76 Only one regionally utterly typical example of a Late Saxon-type sherd was recovered – not entirely unexpectedly from within the main Area F Mid Saxon activity zone. Apart from one other probable example from the same zone, no other material that is categorically of this period has been recorded from either this Area or any other part of the overall site. However, although there are minor subtle changes, one of the key aspects of regional pottery types for the approximate 125-year period between c.950-1075 AD, is their basic uniformity. So that a heavily worn rim in a probable Early Medieval context is either of that date or derived from fundamentally earlier mid-late tenth century Late Saxon occupation. Just this scenario classically applies to the complex Area F structural and compound sequence. This is the nature of the evidence – ceramically there is just not enough to allow for firmer chronological placement. As a result, analysis is left with both definite and potential evidence for this period. To accommodate the latter – this Period has been supplied with two Phases.

### Phase 1: Potential mid ninth-mid tenth century activity

8.4.77 There is one diagnostic sherd that belongs in this period – a knife-trimmed non-Canterbury sandy ware bodysherd from Area F *Context 756* at east end Western Enclosure northern *Linear B*. There is also a further but marginally less diagnostic example - two shelly ware sherds from the same vessel from *Context 711/712* with fabric characteristics which are **more** likely to be either MLS or LS than Early Medieval, ie between c.750-950 AD.

- 8.4.78 At this point it needs to be stressed that it is felt that both the low count of Late Saxon-type sherds and the feature-sequence suggested below for Period II is a genuine and realistic reflection of original trends. If the Period 9 phase of activity had continued uninterruptedly, at the same level of intensity, right through the ninth and tenth centuries at least, there should be a greater body of material obviously dating to the Late Saxon period despite the caveat of in-built recovery biases. Since this is not apparently the case the single definite Late Saxon sherd from *Context* 756 has to be accounted for.
- 8.4.79 Knife-trimming is known on material from both Canterbury and Folkestone Canterbury sandy ware jars that are of probable pre-c.850/875 AD date. However, in the Canterbury Late Saxon sequence, vessels made between c.850-950 AD carry a much more exaggerated form of trimming. This characteristic surface bi-product on the present sherd is not as marked. Although this may be due to manufacture in a different centre it could equally suggest it was from a jar bought and used perhaps towards the end of the second main phase of Period 8, ie between c.800-850 AD particularly since *Context 756* is close to one of the probable Period 8 activity-zone implied by 'clusters' of residual Ipswich Ware sherds. Interestingly this is the first regional instance of knife-trimming on a non-Canterbury Mid Saxon product.

## Phase 2: Potential mid tenth-mid eleventh century activity

- 8.4.80 This potential phase allows for the possibilities represented by the ambiguously datable sherds referred to above. This problem is typically represented by three Canterbury sandy ware rims from *Contexts* 735/736, 822, 962 and a good shelly ware part-profile from the Western Enclosure zone context 1591 they would be fine in either period. The Canterbury rim sherd from *Context* 735/736 from the Western Enclosure's Period 11 Phase 2 (c.1125-1175 AD) Inner Linear H is another classic dichotomy. Superficially it is fine if seen as residual from activity associated with the Phase 1 use of the Enclosure's outer *Linear M* or it may be derived from potential Period 10 Phase 2 Late Saxon activity. Its condition and form could fit either scenario. In addition there is a scatter throughout Area F of a small number of bodysherds, no more than c.15-20, mostly sandy, some shelly, which could be either Period 10 or Period 11 Phase 1.
- 8.4.81 Equally at this stage of assessment, this potential phase also allows for the evidence from *Linear JJ-C*. Although this feature could, as preferred below, be an early Period 11 Phase 1 entity, dug during its *Sub-phase 1* the datable sherds from it could all

equally well be late arrivals just prior to the layout and digging of that Period's *Sub-phase 2* enclosure ditches between c.1075-1125 AD. Technically, since the Eastern Structure is likely to be a Norman manorial construct re-establishing the importance of this significant location, this could place *Linear JJ-C* at some point between c.1066-1075 AD, rather than later.

### Summary

8.4.82 As recovered and currently interpreted, the evidence is saying that there is a significant break or fall-off in activity around c.850 or 875 AD at the latest. Even if there was a degree of continuity throughout, or sporadically during, the tenth and earlier eleventh it was minor - with no major resurgence until c.1075/1080 AD.

# Period 11: Early Medieval-Medieval

# For use with the Period 11 phases – shell-tempered wares only:

**Note :** On the basis of sherds from the Area F structural/compound sequence there are 7 obvious shell-tempered fabric types and their variations :

Fabric 1 = North Kent shell-filled ware with moderate-fairly profuse shell inclusions (few other obvious inclusions)

Fabric 1A = North Kent shell-filled fine sandy ware with moderate-fairly profuse shell inclusions

Fabric 1B = North Kent shell-filled ware with iron-oxide grits

Fabric 2 = North Kent shell-filled ware (moderate-fairly profuse shell inclusions) with sparsemoderate coarse sand

Fabric 3 = North Kent shell-filled sandy ware (sparse-moderate shell inclusions)

Fabric 4 = North Kent shell-filled ware with moderate shell and sand

Fabric 5 = North Kent shell-filled ware with fairly sparse-moderate flint and coarse quartz grits

# Phase 1: Later C11 - early C12 AD Early Medieval (c.1075-1125 AD):

Area contexts:

### **Definite examples from =**

Area D contexts =

Elongated pit 472/471 = 1 sherd Canterbury sandy ware, rim, moderate-sized, fairly heavily abraded

Linear 470 Contexts 473.474, 473/525 = 2 sherds Fabric 1 = 1 each (1 base, 1 bodysherd), 1 small, 1 moderate-sized, 1 moderately, 1 fairly heavily worn

Linear Context 3119 SF17 = 1 very small bodysherd Canterbury sandy ware, fairly heavy unifacial wear

### Area F contexts =

# Inter-compound sinuous Linear JJ-KK-L-J-O-C contexts:

- 1386 (KK) = 1 rim, 1 bodysherd, different vessels, Canterbury sandy ware, fairly large, slightly worn
- 1098 (L) = 1 bodysherd Canterbury sandy ware, medium size, slightly worn
- 1393 (L) = 1 bodysherd Fabric 1, fairly small, moderately worn
- 1382 (J) = 1 bodysherd Canterbury sandy ware, fairly small, slightly worn
- 1338 (C) = 11 sherds Fabric 1, 2 vessels, one ? bowl-form (10 rim, base, body) with lightly thumb-pressed rim, small-large, most fairly fresh, 1-2 fairly heavy unifacial wear
- 830 (C) = 2 bodysherds shelly ware, 1 Fabric 1, 1 Fabric 2, fairly small, 1 fairly worn,
- 834 (C) = 2 bodysherds Fabric 1, medium-sized, 1 fairly worn, 1 base Fabric 1A, moderate-size, fairly fresh
- 1312 (C) = 4 bodysherd, 3 Fabric 1, small, worn, 1 Fabric 1A, small-fairly small, fairly fresh

### **Eastern Structure contexts =**

Northern outer Linears S and T contexts (residual in a Phase 2 linear) =

- 955 = 1 Canterbury sandy ware bodysherd, fairly small, moderately worn
- 1323 = 23 sherds 1 bodysherd Fabric 1A; 22 Canterbury sandy ware, rims and bodysherds, small-large, variably worn, 9 = 1 stewing-pot, 2-4 = another
- 1780 = 1 Fabric 1 bodysherd, fairly small, fairly heavily worn

Southern outer field-ditch/enclosure *Linears BB, CC, DD, EE, LL* contexts =

- 710 = 1 Fabric 1 base sherd, fairly small, heavily leached and fairly worn
- 715/716 = 2 Fabric 1A base sherds, same vessel, small-moderate-sized, highly leached and fairly worn
- 1001 = 2 bodysherds Canterbury sandy ware, small-fairly small, same vessel, near-fresh
- 1006 = 1 Fabric 1 base sherd, thick-walled large-diameter, fairly small, moderately worn
- 1017 = 1 base sherd Canterbury sandy ware, fairly small, fairly worn
- 1023 =
- 1 bodysherd Fabric 1, moderate-sized, fairly heavily worn
- 1 rim sherd Fabric 1B, rim thumb-decorated, fairly small, moderately worn
- 14 rim and bodysherds Fabric 3, same vessel, small-large, rim-neck profile, moderately worn (7 fairly large may be from same vessel; ? = inner posthole 1888)
- 1936 = 2 bodysherds, Fabric 3, same vessel, small, slightly worn

Northern inner structural *Linear V* contexts =

101 = 1 bodysherd Canterbury sandy ware, small, slightly edge-worn, thick-walled

779 = 2 rim sherds, Fabric 1, same vessel, small, fairly heavily worn

1117 = 1 bodysherd Canterbury sandy ware, fairly large, fairly fresh

Southern inner structural *Linears FF, GG, NN, OO* contexts =

946 = 3 bodysherds probable North or West Kent sandy ware, small-fairly small, 1 fairly worn, 2 same vessel only slightly worn (latter may be early Phase 2)

968 = 1 base sherd Fabric 1A split and slightly worn, 1 Fabric 2 fairly worn

979 = 1 sherd Fabric 1, small, fairly heavily worn

995 = 1 bodysherd Fabric 1, small, fairly fresh

Features within the Eastern Structure =

*Linear X Context 1735/1736* = 1 bodysherd Fabric 2, 1 fairly small, fairly worn

Posthole 1888 = 1 bodysherd Fabric 3, small, chipped, slightly worn (? = Linear CC Context 1023)

Southern field-boundary ditch/drain *Linear AA Context 919* =

1 body, 1 base sherd Canterbury sandy ware, small-fairly small, fairly worn

1 bodysherd Fabric 1, fairly small, fairly heavy unifacial wear

1 base sherd Fabric 4, fairly small, fairly worn

### Western Enclosure contexts =

Southern outer *Linear M* contexts =

771 = 4 bodysherds Canterbury sandy ware, small-fairly small, 1 fairly fresh, 2 fairly worn, 1 with moderate unifacial wear

793 = 1 base sherd Canterbury sandy ware, fairly small, fairly worn

822 = 1 rim sherd Canterbury sandy ware, moderate-size, fairly worn

808 =

1 bodysherd Fabric 1, moderate-sized, very worn bifacially

1 rim Canterbury sandy ware pan, fairly small, chipped and fairly heavily worn

1 rim Canterbury sandy ware stewing-pot, fairly large, slightly worn

1 shoulder sherd Canterbury sandy ware with moderate shell, fairly small, moderate bifacial damage

1355/1354 = 2 conjoining sherds Canterbury sandy ware, rim, moderate-sized, moderate edge-wear otherwise only slightly worn

Southern inner *Linear H* contexts (most are residual in a Phase 2 linear) =

735/736 =

2 sherds Canterbury sandy ware, 1 moderate-sized fairly heavily worn rim, 1 fairly small slightly worn bodysherd

1 bodysherd sandy/gritty ware, fairly small, moderately worn

1 Fabric 1 bodysherd fairly small, slight unifacial wear

755 = 1 Canterbury sandy ware rim, fairly small, fairly worn

1513 = 1 Canterbury sandy ware bodysherd, fairly large, moderate bifacial wear

# Other Western Enclosure zone contexts =

*Linear E* contexts =

733 = 20 rim and bodysherds Fabric 4 stewing-pot, fairly small most fairly large, all same vessel, most only slightly worn

828 = 6 bodysherds Fabric 1, same vessel, moderate-sized, fairly fresh

896 = 1 base sherd Fabric 1A, fairly large, basically fresh, some edge damage; 4 sherds?

Canterbury sandy ware with moderate shell, same vessel, fairly small, fairly fresh

904 = 1 rim Canterbury sandy ware, small, near-fresh

Potential structural entity *Linears G* and *N* contexts =

*Linear G Context 1491* = 4 bodysherds, 3 Canterbury sandy, 1 Fabric 1, all small-fairly small, moderately worn

Linear N Context 1591 = 1 bodysherd Canterbury sandy ware, small, moderately worn

Other feature contexts =

773/772 = 1 gritty ware base sherd, fairly large, chipped; 1 rim sherd Canterbury sandy ware, medium-sized, slight edge-damage only

777 = 2 bodysherds, 1 Canterbury sandy, 1 Fabric 1, fairly small, slightly worn

'Dark soil' zone 960 *Pit 964/962* = 4 sherds Canterbury sandy ware, fairly small, 2 rim conjoining, all only moderately worn; 1 Fabric 1 shelly ware bodysherd, fairly small, slightly worn

Pit 1450 *Context 1449* = 3 bodysherds Canterbury sandy ware, small, 1 fairly heavily worn, 1 with moderate unifacial wear, 1 fairly fresh (See also Period 10)

1710 = 1 bodysherd Fabric 1, small, fairly fresh

# N-S outer Western boundary ditch *Linears R-A-SS* sequence contexts =

Linear A Context 1329 = 1 bodysherd Canterbury sandy ware, medium-sized, fairly heavy unifacial wear

*Linear R Context 1587/1588* = 1 bodysherd Fabric 4, fairly small, very heavy bifacial wear *Linear SS Context 1591* =

- 1 bodysherd East Sussex/North Kent grit-tempered ware, fairly small, moderate-heavy bifacial wear
- 2 rim sherds East Sussex/North Kent grit-tempered ware, fairly large, conjoining, moderate unifacial wear
- 2 bodysherds Fabric 5, 1 small fairly worn, 1 moderate-sized with heavy bifacial wear 13 sherds Fabric 4, same vessel, rim-body part-profile, fairly heavy bifacial wear

### Phase discussion

8.4.83 Only two areas produced pottery datable to this phase – Areas D and F. From Area D one moderate-sized Canterbury sandy ware rim, from *Context 471* of the elongated pit 472, is too large to have arrived in-context via agricultural mechanisms. Its degree of wear firmly indicates that it is residual compared with the remaining, and larger and later, sherds from the same context. Within the Canterbury post-Roman sequence, the rim is typical of this period and its presence confirms that *Pit 472* was in existence by this date. Its alignment relationship with the adjacent *Field-ditches 466* and 470 firmly indicates that not only these, but quite probably all ditches associated with the Area D field-system, were first established during this period. One very small Canterbury sandy ware scrap from *Linear Context 2119* and a fairly heavily worn shelly ware sherd from *Field-ditch 470* may also date to this phase of the field-system's use.

### The ceramic evidence. I

8.4.84 In addition to a few earlier, *possibly* Late Saxon sherds, the sinuous inter-compound *Linear JJ-C* produced a number of Canterbury sandy ware and North Kent shelly ware sherds. Of these, the Canterbury sherds are very similar – mostly from fairly large-diameter jars with medium body-wall thicknesses (and in marked contrast to the potential LS elements) including one fairly large rim sherd from *Context 1386* - a large stewing-pot with a slightly everted thickened and internally bevelled rim closely similar to many LC11-EC12 AD examples from Canterbury, its relatively unexaggerated form suggesting a 1075-1100 AD emphasis rather than later. Another context, *1338*, produced a cluster of North Kent shelly ware sherds, most from the same probable bowl – its simple-moulded slightly everted rim suggesting, in line with similar confirmedly contemporary regional formal trends, an early twelfth century

date if not late eleventh. The lack of wear and relative size of these examples, compared with the few heavily worn potentially earlier examples and the few later probably intrusive elements, strongly suggests that they are from either a contemporary context (rather than being intrusive or residual) - **or** are late arrivals into an earlier *possibly* Period 10 Phase 2 construction. Finally from this linear, a few fresher, more mid or late twelfth century-looking, sherds are probably intrusive from **Phase 2 or 3** activity.

- 8.4.85 Contemporary with the sinuous *Linear JJ-C* is the similarly sinuous *Linear E*, which conjuncts with the former at *Contexts 836/904*. The only diagnostic formal element is an everted and internally bevelled Canterbury sandy ware stewing-pot rim from *Context 904* and typical of this period its exaggerated bevel suggesting a date between c.1100-1125 AD rather than late eleventh. Associated sherds are all in shelly wares but include a rare type here, base and bodysherds in Canterbury sandy ware with fine crushed shell. Although all these sherds could be dated to **Phase 2** it is assumed that most are broadly contemporary with *904*'s rim. This means that *Linear E* should also pre-date *Linear D* the *904* sherd probably arriving fairly late in its use.
- 8.4.86 Within the eastern part of this Area the northern outer ditch segments *Linears S* and *T* produced a number of sherds that can be considered contemporary with its initial use - perhaps the one or two more worn and thicker-walled shelly ware sherds from Contexts 955 and 1780, certainly a group of Canterbury sandy ware rims from Context 1323. The latter included rims from 3 stewing-pots, the very slightly clubbed thickened rim of one and the markedly bevelled everted lips of the other two indicating a date possibly as early as c.1080, more probably between c.1100-1125 AD. From the southern outer field-/enclosure-boundary ditch *Linears BB-LL* only six small or moderate-sized sherds were recovered (including several Canterbury sandy ware sherds) that, on the basis of type and condition, could be early pre-1100 AD discards - although a few of the more worn Phase 2 elements may belong in this phase. Context 1023 from linear segment CC produced rim sherds from a Fabric 3 jar or stewing-pot with a simple slightly thickened rim which, on the basis of regional form trends, almost certainly belongs to this phase - or early within Phase 2 at the latest. From the northern inner structural ditch Linear V Contexts 101 and 1117 each produced a single Canterbury sandy ware bodysherd from thick-walled large-diameter stewing-pots almost certainly datable to this phase. In addition, Context 779 produced one highly worn shelly ware rim scrap - its everted thickened but only slightly

pointed rim type indicating a date between c.1100-1125 AD – or early within Phase 2, ie. pre-c.1150 AD at latest – a likelihood under-pinned by its poor condition compared with the latest Phase 2 element from this context.

- 8.4.87 Within the structural zone itself, the north-south *Linear X* and the *Post-pit 1762/1763* are almost certainly primary constructional elements from the former one rather worn shelly ware bodysherd with fairly coarse shell inclusions may be contemporary with the early years of the structure's use, from the latter a fairly large sherd is either a late-current phase loss. or between c.1125-1150 AD. Another feature, *Posthole 1888*, produced a single Fabric 3 shelly ware sherd which, although small, looks remarkably similar to sherds from *Context 1023* of the outer field-ditch segment *Linear CC* and *may* therefore be contemporary.
- 8.4.88 The ceramic evidence from *Linear H* is initially difficult to interpret. *Contexts* 735/736, 738 both produced fairly large and only minimally worn sherds from North Kent shelly ware cooking-pots, their thickened but still slightly stubby everted rims that, as in Canterbury, presage the exaggeratedly everted rims of the mid-late twelfth century indicating a date early within this phase, between c.1125-1150 AD or from very slightly earlier. Another context, 929, from the eastern end of Linear H, contained a fairly large only slightly damaged sherd from a large shell-filled Canterbury sandy ware storage jar with thumb-decorated rim - its everted and thickened rim typical of the mid-twelfth century (a very highly worn rim sherd from the same vessel was recovered from 'dark soil' zone 960 20 metres to the north). Technically the later dating of this pottery this could suggest that *Linear H* is a Phase 2 construct. However the stratigraphic evidence is apparently unequivocal – *Linear H* is cut by Linear I and has to precede it. In addition, the alignment and nature of Linears H and M make more sense, together with the easternward Linears BB-LL as part of a relatively early field-boundary and entrance-way sequence. With these aspects in mind, the presence of the later-dated pottery elements from Linear H can be accommodated if they are seen as arriving during the Phase 2 backfilling of Himmediately prior to the cutting of the southern outer Western Enclosure *Linear I*.
- 8.4.89 In addition to the establishment of Area F's main structural and enclosure-ditch elements it has been suggested that the bow-sided entity represented by *Linears G* and *N* and associated 'internal' features represents another structure. This potential building produced, amongst some shelly ware sherds, four in Canterbury sandy ware. Although the latter could be later, earlier-mid twelfth century AD, the fairly thick

body walls of two is generally more typical of the present c.1075-1125 AD phase (see also Phase 2).

8.4.90 A number of other minor features within the overall Western Enclosure zone also produced broadly contemporary material. These include linear Pit 733, Gully 777, Pits 964/962, 1450/1449 and the hollow 1710. The linear Pit 733 produced a cluster of sherds from the same moderately Fabric 4-type shelly ware stewing-pot. Its simple slightly round-topped and slightly everted rim broadly in line with regional formal trends during the later eleventh-early twelfth century – the pit's position suggesting that it was dug either during the first phase of site-preparation associated with the sinuous Linear JJ-C or the second – when the outer compound (Linears H and M, S and T) and field-boundary ditches (Linears LL-BB) were dug. Although Gully 777 is cut by Linear I, and should pre-date it, its two bodysherds are broadly contemporary with the pottery from both the latter and from the previous initial site-drainage curvilinear ditch JJ-C. Unless these two sherds are intrusive into a much earlier feature, this should indicate that 777 was dug during the use-time of Linear JJ-C. The last two features, 962 and 1449, each produced a few Canterbury sandy ware bodysherds and a single shelly ware sherd. Although the form of the rim from 962 and the character of the bodysherds could allow them to be placed into the later tenth or perhaps the earlier eleventh century, there is so little confirmable Late Saxon material from an area with a strong c.1050 AD-plus component that both these feature are considered more likely to be contemporary with this sub-phase. A similar rationale may apply to the oddly shaped feature 773/772. An unworn earlier Mid Saxon gritty ware from this feature has already been recorded for Period 9 Phase 1. Despite its condition it has to be residual among two other sherds of later date with only slight damage. One of these is in a very similar gritty fabric but is from a much larger vessel with a sharply-defined base angle – typical of tenth, eleventh century or later manufacturing trends. Associated with it was a Canterbury sandy ware jar rim. Again the latter, as might the gritty ware base, would not be out of place among some Canterbury later tenth century assemblages but, again in view of the low quantity of definite LC9-MC10 AD sherds recorded, is placed into the earliest activity for the present phase between c.1075-1100 AD. The placement of the single shelly ware sherd from Context 1710 is uncertain. The context is within Hollow 1708 immediately north-west of the 'dark soil' zone 960. Hollow 1708 is cut by the Western Enclosure's Phase 2 northern ditch Linear B. Since the sherd's manufacturing characteristics suggest an earlier-mid twelfth century production date it is possible that this sherd is intrusive from Phase 2 activity. If it is not intrusive and contemporary with the use of Hollow 1708 then the latter is likely to be a Phase 1 entity – the sherd arriving perhaps between c.1100-1125 AD rather than earlier.

8.4.91 Finally there is the evidence from the approximately north-south field-ditch sequence at the west end of the Western Enclosure. Linear A Context 1329 produced a single fairly heavily worn Canterbury sandy ware sherd, Linear R Context 1587/1588 a single very heavily worn Fabric 4 shelly ware bodysherd and Linear SS Context 1591 a cluster of sherds consisting of a few coarsely grit-tempered and a number in the Fabric 4 shelly ware including a jar part-profile. The grit-tempered sherds include a fairly large rim from a large-diameter stewing-pot with a simple rounded and slightly thickened rim. The grit is principally crushed flint and the vessels represented either from East Sussex or possibly North Kent (the ware type is a minority fabric in eastern Kentish Late Saxon or Early Medieval assemblages). The fabric type and form could be Late Saxon – however there are few proven examples of later ninth century Late Saxon types from the site and none confirmably of tenth century date. In addition, no material earlier than the late eleventh century was recovered from any of the Area D pits and field-ditch system - of which Linear SS and, by implication of similar alignment, Linears A and R, should be associated and contemporary elements. Since this vessel's form is also very similar in general type to those of late eleventh century Canterbury sandy ware vessels – a date for it of between c.1075-1100 AD is likely. The everted thickened and slightly clubbed form of the rim from the associated shelly ware part-profile could, again, occur in a Late Saxon assemblage but as a type is longlived and could occur later. So that, for the same reasons given for the last vessel, it is considered to be broadly contemporary but here perhaps rather more broadly between c.1075-1125 AD.

### Phase 2: Mid C12 AD Early Medieval (c.1125-1175 AD):

Area contexts:

# **Definite examples from =**

Area A contexts =

*Pit 587* =

9 sherds Fabric 1 (1 rim, 8 body, 2 ? same), small-moderate-sized, 8 slight-moderately worn, 1 fairly heavily

5 sherds Fabric 1A, same vessel, small-fairly small, moderately worn

Linear Context 415 = 1 bodysherd Fabric 1, moderate-sized, semi-leached, fairly fresh

Area D contexts =

*Elongated pit 472* contexts =

471 = 1 Fabric 1 cooking-pot rim, small, fairly heavily worn

480/476 = 2 Fabric 1 sherds, same vessel, 1 small, 1 large cooking-pot/storage-jar rim, fairly heavily worn

Pit 3218 Context 3217 = 1 small bodysherd Fabric 1, moderately worn

*Linear Context 3103 SF 15* = 4 small bodysherds, 1 Fabric 1, 3 Fabric 1A, all small, all fairly heavily worn

Linear Context 3119 SFs 13, 16 = 1 Fabric 1 bodysherd, 2 Fabric 1A (1 rim, 1 bodysherd), all small, all fairly heavily worn

*Gully/linear terminal Context 3157* = 1 bodysherd Fabric 1, fairly small, heavy unifacial wear *Context 3050* = 1 Fabric 1 bodysherd, small, fairly heavily worn

Area E *Contexts 273, 459* = 1 Fabric 1 bodysherd each, 1 small, 1 fairly large, both moderately worn

Area F contexts =

#### **Eastern Structure contexts =**

Northern outer *Linears S* and *T* contexts =

719 = 1 bodysherd Fabric 1, medium-sized, moderately worn

882/883 = 1 bodysherd Fabric 1, small, fairly worn; 2 base sherds Fabric 2, same vessel, small, moderately worn

955 = 1 Canterbury shell-filled sandy ware rim, small, moderately worn; 1 bodysherd Fabric 1, fairly small, fairly fresh

1415/1416 = 2 sherds, 1 Fabric 1 rim, moderate-sized, chipped, moderate partial unifacial wear; 1 bodysherd Fabric 2, fairly small, fairly worn

1780 = 1 jar rim, Fabric 1, moderate-sized, some unifacial wear internally

Southern outer field-ditch/enclosure *Linears BB, CC, DD, EE, LL* contexts =

710 = 10 Fabric 1 bodysherds (8 one vessel, 2 another), moderately worn; 1 bodysherd West Kent fine sandy ware, moderate-sized, fairly worn (**probably** = **Context 755**)

710/712 = 3 Fabric 1 sherds, 2 rims, 1 bodysherd, one of each both fairly heavily worn and abraded but one rim fairly fresh

1006 = 3 Fabric 1, 1 Fabric 1A bodysherds, fairly small-fairly large, slightly worn 1017 =

2 bodysherds Fabric 5, small, 1 with fairly heavy unifacial wear, 1 similar bifacially

5 sherds Fabric 1, 4 body, 1 ? pan rim, small-moderate-sized, bodysherds fairly heavily worn overall, rim fairly fresh

2 sherds Fabric 1A, 1 body, fairly small, 1 storage-jar rim with thumb-decorated rim, both with heavy unifacial wear

1023 = 1 Fabric 1 base sherd, fairly large, slightly chipped; 1 Fabric 2 storage-jar rim, fairly large, moderately worn

and:

845 = 4 bodysherds, 2 Fabric 1, 2 Fabric 1A, small-large, 1 with heavy bifacial wear, 1 with unifacial wear, 2 near-fresh

Northern inner structural *Linear V* contexts =

101 = 8 bodysherds Fabric 1, small-fairly large, one split, fairly fresh; 1 bodysherd BelgianAndenne ware, jug, glazed, fairly small, fairly fresh

103 = 1 rim sherd Fabric 2, large, moderate part-unifacial wear, closed pan form, bold rim thumbed-decoration = Context 105

105 =

7 sherds, 3 body, 4 rim, Fabric 2, moderate-large, 3 fresh, 1 with slight unifacial wear, same vessel, bold rim thumbed-decoration = **Context 103** 

21 sherds Fabric 1, parts 3 vessels (7 sherds same), small-large, most slightly worn, 1 near-fresh, 2 rims with thumbed-decoration 1 bold

107 = 5 sherds Fabric 1, same vessel, lug-handled jar or bowl, near-fresh, internal wear ? from use not exposure

779 = 1 sherd Fabric 1, rim, fairly large, near-fresh

1117 = 1 bodysherd Fabric 2, fairly small, chipped, slightly worn

1413 =

6 sherds N.French/Flanders fine grey sandy ware, rim and body, medium-large, chipped otherwise fresh = **Context 1697** 

4 sherds, 1 rim Fabric 1, fairly small; 3 rims Fabric 2, fairly small-fairly large, 2 same cooking-pot (1 near-fresh, 1 leached but near-fresh), 1 pan rim highly worn and abraded

1413/1766 = 22 bodysherds =

19 Fabric 1 (small-medium sized, most leached but near-fresh, most same vessel)

1 Fabric 1A (fairly small, fairly worn)

2 Fabric 2 (fairly small, heavy unifacial wear, same vessel)

Southern inner structural *Linears FF, GG, NN, OO* contexts =

946 = 5 bodysherds, 3 Fabric 1, 1 Fabric 1A-type, 1 Fabric 3, all fairly small, all fairly fresh

968 = 14 sherds Fabric 1, same vessel, small-mostly large, most near-fresh

975 =

16 sherds Fabric 1, 4-6 vessels represented, 1 fairly large rim slightly worn, most remainder small-moderate-sized, 1-2 fairly worn, most only moderately

2 sherds Fabric 1A, small, slightly worn

1 Fabric 5-type, fairly small, fairly worn

979 = 1 sherd Fabric 2, fairly small, moderately worn

995 = 8 bodysherds, 3 Fabric 1, 4 Fabric 1A, 1 Fabric 2, most moderate-sized, most only slightly worn

1031 = 11 sherds Fabric 1, same vessel, small-large, mixed wear-pattern, fairly heavy bifacial-fresh

1053 = 7 bodysherds Fabric 2, same vessel, small-fairly large, only moderately worn

1060 =

1 bodysherd Fabric 1, moderate-sized, fairly fresh

1 rim sherd Fabric 1A, moderate-sized, chipped, fairly fresh

2 sherds Fabric 2, 1 rim, 1 body, moderate-sized, slight unifacial wear for both – different vessels

2 bodysherds Fabric 5, same vessel, moderate-large sized, moderate internal (?use) wear

Features within the Eastern Structure =

*Linear X Context 1735/1736* = 1 bodysherd Fabric 2, large, near-fresh

Post-pit 1716 = single bodysherd Fabric 1A, fairly small, fairly worn including moderate unifacial wear

Post-pit 1762/1763 = 1 base sherd Fabric 2, fairly large, slightly worn

Southern field-boundary ditch/drain *Linear AA Context 919* = 2 bodysherds

### Western Enclosure contexts =

Southern outer *Linear M Context* 1355/1354 = 1 bodysherd North French fine sandy ware jar/pitcher, chipped moderate unifacial wear; 1 small slightly worn bodysherd Fabric 1

Southern inner *Linear H* contexts =

735/736 = 1 cooking-pot rim Fabric 1, fairly large, near-fresh

738 = 7 sherds Fabric 1, small-mostly medium-large-sized, 7 same vessel base, slightly worn, 1 stewing-pot rim virtually fresh

755 = 1 bodysherd W.Kent fine sandy ware, medium-sized, fairly worn overall (**probably** = **Context 710**)

809 = 2 bodysherds, 1 Fabric 1, fairly small, fairly worn, 1 Fabric 1A, moderate-sized, slightly chipped, light unifacial wear externally

- 868 = 1 bodysherd Fabric 1, small, fairly heavily worn
- 927 = 5 bodysherds, 4 Fabric 1 (3 same vessel), mostly moderate-sized, slightly worn, 1 Fabric 1A, small, fairly heavy unifacial wear
- 929 = 3 sherds Canterbury shell-filled sandy ware, same vessel, thumb-press decorated rim, chipped, slight edge-wear (= Context 960)
- 1071 = 1 bodysherd Fabric 1, moderate-sized, slightly worn
- 1407 = 1 bodysherd Fabric 2, fairly small, moderately worn
- Eastern  $Linear\ D\ Context\ 830\ (C) = 1$  Fabric 1, large spout-bodysherd spouted pitcher with applied thumb-pressed strips, fresh externally heavy internal wear (? not exposure)

Potential structural entity *Linears G* and N and associated contexts =

Linear G Context 1510 = 2 bodysherds Fabric 1A, same vessel, small, moderate unifacial wear.

Linear N Context 1527 = 6 bodysherds, Fabric 1, same vessel, fairly small-moderate-sized, all heavily leached and moderately worn

Context 1621 = 1 bodysherd Fabric 1, small, heavily worn

Context 1640 = 2 bodysherds Fabric 1, same vessel, small, fairly heavily worn

Context 1648 = 6 bodysherds Fabric 1, 3-4 vessels (3 same vessel), small-fairly small, 2-3 fairly worn, 3 fairly heavily (1 unifacially)

### Other Western Enclosure zone contexts =

898 = 1 small bodysherd Fabric 1, fairly heavy bifacial wear

960 =

2 sherds Fabric 2 with moderate coarse sand, same jar rim, small, fairly worn

1 sherd Canterbury shell-tempered sandy ware, decorated storage-jar rim, medium-sized, fairly heavily worn overall (= Context 929)

22 sherds Fabric 1, 14 same pan (small-fairly large, fairly fresh), rest small, variably worn

1118 = 2 sherds Fabric 1, same cooking-pot, large, some unifacial and partial edge-damage

1340 = 2 bodysherds Fabric 1, same vessel, fairly small, fairly worn; 1 bodysherd Fabric 2, fairly large, fairly worn

2215 = 1 Fabric 4 rim, moderate-sized, fairly fresh

# Outer N-S Western boundary ditch Linears R-A-SS sequence contexts =

Contexts 1136, 1329, 1411, 2142 – 1 medium-sized rim sherd Fabric 5 grit-tempered shelly ware, 5 small-fairly small Fabric 1 sherds (inc 1 rim) - all heavily worn

Context 1411 = 1 medium-sized bodysherd grit-tempered ware, moderate unifacial wear

- Linear SS Context 1591 = 1 moderate-sized bodysherd grit-tempered ware, moderate corner wear otherwise fairly fresh
- Inner N-S Western boundary ditch Linear Q  $Context\ 1515-2$  small Fabric 1 bodysherds, fairly worn

### Phase discussion:

- 8.4.92 Area A produced pottery of this date from two contexts one sherd probably intrusive into the Late Roman ditch *Context 415* (**check**) and the isolated pit *587*. The latter produced a small quantity of mostly fairly unworn shell-tempered pottery including one jar sherd with a beaded and internally-cupped rim of typical midtwelfth century AD type (cf. Cotter 2006, Fig.119.82).
- 8.4.93 The Area D field-system established during the previous phase continued into this period with sherds of mid twelfth century pottery being deposited into the elongated Pit 472. Although a number of more worn plain bodysherds from this and contemporary contexts in the same area may date to this phase, only 3 rims can be firmly allocated, one from Context 480/476, one from Context 471 and one from Context 3119. All are well-paralleled by shelly ware forms from Canterbury and Dover (undecorated parallel cf. Cotter 2006, Fig.119.83) – the form of rim from 3119 indicating a mid-twelfth century date – the other two probably dating towards the end of this phase, ie to between c.1150-1175 AD. In addition, one small fairly worn shelly ware bodysherd, probably intrusive into the C1 AD pit 3218, is useful as an indicator of broadly contemporary activity in the central part of Area D. The pit is close to the main north-south field-boundary/hedge ditch and the sherd is probably derived from contemporary manure scatters. The same may apply to a single heavily worn shelly ware sherd from the Gully/linear terminal Context 3157 – since the slim trace of this feature suggests it *could* be an earlier perhaps Period 6 or 7 ditch severely reduced by later Early Medieval ploughing.

### The Area F ceramic evidence.

8.4.94 The various enclosing and structural ditches cut during Phase 1 continued to be used into the twelfth century and produced pottery datable to this phase. Of those associated with the Eastern Structure's outer ditches - the northern outer ditch segments *Linears S* and *T* produced a slightly larger number of shelly ware bodysherds than the previous phase and, since no material of Phase 3 date was recorded, the overall impression is that this particular portion of enclosing ditch received very little rubbish at any time during the Eastern Structure's life. Only three

diagnostic rims were recovered, both with thickened and everted rims, two (one each from Contexts 955, 1415/1416) datable to between c.1125-1150 AD and the second, from Context 1780, datable to towards the end of the period c.1150-1175 AD. By contrast, at least during the present and following phases, the southern field or enclosure boundary ditch segments Linears BB-LL appear to have received rather more discards – again mostly bodysherds. Of the three rims recovered two – one heavily worn and one fairly fresh - respectively come from near the beginning and close to the end of the overall span c.1125-1175 AD. The third and moderately worn, with its thickened, everted and rather clubbed rim type is a mid-twelfth century product. Context 710 produced a bodysherd from probably the same West Kent fine sandy ware vessel as a sherd from the Western Enclosure's Linear H Context 755. In addition a few fairly heavily worn and obviously residual body and rim sherds datable to this sub-phase accompanied the large late Phase 3 discard-group from Context 1017 (Linear LL). These included a very battered thumb-decorated storage-jar rim and a fresh probable pan rim, both in North Kent shelly ware and both datable to c.1150-1175 AD.

8.4.95 Of those associated with the Eastern Structure's inner structural ditches – one context from the southern ditch segment NN, 1013, produced a cluster of sherds from the same shell-tempered cooking-pot – its fairly strongly everted rim with thinned outer lip indicating a c.1125-1150 AD, perhaps closer to mid-century than earlier. Another context, 1060, from the same ditch segment, produced a shelly ware rim which is a slightly later development of that from 1013 – this time between c.1150-1175 AD. Context 1413 (and 1413/1766), of the northern inner ditch segment Linear V, produced fresh large sherds from a North French/Flanders light grey fine sandy ware collared-rim pitcher with neatly applied diagonal thumb-decorated strips together with several shelly ware cooking-pot rims (a few sherds from the same pitcher were recovered from Context 1697). The near-fresh condition of one cooking-pot suggests that both it and the similarly virtually fresh NFR pitcher sherds were probably contemporary discards. This is reinforced by the cooking-pot's rim form - thickened everted (clubbed rather than elongated), slightly squared and with a slight inner-rim beading – indicating a date fairly early within the bracket c.1150-1175 AD (another rim from ditch segment GG Context 975 is similarly dated). On the basis of the Canterbury evidence this appears to be the period, or at least towards its end, that local pitcher and some early jug forms were beginning to copy the collared and internally-cupped rims of continental pitchers that were arriving in this country from c.1125/1150 AD onwards. Context 1413/1766 produced a cluster of shelly ware

bodysherds, most from the same vessel – most broadly contemporary with the above although the condition of some could indicate that they are earlier-mid twelfth century losses. Contexts 103, 105 and 107 from northern inner ditch V produced a useful group of large only slightly worn or near-fresh rim sherds including, from 107, conjoining fragments from a large-diameter vessel with an upright simple rim and one of two neatly applied and square-sectioned lug handles applied to the rim's exterior. The type of handle is unusual for the period and the diameter to large for as pitcher – so that a jar or bowl form is indicated. Same-vesel sherds from the other twocontexts include a large-diameter storage-jar and one unusual closed-form pan both with bold thumb-pressed 'cabled' rim decoration. One, a more slightly worn rim element is an earlier-mid-century discard, whilst the rim decoration of the storage-jar and pan are typical of the period c.1150-1175 AD. The thickened elongated but slightly snubnosed everted rim, from another shelly ware vessel, a cooking-pot from Linear V Context 779, is typical of the latter period too. Although this is the production and acquisition period for these three they could be earlier Phase 3 discards – as may the single large base sherd from a shelly ware vessel recovered from the inner structural Linear X (Context 1735/1736). Late discard may also apply to a single sherd from a yellow-glazed Andenne jug Context 101 - one of the few non-English imported fineware-class vessels from Neats Court. The arrival-band for this ware type is anywhere between c.1050-1200 AD and although importation prior to c.1100 AD is not impossible, twelfth century acquisition is more likely. As a quality tableware product and a 'cared-for' item a longer-than-normal life is a reasonable expectation – although if the latter was at the same time as the shelly ware sherds from this context, a loss date prior to c.1175 AD may be more realistic.

8.4.96 Still within Area F – only two of the three ditches that belong to this phase of the Western Enclosure produced pottery – *Linears I* and *D*. For the first, only a fairly small number of sherds were recovered. The majority are bodysherds from Canterbury sandy ware vessels but there also four rims – three from jars with simple thickened, slightly everted rims, two of which have slight internal bevels (*Contexts 808, 822, 1355/1354*) – and one from a shallow pan form with a fairly markedly everted and squared rim. Two of the jar rims are typical of the period c.1075-1100 AD and one more broadly to between c.1075-1125 AD – and should all be residual. The pan form is more difficult – its developed everted rim is more Medieval in character and could be later twelfth. Whilst its relatively good condition should confirm a later element arriving during from either **Phase 2 or 3** activity, the jar rims and particularly that from *822 could*, on the basis of published Late Saxon groups

from the Canterbury Saxon sequence, also be dated to the second half of the tenth century. Although this caveat is less likely to apply to the pan rim, it is worth noting that confirmed mid-late tenth century pans tend to have markedly everted rims so that, although the present example is rather more likely to be a mid-later twelfth century product an eleventh century date is also feasible (and either explanation would fit its condition in this context). That the jar rims are not dated to the tenth century is partly due to the presence of a bodysherd from a North France/Flanders reduced fine sandy ware jar or pitcher. Although this type of pitcher could arrive in this country as early as c.1100 AD, most examples in Canterbury and Dover are dated later, between c.1125-1175 AD. The present example is unlikely to be radically different and is here seen as a contemporary discard.

- 8.4.97 For the second ditch, *Linear D*, a few shelly ware sherds are probably datable to this phase. One, fairly heavily worn and thicker-walled, may be residual from Phase 1 activity but the better condition and thinner wall-thicknesses of the others suggests they are stray discards contemporary with the earliest use of this feature and earlier than the associated fresher discards detailed in Phase 3 below. In addition, there is a rather more difficult ambiguously datable element from the conjunction of *Linears C* (Phase 1) and *D*. This constitutes a large shelly ware sherd from a spouted pitcher decorated with applied thumb-pressed strips radiating down- and outward from beneath the spout. The manufacture of spouted pitchers is in decline by c.1150 AD and, although it could be a later eleventh century product, its fabric appearance is identical to other broadly mid-twelfth century shelly ware products from this site and elsewhere (eg, the twelfth-century levels at the port-town of Stonar, near Sandwich) so that discard either during this phase or, as a cared-for item, fairly early within **Phase 3** is likely.
- 8.4.98 A number of other features within the Western Enclosure zone also produced pottery datable to this phase. These include, as indicated for Phase 1, the bow-sided presumed structural entity represented by *Linears G* and *N* and associated 'internal' features. These contained a number of shelly ware sherds, mostly from 'internal' *Contexts 1621, 1640* and *1648* but also a group of same-jar sherds from *Linear N Context 1527*. Very noticeably, practically all of these sherds are fairly highly worn and heavily leached of their shell content the latter due to either fairly longterm exposure or particularly acidic context soil. Whilst the rather coarser shell voids of the *1527* sherds could suggest a Phase 1 product, sherds from the 'internal' feature are mostly thinner and more typical of mid-twelfth century types from this site. Of the

contemporary sherds from the remaining contexts - the single small shelly ware sherd from *Context 898* may be intrusive into an earlier feature since *898* is cut by **Phase 1** *Linear E*, the Fabric 4-type shelly ware stewing-pot rim from *Context 2215* with its flat-topped rim with slightly everted and thickened lip is, as an intermediate developmental stage between the earlier *733* and later *1023* Fabric 4 examples, probably datable to between 1125-1150 AD just possibly from c.1100 AD and rims from 'dark soil' zone *960* and *Context 1118* are datable to late within this phase, between c.1150-1175 AD – the pan profile from *960* from the same vessel as rim sherds from *Context 929* (already referred to above re *Linear H*).

8.4.99 The western boundary field-ditch sequence consisting of *Linears R-A-SS* continued in use during this phase – with both *Contexts 1591* (*Linear SS*) and *1411* (*Linear R*) producing mre sparsely and harder-fired grit- or flint-tempered sherds of earlier-mid twelfth century type. In addition, *Contexts 1136, 1329, 1411, 2142* all produced small quantities of fairly small heavily worn Phase 2-type shelly ware sherds – as did *Context 1515* of the inner boundary ditch *Linear Q*.

Area F inter-context same-vessel equations for Period 11 Phase 2:

Sherds from same West Kent fine sandy ware vessel from Eastern Enclosure southern outer Linears BB-LL Context 710 and Western Enclosure's Linear H Context 755.

Sherds from same Canterbury shell-filled sandy ware thumb-decorated jar rim from Eastern Structure zone *Context 929* and 'Western Enclosure 'Dark soil' zone *Context 960* 

Sherds from same North French-Flanders fine grey ware pitcher with applied thumbed strips from Eastern Structure zone *Contexts 1413 (Linear V)* and *1697* 

Sherds from same closed-form deep pan with bold thumbed rim decoration from Eastern Structure zone northern inner *Linear V Contexts 103, 105* 

### Phase 3: Late C12 AD-early/mid C13 AD Early Medieval (c.1175-1225/1250 AD):

Area contexts:

### **Definite examples from =**

Area D contexts =

Field-ditch 466 Context 467 = 1 medium-sized bodysherd Fabric 1, heavy unifacial wear.

Field-ditch 470 contexts =

469 = 2 Fabric 3 sherds, same vessel, small, moderately worn; 1 bodysherd N.Kent fine sandy ware with sparse shell, small, fairly worn

473/474 =

8 sherds Fabric 1, 3 small, 5 moderate-large sized, most fairly fresh (same vessel)

3 sherds Fabric 1B, 1 pan rim, 2 bodysherds, all large, fairly heavy bifacial wear, same vessel

2 small bodysherds Fabric 1A, some unifacial wear, same vessel

473/525 =

1 rim sherd London Region jug, small, fairly fresh

3 bodysherds Fabric 1, small-moderate sized, slightly-fairly worn

2 bodysherds Fabric 1A, same vessel, small-moderate sized, fairly worn

*Elongated pit 472* contexts =

471 =

2 bodysherds from 2 London Region jugs (1 NFR-style), small, 1 fairly worn, one slightly

7 sherds Fabric 1, 4 bodysherds, 3 cook-pot rims (2 same vessel), 1 pan rim (suspension-hole), 4 small, 2 medium, 1 large, 4 same vessel fairly fresh, pan with heavy unifacial wear.

475/476 = 1 fairly worn small London Region jug bodysherd, 1 Fabric 3 cook-pot bodysherd, applied thumbed strip, heavy unifacial wear

480 =

2 London Region jug bodysherds, 1 small, 1 moderate-sized Early Rounded-style, both moderately worn

8 sherds Fabric 1, 2 pan rims, 6 body, 2 same vessel, small-large size, most with moderateheavy unifacial wear

4 sherds Fabric 1A cooking-pot rim, same vessel, large size, differing moderate unifacial wear

480/476 = 9 bodysherds (1 handle stub) same London Region jug, small-moderate size, moderately worn

523 = 2 base sherds Canterbury sandy ware, same vessel, fairly small, slightly worn; 2 bodysherds Fabric 1A, small, same vessel, slightly worn

Area E Quarry *Context 465* = 2 bodysherds London Region NFR-style jug, medium-sized, moderately worn

Area F contexts =

### **Eastern Structure contexts =**

Southern outer field-ditch/enclosure *Linears BB, CC, DD, EE, LL* contexts =

710/712 = 6 Fabric 1 bodysherds (4 moderate-sized, fairly fresh, same vessel); 3 Fabric IA bodysherds, 2 same vessel, small-moderate-sized, fairly fresh

711/712 = 1 small fairly fresh Fabric 1 bodysherd

982 = 1 Fabric 1 bodysherd, fairly small, some unifacial wear internally

1017=

- 92 rim, body and base sherds Fabric 1, small-large, most fairly fresh (1 contemporary very worn), parts 3-4 storage-jars and cooking-pots (some sooted sherds)
- 4 body sherds Fabric 1A, 3 same vessel, fairly small-fairly large, fairly worn
- 12 sherds Fabric 4, 1 rim, rest bodysherds, small-large, some fresh, most only slightlymoderately worn
- 1023 = 2 bodysherds, fairly small, 1 Fabric 1, 1 Fabric 2, thin-walled. fairly hard-fired

Southern inner structural *Linears FF, GG, NN, OO* contexts =

975 = 15 bodysherds, 9 Fabric 2, 6 Fabric 5-type, few small, most moderate-sized or large, most near-fresh

#### **Western Enclosure contexts =**

Southern inner *Linear H Context* 868 = 1 Fabric 1 base sherd, fairly large, slightly worn

Eastern *Linear D* contexts =

- Context 730 = 21 sherds Fabric 1, 3 vessels, 1 cooking-pot rim (16 same vessel, some sooted), small-large, 2-3 slightly more worn than fairly fresh majority
- Context 1875 = 11 sherds Fabric 1, 6 vessels, 1 cooking-pot rim (6 same vessel, some sooted), small-large, 3 more worn (I heavy unifacial) than slightly worn majority; 2 sherds Fabric 1A (same vessel), slightly worn

#### Other Western Enclosure zone contexts =

- 960 = 3 sherds, 2 rims Fabric 1 (same vessel) large, heavy worn, 1 bodysherd Fabric 2, medium-sized, slightly worn
- 986 = 6 sherds Fabric 1, 3 bodysherds, 3 rims, small-large, 1 heavy unifacial wear, 3 slightly worn, 2 fresh; 1 bodysherd Fabric 1A, fairly fresh
- 1008 = 6 bodysherds, small-fairly big, 3 Fabric 1 (1 fairly worn, 2 same vessel moderate unifacial wear), 3 Fabric 2 (1 fairly worn, 2 same vessel fresh)

#### Phase discussion:

8.4.100 The Area D field-system established during **Phase 1** continued in use with the majority of sherds recovered from *Field-ditches 466* and *470* and from the elongated *Pit 472* all dating to this phase. *Field-ditch 470* produced only a few plain bodysherds but the relatively large quantities of frequently large sherds from both *Field-ditch 470* and the elongated *Pit 472* all constitute a broadly contemporary group – and will be illustrated to epitomise this phase of activity in the final publication. Both contained large rim sherds from two large-diameter pans with thumb-decorated rims, a number

of cooking-pot rims including one with traces of an applied thumb-decorated vertical strip, and one, possibly two, rims from fire-covers – one with a below-'rim' hole bored for suspension/lifting and with similarly decorated applied strips. In addition, both also contained sherds representing at least 4 London Region jugs – including one definitely in the Early Rounded style and one probably in the North French style. The first style has a production peak around 1170 AD, the second a production range of between c.1200-1240/1250 AD. The associated pans and cooking-pots can all be paralleled in well-dated Canterbury and Dover assemblages with a basically similar dating of c.1175-1225/1250 AD (eg. Cotter 2006, Fig.117.62 and Fig.118.75-76, 77-78). Within this general date band, dominant emphasese in firing and formal trends suggests that most of these elements were discarded between c.1175-1225 with little or no material arriving as late as c.1250 AD. Within the date range given the fairly heavy unifacial wear on many of the sherds, even on the latest elements, indicate that during its life and even after the latest rubbish deposit, *Pit 472* was left open for some time before final seal.

8.4.101 In Area F occupation of the Eastern Structure and the use of its adjacent Western Enclosure – including the latter's new outer *Linear I* - continued into this phase. The field-boundary ditch long the southern side of the Eastern Structure produced, from ditch segment Linear LL Context 1017, a fairly large discard-group containing frequently large little worn sherds representing parts of 3-4 North Kent shelly ware storage-jars and cooking-pots. The rim types present, with their elongated slightly round-pointed and everted rims, with or without slight inner-rim beading, presage the slightly later-dated and regionally well-paralleled material from Area D Pit 472. Here a date around c.1175 AD, or certainly no later than c.1175-1200 AD, is likely. This group is also useful in that it contained a few sherds from a distinctively different shelly ware (Fabric 4) with a fairly finely sandy matrix similar to Fabric 1A but sparser and with only moderate quantities of fairly large shell plates giving, on surfaces, a much sparser shell 'sparkle'. There are 4-5 examples from this site, the associated rim types apparently sharing the same evolutionary changes exhibited by other eastern regional potting traditions during the later eleventh-twelfth centuries – but in a more restrained manner. The rim from 1017 is flat-topped with a really minimal lip evertion, its form looking earlier but in fact generally in line with the more everted, flattened and squaring rims of the later twelfth and earlier thirteenth century. The inner structural ditch segment Linear GG Context 975 produced a number of fairly large little-worn bodysherds from 2 cooking-pots or jars which, although not as brightly oxidised as the latest elements from Area D Pit 472, have

- thin-walled and hard-fired almost 'ringing' fabrics suggesting that they are marginally earlier either late Phase 2 or between c.1175-1200 AD, rather than later.
- 8.4.102 In the Western Enclosure zone *Linear D*, although dug in **Phase 2**, remained open into this period to receive at least two separate clusters of rubbish one each into *Contexts 730* (southern end) and *1875* (northern end). Both produced large sherds from soot-stained shelly ware cooking-pots (cf. Cotter 2006, Fig.117.62-63) and datable to fairly early within this phase, c.1175-1200 AD rather than later.
- barn structure its use continued into this phase but unlikely much later. Potential internal features *Contexts 1621, 1640* and *1648* all produced mostly highly worn shelly ware sherds of broadly mid-twelfth century AD date. The size and condition of these could be considered as typical of material that has been broken or discarded and then trampled into the floor of a frequently-used building but any use as late as **Phase 3** is arguable. Chronologically, *Context 986* is a borderline context since most of its more worn bodysherds should be residual with two of its three cooking-pot rims, with their thickened squared and everted forms, indicating a date late within the Phase 2 emphasis c.1150-1175 AD and the third with its slightly rounded but markedly everted rim slightly later and likely to be early within the present phase, c.1175-1200 AD. A single pan rim from 'dark soil' zone *960* has a broader c.1175-1200 emphasis, whilst only *Context 1008* produced late-phase material with, amongst a group of residual Phase 2-type shelly ware sherds, two very thin-walled, hard-fired and oxidised sherds of late twelfth-early thirteenth century date
- 8.4.104 On the basis of its Phase 4 sherds, the western boundary field-ditch sequence consisting of inner and outer *Linears R-A-SS-Q* presumably continued in use during this phase but no obviously Phase 3 material was recovered from any of these linears.
- 8.4.105 Although the Eastern and Western compounds remained in use during most of this period it is interesting that the very latest dump of pottery from the main Period 11 zone of activity is from the Area D *Pit* 472. The dating emphasis for the latter is appropriate to between c.1175-1225/1250 AD whereas, other than the western field-bundary linears, the obviously latest elements from any Area F contest is more specifically between c.1175-1225 AD. This does not necessarily imply a slightly earlier abandonment of the Eastern Structure or the Western Enclosure both *Pit* 472

and a late fill of the Area E quarry contained broadly contemporary London Region jug sherds – but perhaps a different choice of location for rubbish disposal than previously used.

#### Phase 4: Medieval and later:

*Medieval (c.1225/1250-1375 AD) :* 

Area contexts:

## **Definite examples from =**

Area E Quarry *Context 484* = 1 rod handle, Kingston Surrey sandy ware, fairly large, moderately worn

Area F contexts:

Outer N-S Western boundary field-ditch *Linear A Context 1329* =

1 jug bodysherd Ashford/N.Kent sandy ware with sparse shell, round-bodied, applied vertical thumbed strips, worn.

1 jug bodysherd London Region ware, small, moderately worn

Inner N-S Western boundary field-ditch *Linear Q Context 2128* – 1 jug rim sherd, Ashford/N.Kent sandy ware, medium-sized, chipped, slightly worn

*Late Medieval (c.1375-1525 AD) :* 

Area contexts:

## No examples

Post-Medieval and later (c.1525/1550 AD-plus):

Area contexts:

#### **Definite examples from =**

Area D Context 237 (Roman Cremation 6) = 1 roof-tile fragment, large, fresh

Area E Context 130 (Roman Cremation 3) = 1 roof-tile fragment, moderate size, fairly fresh

Area F Western Compound zone other features *Contexts 1491, 1970* = 1 sherd each, Post-Medieval red earthenware, moderate-sized, fresh

## Phase discussion:

8.4.106 Ceramically, there is very little Medieval material that can be dated later than c.1250 AD. This *possibly* includes the two Potters Corner, Ashford or N.Kent sandy ware jug sherds - with firing and formal trends indicating an earlier-mid thirteenth century date - from Area F's western N-S boundary *Linears R-A* and *Q* (*Contexts 1329, 2128*) and probably one small sherd from a London Region jug, again from *Linear A Context* 

1329. More definitely there is one worn rod handle from a small Surrey (Kingston) sandy ware drinking-jug of later fourteenth-century type from the Area E Quarry. The thin scatter of later material is reviewed in the **Summary** for this period.

## Specific contexts that can be allocated to Period 11:

Phase 1 (c.1075-1125 AD):

First 'sub-phase' – Area F site drainage (arguably between 1066-1075 or a little later – manorial system stimulus):

Area F Inter-compound Linear sequence JJ-KK-L-J-O-C

Area F Linear E

Area F 'Dark soil' zone *Context 960* (assumed open because of next Phases 2-3 ceramic content)

Second 'sub-phase' – layout of Areas D and F field-boundary ditch system and enclosures :

- Area F Eastern Structure northern enclosure outer ditch *Linears S-T* (west end forming entrance with still extant eastern terminal Linear C)
- Area F Eastern Structure southern outer field-/enclosure-boundary ditch segments Linears AA-OO
- Area F Eastern Structure southern outer field-/enclosure-boundary ditch segments Linears BB-LL
- Area F Eastern Structure northern enclosure outer ditch *Linears S-T* (west end forming entrance with still extant eastern terminal Linear C)
- Area F Eastern Structure southern 'ditch' segment Contexts 990, 844
- Area F Western Enclosure southern outer ditch *Linear M* (east end forming entrance with segment *Context 844*
- Area F Western Enclosure southern inner ditch Linear H
- Third 'sub-phase' mainly building construction trenches (this accounts for the time-lag represented by *Linear OO* cutting *Linear CC*):
- Area D all field-system ditches including *Linears* 466 and 470 etc
- Area F Eastern Structure northern inner structural *Linear V*
- Area F Eastern Structure southern inner structural *Linears FF, GG, NN, OO* (over-riding and replacing *Linears AA-QQ*)
- Area F Eastern Structure internal Linears W, X and presumably Linear Y, Z
- Area F Western Enclosure? 'barn' Linears G, N
- Area F Western Enclosure *Linear B* (east terminal forming entrance with west terminal of Eastern Structure northern inner *Linear S-T*)

Area F western field-boundary ditch Linears R, SS

Area F western field-boundary ditch Linear Q

Other contexts that can be allocated to Phase 1:

Area D Context 3050

Area D elongated Pit 472

Area F Eastern Structure internal *Post-pit 1716* – by structural implication and presence of next-phase pottery

Area F Eastern Structure internal Post-pit 1762/1763

Area F Eastern Structure internal Post-hole 1888 probably

Area F 'Dark soil' zone *Context 960* (assumed open because of next Phases 2-3 ceramic content)

Area F 'Dark soil' zone Pit 964/962

Area F linear Pit 733

Area F Pit 773/772

Area F linear Gully 777

Area F Hollow 1708 Context 1710 probably

Area F Pit 1450/1449

Phase 2 (c.1125-1175 AD):

Area D all field-system ditches including Linears 466 and 470 etc remain in use

Area F Eastern Structure northern enclosure outer ditch Linears S-T remain in use

Area F Eastern Structure southern outer field-/enclosure-boundary ditch segments *Linears*BB-LL remain in use

Area F Eastern Structure northern inner structural *Linear V* remains in use

Area F Eastern Structure southern inner structural Linears FF, GG, NN, OO remain in use

Area F Western Enclosure? 'barn' Linears G, N remain in use

Area F Western Enclosure Linear B remains in use

Area F western field-boundary ditch Linears R, SS remain in use

Area F western field-boundary ditch Linear Q remain in use

## New:

Area F Western Enclosure southern outer ditch Linear I

Entrance represented by Area F Eastern Structure southern 'ditch' segment *Contexts 990, 844* and east end *Linear M* now **replaced** by *Linear I* (perhaps forming wider southern entrance between east terminal *Linear I* and Eastern Structure's west end? post-pit *Context 1032* – and 'equivalent' to the existing width of the northern entrance).

Area F Western Enclosure eastern ditch *Linear D* (consolidates 'closing-off' of 'Dark-soil zone' 960)

Other contexts that can be allocated to Phase 2:

Area A Pit 587

Area D elongated pit 472

Area F 'Dark soil' zone Context 960

Area F Pit/Gully 1119 Context 1118

Area F Pit 2216

Phase 3 (c.1175-1225 or 1250 AD):

Area D all field-system ditches including Linears 466 and 470 etc remain in use

Area F Eastern Structure northern enclosure outer ditch Linears S-T remain in use

Area F Eastern Structure southern outer field-/enclosure-boundary ditch segments *Linears*BB-LL remain in use

Area F Eastern Structure northern inner structural *Linear V* remains in use

Area F Eastern Structure southern inner structural Linears FF, GG, NN, OO remain in use

Area F Western Enclosure? 'barn' Linears G, N remain in use

Area F Western Enclosure Linear B remains in use

Area F Western Enclosure southern outer Linear I remains in use

Area F Westen Enclosure eastern ditch *Linear D* remains in use

Area F western field-boundary ditch Linears R, SS remain in use

Area F western field-boundary ditch *Linear Q* remain in use

Other contexts that can be allocated to Phase 3:

Area D elongated pit 472

Area F Pit 985 Context 986

Area F 'Dark soil' zone Context 960

Area F Gully 1340

Area F Pit 1008

Phase 4 (c.1225/1250 AD-plus):

Area F Western field-boundary ditch Linears R, SS remains in use

Area F Western field-boundary ditch Linear Q remains in use

New:

Area F Western field-boundary ditch *Linear A* 

Possibly Area F large Pit 1441 because it cuts the Phases 2-3 Linear H

## General Area-based activity implied by presence of residual/intrusive sherds:

Early Medieval:

**Phase 2 - c.1125-1175 AD =** Area E Quarry zone

**Phase 3 - c.1175-1225/1250 AD =** Area E Quarry zone

Medieval and later:

**Phase 4** = Areas E-F

## Illustratable pottery providing confirmation of activity during Period 11:

Phase 1 Early Medieval - 1075-1125 AD:

- 1 Canterbury sandy ware stewing-pot rim from Area D *Elongated pit 472*
- 2 North Kent shelly ware cooking-pot rims from Area D Elongated pit 472
- 1 Canterbury sandy ware stewing-pot rim and 1 N.Kent shelly ware bowl rim from Area F Inter-compound *Linears JJ-C Contexts 1386, 1338*
- 3 North Kent shelly ware vessel rims (1? pan rim, 2 thumb-decorated cooking-pot/storage-jar rims) from Area F *Linears BB-LL Contexts 1023, 1017*
- 1 North Kent shelly ware Fabric 3 stewing-pot rim from Area F *Linear CC Context 1023*
- 3 Canterbury sandy ware rims stewing-/cooking-pots from Area F *Linear T Context 1323* (check)
- 1 North Kent shelly ware cooking-pot rim from Area F *Linear V Context* 779
- 1 Canterbury sandy ware jar/stewing-pot rim from Area F Linear E Context 904
- 3 Canterbury sandy ware cooking-pot rims and one Canterbury sandy ware pan rim from Area F *Linear M Contexts 808, 822, 1354*
- 2 Canterbury sandy ware cooking-pot rims from Area F Linear H Contexts 735/736, 755
- 1 North Kent Fabric 4 shelly ware stewing-pot rim from Area F linear Pit 733
- 1 Canterbury sandy ware jar rim from Area F *Pit 773/772*
- 1 Canterbury sandy ware jar rim from Area F 'Dark soil' zone Pit 964/962
- 1 North Kent shelly ware cooking-pot rim from Area F Pit 2216

Phase 2 Early Medieval - c.1125-1175 AD:

- 1 North Kent shelly ware jar rim from Area A Pit 387
- 1 North Kent shell-tempered fine sandy ware cooking-pot rim from Area A Pit 387
- 1 Canterbury-type shell-filled sandy ware jar rim from Area F Linear S-T Context 955
- 1 North Kent shelly ware storage-jar/stewing-pot rim from Area F *Linears S-T Context 1780*
- 2 North Kent shelly ware rims 1 ?pan rim, 1 storage-jar with decorated rim from Area F

  Linears BB-LL Context 710/712

- 1 North Kent shelly ware cooking-pot rim from Area F *Linear V Context* 779
- 1 rim and bodysherds North France/Flanders fine light grey sandy ware collared-rim pitcher with applied thumb-decorated strips from Area F *Linear V Context 1413*
- 3 North Kent shelly ware rims 2 cooking-pot and 1 pan from Area F Linear V Context 1413
- 3 North Kent shelly ware rims 1 storage-jar, 1 cooking-pot, 1 pan with thumb-decorated rims from Area F *Linear V Context 105*
- 1 North Kent shelly ware rim lug-handled bowl/jar from Area F *Linear V Context 107*
- 3 North Kent shelly ware cooking-pot rim from Area F Linear NN Contexts 1031, 1060
- 1 North Kent shelly ware cooking-pot rim from Area F *Linear GG Context* 975
- 2 North Kent shelly ware jar rims from Area F *Linear H Contexts* 735/736, 738
- 1 Canterbury shell-filled sandy ware rim with thumb-pressed decoration from *Linear H*Context 929
- 1 North Kent shelly ware decorated pitcher spout from Western Enclosure Linear D *Context* 830
- 1 North Kent shelly ware cooking-pot rim from Area F Pit/Gully 1119
- 1 Fabric 4-type North Kent shelly ware rim from long Pit 2216 Context 2215

## Phase 3 Early Medieval - c.1175-1225/1250 AD:

- 1 North Kent shelly ware pan with decorated rim from Area D Field-ditch 470
- 1 London Region jug rim from Area D Field-ditch 470
- 2 North Kent shelly ware cooking-pot rims from Area D Elongated pit 472
- 1 North Kent shell-tempered fine sandy ware strip-decorated pan from Area D *Elongated pit* 472
- 2 North Kent shelly ware rims 2 cooking-pots from Area F *Linears BB-LL Context 1017*
- 2 North Kent shelly ware cooking-pot rims from Western Enclosure Linear D *Contexts 730,* 1875
- 3 North Kent shelly ware cooking-pot rims from Area F Pit 985

#### Phase 4 Medieval and later:

1 Ashford/N.Kent sandy ware jug rim from Area F Linear O Context 2128

## Period summary:

8.4.107 There is no doubt of the ceramics for this period and, although they represent an occupational continuum of between 150-200 years, they divide typologically into four main phases -

Phase 1 - Later C11 - early C12 AD Early Medieval (c.1075-1125 AD)

- Phase 2 Mid C12 AD Early Medieval (c.1125-1175 AD):
- Phase 3 Late C12 AD-early/mid C13 AD Early Medieval (c.1175-1225/1250 AD):
- Phase 4 Medieval and later (c.1250 AD onward):
- 8.4.108 Pottery datable to this general period principally stems from activity associated with the construction and occupation of the Area F Eastern Structure and the adjacent Western Compound, the establishment and use of the Area D field-system and from a scatter of features in Areas A and E. Within Area F it is derived from a complex sequence of inter-cutting ditches, ditch re-cuts and other features representing no more than 150-200 years of habitation and land-use between approximately c.1075-1225 or 1250 AD at latest. In order to date and phase this sequence adequately, the generally close parallels the Neats Court pottery has with forms and fabric types from the post-Saxon Canterbury sequence and recent work in Dover (Cotter 2006) have been used to divide the overall assemblage into three main phases c.1075-1125 AD, c.1125-1175 AD and 1175-1225 possibly 1250 AD.
- 8.4.109 For Period 11 as a whole, the pottery assemblage is dominated by coarsewares with very few imports. The former consist mostly of eastern Kentish shell-tempered wares (on the basis of the clay's mica content), with considerably smaller quantities of other wares mostly Canterbury products but also a few West Kent sandy wares together with similarly low quantities of mixed-temper grit (quartz or flint) and shell-tempered from other regional sources including, just possibly, one from East Sussex. The presence of Canterbury sandy ware has been crucial in defining the earlier, late eleventh-early twelfth century phases of occupation (Phases 1-2). Apart from one example that *may* have arrived during the earlier twelfth century, the few Continental or non-local English fineware imports arrived during the mid-late twelfth and early thirteenth centuries.

# Phase 1: Mid eleventh-early twelfth century Early Medieval settlement (c.1075-1125 AD)

8.4.110 On the basis of the associated pottery the archaeological evidence indicates that this first phase witnessed relatively intense activity – divisible into 3 main 'sub-phases'

## 'Sub-phase 1'

8.4.111 It is suggested that as part of the initial renewal of occupation in Area F - the ditch segments *Linears JJ, KK, L, J, O* and *C* were cut. The superficially curious nature of these may indicate their function. Seen collectively, the course of *Linear JJ-C* is, mostly, totally alien compared with the main east-west axis of both the Eastern

Structure's and Western Enclosure's ditches. It is however rather obviously snaking around the large and presumably poorly drained 'dark soil zone' of the large hollow 960 – within the Western Compound zone. It is unlikely to be a Late Saxon or earlier feature because of the obvious entrance-type relationship between *Linear C*'s eastern tip and the western tip of the Eastern Structure's outer ditch *Linear S*. More probably its principal function was to delineate the new intended structural area – the Eastern Structure – and initially enclose off, perhaps even partially drain, the wet zone represented by Hollow 960 and immediately adjacent areas (a process repeated rather more compactly by *Linear D* in Phase 2). Despite a probable or potential lack of continuity, the placement of the Eastern Structure over the same but earlier Period 9 building(s) zone does imply awareness of previous activity and renewal of occupation in a favoured place. Even with, arguably, c.150-200 years of abandonment any Period 9 structural remains may have still been visually extant – and the function of *Linear JJ-C*, albeit rather irregularly, may have been to initially demarcate and 'tidy-up' the whole area preparatory to the construction of the Eastern Structure.

## 'Sub-phase 2'

8.4.112 During this sub-phase the Western Enclosure's southern inner *Linear H*, the Eastern Structure's outer northern Linears S and T and southern Linears LL, EE, DD, CC (and possibly the initial stages of BB) were cut. In the first instance, the basic rationale for this is provided by the fact that the Western Enclosure's outer Linear I cuts the earlier, inner, Linear H. The available ceramic evidence confirms this – and Linear I should therefore be a Phase 2 construct. In the second it is provided by the following. The straggly nature of the eastern extension of Linear H, Linear M – at Contexts 795, 1305 and 1072 - mirrors the form of the odd-shaped pit entity 981 immediately eastward – jointly perhaps another entrance-type feature south and opposite of the one created by the ends of *Linears C* and *S*. Its nature, and 981's, is also broadly similar to the Linears LL, EE, DD, CC and perhaps the earlier phase(s) of BB. These linears, partly because of the way BB extends off-site beyond the Eastern Structure, partly because of their straighter and generally thinner nature (compared with the Eastern Structure's main ditches) are seen as part of a field/hedge-boundary ditch. This early field-boundary layout extended across-area, included *Linear I* and in some way must have included the inner north-south ditch Linear Q – or an equivalent boundary aspect. At this initial stage there would have been no need for Linears B or D - the sinuous Linear JJ-C closed off the northern side at C. At the same time Linear S and T was laid out deliberately enclosing where the Eastern Structure was to stand – immediately adjacent on its south side to the east-west field-boundary linear(s).

Elsewhere, it is fairly logical to assume that the Area D field-system was laid out at more-or-less the same time, a likelihood partly supported by the earliest pottery recovered from *Pit 472* - tucked away in the southern part of this field-system – a sherd from a Canterbury sandy ware stewing-pot with rim type typical of the period c.1075-1125 AD.

## 'Sub-phase 3'

8.4.113 Not immediately perhaps, but a little time later, work was begun on the Structure's foundation trenches. This scenario makes sense of the layout differences between the western ends of *Linears S, RR* and *FF/GG* and the overlap by *Linear OO* of *Linear CC*. The ends of the structural linears *RR* and *GG/FF* are virtually identical in their end-of-linear northward 'flick' in alignment – and the separate trenches of *GG* and *FF* are mirrored more-or-less in the form of *Linear RR* at *Contexts 103/104*. If the outer ditches (*Linears S* or *CC* etc) had been dug at the same time it would be more reasonable to expect the western end of *S* to have the same alignment as *RR*, with no overlapping or cutting of *OO* by foundation trench *CC*. With these latter ditches, there is no need to expect a significant difference in time between digging both – the overlap could be no more than due to weather/soil conditions and some slippage. At this time the space between the western end of the Eastern Structure and the sinuous *Linear JJ-C* remained open – with perhaps a secondary drainage gully, *Linear E*, being dug towards the end of this phase if not earlier during 'Sub-phases' 1 or 2.

## Associated pottery

8.4.114 As recovered, Canterbury potteries seems to be the main supplier of kitchenwares during **Phase 1**, supplemented by smaller quantities of shell-tempered or grittempered vessels from other sources. Although Canterbury sandy ware products are mostly represented by thick-walled bodysherds, these and a small number of rim sherds mostly come from the large-diameter simple, slightly thickened or internally-bevelled rims that characterize Canterbury stewing-pots between c.1075-1125 AD, if not slightly earlier. Those from the earliest 'Sub-phase' 1 possible drainage linear JJ-C with simple thickened or or internally slightly bevelled rims are, in Canterbury, more typical of the period c.1050-1100 AD than later. Others, from 'Sub-phases' 2-3 linears and features (eg. the Area D field-system pit 472), with more developed innerrim bevels are more typical of the period c.1075 or 1080-1125 AD. One North French/Flanders grey ware pitcher or jar may have been acquired during the early years of the twelfth century.

## Phase 2: Early-late twelfth century Early Medieval settlement (c.1125-1175 AD)

8.4.115 During this phase the Eastern Structure and its associated enclosing and southern field-boundary linears remain in use. Immediately to the west, the enclosing of the now better-drained but still damp 'dark soil' zone and? utility area was consolidated by the digging of *Linears D*, *B* and *I*. On the basis of the pot from *Linear I* this should have been between c.1125-1150 AD, certainly no later and probably early within that range.

## Associated pottery

- 8.4.116 A thin scatter of more thickened slightly clubbed forms confirms the continuing acquisition of Canterbury vessels into the earlier twelfth century but, apart from one variant (a large shell-tempered sandy ware stewing-pot or storage jar with thumb-decorated thickened rim), there are no obvious examples of mid-twelfth or later date. The general absence of these confirms that, at least in terms of market-bought kitchen wares, Canterbury products were no longer being aquired after 1125 or 1150 AD.
- 8.4.117 Amongst the contemporary shell-tempered wares is a predominant fabric type with fairly finely-ground moderate quantities of shell added to a fine silty non-sandy clay. This ware type occurs regularly in most of the site's twelfth century contexts the only major difference being increasingly better-ground and evenly-mixed shell plates in the thinner-walled harder-fired more frequently oxidised products of later twelfthearly thirteenth century date. Occurring alongside these is a fabric variant using a finely sanded clay. Although the first fabric type is superficially similar to its non-sandy equivalents from Canterbury, the second is not. However, since this sandier variant appears to share very similar chronology-based manufacturing trends as the first fabric it is likely to represent no more than a slight localised variations in the same clay source used rather than products stemming from distinctly different locations.
- 8.4.118 Again, the overall range of coarseware vessel types, irrespective of whether made in finely sandy shell-tempered or purely shelly fabrics, is dominated by kitchenwares mostly medium-diameter cooking-pots, fairly large-sized competently-made thin-walled stewing or storage jars. In keeping with general regional trends for the period, some have thickened rounded or club-formed, sometimes thumb-decorated, others have noticeably everted but round-topped and slightly pointed, rims. Into this group of predominantly mid-late twelfth century material should go some more unusual shell-tempered sherds from *Contexts 103*, *105* and *107* at the western end of the

Eastern Structure's northern inner linear. RR-V. Two of these sherds are from a largediameter and closed-form pan with bold thumb-decoration on its rim top, the decoration-style indicating an earlier-mid C12 AD date, rather than later. Initially rather more difficult to date were the sherds from Context 107. The latter are from a simple upright-rimmed fairly large diameter shell-tempered jar with a neatly-made square-sectioned lug-handle attached to the rim and shoulder. This type of handle is made for suspension and should, originally, have been one of two on either side of the vessel's mouth – the vessel's wide mouth suggesting it was used to collect or carry water rather than as a pitcher. Normally lug-handled vessels are more typically a C9 or C10 AD phenomenon. In view of the sometimes fresh condition of the definitely re-deposited Period 9 Mid Saxon Ipswich sherds – it is not totally impossible that these sherds are Late Saxon, and similarly re-deposited from any subsequent Period 10 activity. However, as already indicated, genuine or potential examples of Late Saxon pottery are rare from this site and those isolated are either mostly fairly heavily worn or have different fabric characteristics to the present sherds. With these, their fabric, firing appearance and productional quality is undeniably similar to the majority of confirmably mid-later twelfth century shelly wares recovered from this site - including a fragment from a spouted pitcher decorated with applied thumbpressed strips from this phase's Linear D (Context 830) closing-off the eastern end of the Western Compound - and perfectly acceptable as a twelfth century form within a twelfth century context. Finally, although probably discarded during Phase 3 (Contexts 1413, 1697), two other notable elements were almost certainly acquired late during this Phase – a fine North French or Flanders light grey ware pitcher with a deep internally-cupped and collared rim and decorated with neatly applied thumbpressed strips and, originally, an equally fine early jug with the pale fabric and buffyellowy glaze typical of the Early Rounded style of London Region products.

# Phase 3: Late twelfth-earlier thirteenth century Early Medieval settlement (c.1175-1225 or 1250 AD)

8.4.119 The Eastern and Western Compounds remained in use during most of this final phase without any major obvious alterations to the existing layout. It is interesting to note, though, that the very latest dump of pottery from the main Period 11 zone of activity is not from Area F but from the Area D *Pit 472* – with a dating emphasis here to between c.1175/1200-1250 AD, whereas the latest elements from Area F Eastern Structural zone are more specifically datable to between c.1175-1225 AD. This need not imply a slightly earlier abandonment of the Eastern Structure – both *Pit 472* and a late fill of the Area E quarry contained broadly contemporary London Region jug

sherds – rather temporarily different choices of location for the disposal of rubbish. The Area F field-boundary  $Linear\ A$  appears to be the latest element - partly because it cuts the Phase 2 Western Enclosure  $Linear\ B$  but also because it appears to cut the  $Linears\ G$  and N in the western half of the Western Enclosure (see below).

# Associated pottery

- 8.4.120 The small group of large sherds from large-diameter pans (including one with a suspension-hole bored through its side) recovered from the Area D *Pit 472*, with their markedly more everted, broader and flatter rims with rounded or even squared edges, epitomise the changes in form that took place towards the end of the twelfth and into the earlier thirteenth century.
- 8.4.121 Concurrent with these are sherds representing three other London Region jugs which, although they may have been bought shortly before c.1200, are more likely to have been discarded a little later. With no large later groups or concentrations of later pottery from either Area F, D or any other site-area, the main Early Medieval phase of occupation was clearly in decline between c.1200-1225 AD or shortly after. There is no reliable indication of immediate-locale occupation after c.1250 AD.

# Phase 4: Medieval and later (c.1250 AD-plus)

8.4.122 Other than a scatter of one or two later and ceramically undatable pits in Area F, that obviously post-date earlier Phases 1-3 features, the only new feature cut during this period would appear to be the field-ditch  $Linear\ A$ , cutting the former possible 'barn'  $Linears\ N$  and G – now dismantled. There would be no point in doing this unless there was a rationalisation of the existing north-south field-boundary, perhaps as part of a wider land or property re-organisation process following the abandonment of the whole Eastern Structure/Western Enclosure zone.

# Medieval (c.1250-1375 AD)

8.4.123 A few sherds, including two from possible North French-style London Region jugs (from the Area D field-system and the Area E Quarry) and another, possibly from an Ashford/North Kent sandy ware jug, from Area F *Linear Q, may* stem from the tailend of the previous phase of occupation. Alternatively these are later acquisitions, like the isolated fourteenth century Kingston Surrey Ware jug handle from the Area E Quarry, used by a differently-located household and arriving in place as stray losses or via manure spreading.

*Late Medieval (c.1375-1525 AD)* 

8.4.124 There is a complete absence of recovered material for this period. This point, together with a near-total absence of later thirteenth-fourteenth century material suggests that the immediate area either became agricultural, pasture or fallow land for a period of at least 300 years if not longer – if the evidence for the following Post-Medieval period has been interpreted correctly.

Post-Medieval and later (c.1525 AD-plus)

- 8.4.125 A thin scatter of later sixteenth-earlier eighteenth century Post-Medieval material, mostly roof-tile fragments, was recovered from across the site. There is very little contemporary pottery and, with a few exceptions, most appear to be intrusive into earlier contexts and most are probably the bi-product of manure scatters. The exceptions are two moderate-sized and near-fresh sherds of red earthenware, one each from *Contexts 1491* and *1970* dated to between c.1575-1650 AD and a large unworn fragment of C17 AD roof-tile from *Context 237*. If these elements are not intrusive these contexts *may* represent a limited degree of contemporary agricultural or settlement-fringe activity. A wider spread of Late Post-Medieval-Modern material, mostly tile fragments and flower-pot sherds but also a thin scatter of china. Very little of this material obviously stems from contemporary features and, where not intrusive from any agricultural activity (eg., possibly the tile fragment intrusive into the Early Roman Cremation 130 SF 15) may be introduced during modern (2008) machine-smear.
- 8.5 Analyst and Consulted Specialists

Analyst: N.Macpherson-Grant, Independent Ceramic Analyst (Prehistoric and Saxon pottery specialist for the Canterbury Archaeological Trust 1985-2001)

Consulted specialists:

Paul Blinkhorn, Independent Ceramic Analyst (Saxon-Post-Medieval pottery specialist)

Malcolm Lyne, Independent Ceramic Analyst (Roman pottery specialist, south-east England

# 9 The Worked and Burnt Unworked Flint

By Hugo Lamdin-Whymark

## 9.1 Introduction

9.1.1 Excavations at Neats Court yielded 243 struck flints, 188 pieces/2.117 kg of burnt unworked flint and four possibly utilised pebbles (Tables 1 and 2). The assemblage includes an early Mesolithic microlith and a small number of blades and flakes that may be broadly contemporary. These artefacts are not contemporary with the contexts they were recovered from but a Mesolithic/early Neolithic serrated blade and narrow flake in fresh condition from context 2624 may be contemporary with the feature. The remaining assemblage lacks closely datable artefacts, but the form the flake debitage and reduction techniques indicates the presence of Neolithic/early Bronze Age flintwork and possibly some middle to late Bronze Age material. The latter was predominately recovered from contexts 2582-5 and a concentration of the former was noted in context 2136.

CATEGORY TYPE	Total
Flake	163
Blade	2
Bladelet	1
Blade-like	2
Irregular waste	43
Chip	4
Tested nodule/bashed lump	8
Single platform flake core	2
Multiplatform flake core	3
Core on a flake	1
Unclassifiable/fragmentary core	1
Microlith	1
End scraper	3
Side scraper	2
End and side scraper	2
Other scraper	1
Serrated flake	1
Retouched flake	3
Rounded/Utilised? pebble	4
Grand Total	247

No. of burnt flints (%)*	6 (2.5)
No. of broken flints (%)*	23 (9.6)
No. of retouched flints (%)*	13 (5.4%)

<sup>\*</sup> Percentage excludes chips and rounded/utilised pebbles

Table 9.1: The flint assemblage from Neats Court by category type

Context	Total No.	Total Weight (g)
0	1	15
9	1	6
15	1	19
21	1	27
27	1	9
1062	14	378
2136	7	37
2155	2	33
2157	3	7
2159	1	11
2162	14	150
2330	2	4
2384	4	45
2401	1	1
2406	1	12
2432	1	10
2514	1	8
2540	8	78
2542	4	23
2583	4	29
2595	1	13
2625	35	331
2646	2	6
2659	4	28
2660	34	379
2661	18	255
2669	22	203
Grand Total	188	2117

Table 9.2: The burnt unworked flint assemblage from Neats Court by context

# 9.2 Methodology

9.2.1 The flints were catalogued according to broad artefact/debitage type and retouched pieces were classified following standard morphological descriptions (Bamford 1985; Healy 1988; Bradley 1999; Butler 2005). Additional information was recorded on condition of the artefacts including, burning, breakage, the degree of edge-damage and the degree of cortication. Unworked burnt flint was quantified by weight and number. The assemblage was catalogued directly onto a Microsoft Access database and data manipulated in Microsoft Excel.

#### 9.3 Provenance

9.3.1 Struck flint was recovered from 46 archaeological contexts distributed across the excavation area and further artefacts were recovered as unstratified finds. Twenty-two contexts contained a single flint and forty yielded less than ten artefacts. The largest assemblages were recovered from 2136 (39 flints), 2155 (11 flints), 2342 (16 flints), 2582 (16 flints), 2583 (38 flints) and 2585 (14 flints). The burnt unworked flint was recovered from 26 archaeological contexts and as unstratified finds. No particularly dense concentrations of burnt unworked flint were noted. The rounded and possibly utilised flint pebbles were recovered as individual finds in contexts 2136 and 2162, and two were recovered from context 2648.

## 9.4 Raw material and condition

- 9.4.1 The flint raw materials originated from several sources, but all are comparatively local to the site. The majority of the flint exploited was poor quality, thermally flawed, rounded pebbles that derive from local tertiary deposits. The burnt unworked flint and possibly utilised pebbles were exclusively of this material, and the possible middle to late Bronze Age flintwork also appeared to predominately exploit material from this source. The Mesolithic and Neolithic/early Bronze Age flintwork appeared to exploit a higher quality flint, presumably obtained from the chalk or secondary deposits close to the chalk. Four pieces of flint exhibit a distinctive olive-green cortex with an underlying orange band. These pieces originate from the Bullhead Bed at the base of the Reading Beds, which outcrops in numerous areas around the London syncline; pieces may also be available from secondary gravel deposits.
- 9.4.2 The flint typically exhibits slight to moderate edge-damage indicating that it was exposed for a period before deposition. A small number of artefacts were in fresh condition and may be broadly contemporary with the features from which they were recovered. These contexts comprise the Mesolithic/early Neolithic flint from context 2624 and the possibly middle to late Bronze Age material from contexts 2582-5.
- 9.4.3 The majority of the assemblage was free from surface cortication, but approximately one third of the assemblage exhibited either a light speckled bluish-white surface or a moderate to heavy white cortication.

# 9.5 The assemblage

9.5.1 The struck lithic assemblage is an admixture of Mesolithic, Neolithic/early Bronze Age and possibly middle to late Bronze Age artefacts. The Mesolithic component comprises an early Mesolithic microlith (context 2432), a fine parallel-sided blade (context 2544) and a large 72 mm long by 27 mm wide blade (context 2136); less diagnostic flake debitage in the assemblage may also derive from this industry, but it cannot be clearly separated from later industries. In addition, a blade and blade-like flake from context 2624 have been assigned a broad Mesolithic/early Neolithic date. The microlith was manufactured from an orange brown flint and is complete, except for limited modern damage to the tip; the artefact measures 35 mm long, by 8 mm wide and 3 mm thick. The microlith is backed along its left hand side with additional retouch at the proximal end on the right hand-side creating an oblique truncation. The

form is directly comparable to Clark's C1d (1934, 56) and falls within the early Mesolithic broad blade tradition.

- 9.5.2 In addition to the Mesolithic material, a quantity of regular and thin flake debitage that appeared to have been produced with some care was recovered. This material was recovered from across the excavation area, but a particular concentration was noted in context 2136 although the condition of material indicates that it has been redeposited. This debitage is not easily datable due to the small size of the assemblage, but the overall proportions of the artefacts indicate a broad Neolithic/early Bronze Age date (i.e. narrow, thin and regular, but few true blades). A few possibly contemporary scrapers were recovered in association with this flake debitage, but these tools are not closely datable.
- 9.5.3 The final component of the struck flint assemblage comprises small squat flakes of poor quality local flint that have been struck from plain platforms without preparation, irregular cores and tested nodules with few removals, and irregular waste from the fracture of poor quality flint pebbles. This material was predominately recovered from contexts 2582-5, although comparable pieces were noted in other contexts. This debitage reflects a low standard of craftsmanship and is most typical of middle to late Bronze Age industries.
- 9.5.4 The burnt unworked flint was recovered in small quantities from contexts across the excavation. The majority of the flint was heavily calcined and had been subjected to temperatures in excess of 400 °C (Shepherd 1972). Burnt unworked flint is a common feature of prehistoric sites and may be associated with a variety of domestic and industrial tasks.
- 9.5.5 Three complete rounded tertiary pebbles and one broken example were retained during the excavation as they may have been used. These pebbles are of the same material that was being knapped in the middle to late Bronze Age and also burnt. These pebbles differ, however, as they exhibit very smooth surfaces. In three cases the smoothing covers the entire surface area of the pebble and it is not possibly to determine if this surface condition results from use or is a natural feature of pebbles originating from this geological source. The fourth pebble, from context 2648, however exhibits a distinct high sheen on one slightly flattened surface. This pebble, measuring 53 mm long by 46 mm wide and 34 mm thick and weighing 118 g, may, therefore, have been utilised for burnishing materials, for example leather.

## 9.6 Potential

9.6.1 The lithic assemblage recovered from Neat Court has little potential for further analytical work as the assemblage is of limited size and comparatively little material was recovered from contemporary deposits. The assemblage does, however, indicate an early Mesolithic presence in the landscape and also attests to Neolithic/early Bronze Age and middle to late Bronze Age activity. For the Mesolithic and Neolithic, this slight evidence provides another dot on the map and is useful for interpreting broad patterns of activity at a regional level.

#### 9.7 Recommendations

9.7.1 No further analytical work is recommended, but a summary report of c. 1000 words that characterises the assemblage should be produced. The report should be accompanied by a table of the stuck flint and an illustration of the possible burnisher from context 2648.

#### 9.8 Task list

Task	Time (days)
Edit report for publication, brief and check illustration	0.5 days

Total cost: 0.5 days @ XXX per day = £XXX

## 9.9 Method statement

9.9.1 A summary report on the lithic assemblage will be produced from the data recorded as part of the assessment.

# 9.10 Storage and curation

9.10.1 The majority of the struck flints is bagged by context. This level of bagging is appropriate as the majority of the assemblage already exhibits edge-damage as it was recovered from later archaeological contexts. The flintwork is adequately boxed and bagged for long-term storage and curation.

# 10 The Small Finds

Ian Riddler and Faye Minter

#### 10.1 Introduction

10.1.1 A small assemblage of objects from the excavations includes items of both Roman and Middle Saxon date, as well as a medieval coin and a collection of late post-medieval finds. The late post-medieval finds are dominated by buttons of various materials; they have been catalogued but are not further discussed here. The earlier objects are described by period.

## 10.2 The Roman Small Finds

Coin

10.2.1 A Silver denarius of Vespasian (AD 69-79) survives in a worn and incomplete condition (no.10).

Mint: Rome, AD 75.

Obverse: [IMP CAESAR VESPA]SIANVS AVG; (retrograde) laureate head right

Reverse: [PON MAX TR P] COS VI; Victory standing left on prow, holding wreath

and palm

This denarius is a common variety (RIC II, p. 25, no. 93 Reece 4).

## Brooches and Pins

- 10.2.2 An incomplete copper alloy plate brooch (12) has a lozenge-shaped main field with traces of dark blue enamel at the centre, as well as red enamel covering flat, round lobes set to either side. The centre is an openwork design with D-shaped perforations and two further fragmentary lobes at either edge. Plate brooches of this form are fairly common items of second-century date, although the disc form tends to be more popular in Kent (Johns 1996, 172; Crummy 1983, 17). A fragmentary lobed lozenge-shaped brooch from Neatham includes orange and yellow enamel decoration, whilst several related examples were also recovered from Richborough (Millett and Graham 1986, 110 and fig 74.123; Bushe-Fox 1949, pl XXIX.49; Cunliffe 1968, pl XXXI.62 and 67).
- 10.2.3 Six small fragments of copper alloy (89) from vessel 88 of cremation group 910 originally formed a part of a spring mechanism for a bow brooch of early Roman date; it is not possible to identify them to type. The same can be said for a near complete pin (84) from cremation group 859, which survives as eight fragments in

poor condition. It is recognisable as a pin with a simple looped head and it can be compared with a similar example from Monkton (MacDonald, Manning and Riddler 2008, 193 and fig 2.47.2245), but the original form of the pin is unclear. It is possible that it comes from a brooch.

Context 130 Sf 12

10.2.4 Incomplete copper alloy lozenge-shaped pale brooch with round lobed extensions to either side, originally filled with red enamel, and D-shaped perforations to each side of a central bar filled with dark blue enamel. Further lobes extend from either end of the central bar, possibly in a trefoil arrangement, but both extensions have fractured away. Two raised lugs on the reverse for the pin, and part of the catchplate also survives.

Length: 52.9mm Width: 32.3mm

Cremation Group 910 Sf 89

10.2.5 Six small fragments of copper alloy forming part of the spring mechanism of a bow brooch.

Length: 7.8mm Width: 2.1mm

Cremation Group 859 Sf 84

10.2.6 A looped headed copper alloy pin, possibly from a brooch, with a straight shaft of circular section. Heavily burnt and surviving as eight small fragments.

Length: 54.3mm Width: 15.0mm

Quern

10.2.7 A fragment of a basalt lava quern (19) stems from the centre of the stone and includes part of its axial perforation, with a rounded profile. Basalt lava querns are first seen in Kent in the late Iron Age and continued in use throughout the entire Roman period (Riddler and Vince 2005a; MacDonald, Manning and Riddler 2008, 210). After a gap of several centuries, their importation resumed at some point in the seventh century, a stratified example from Canterbury suggesting that this may have occurred in the second half of that century (Blockley *et al* 1995, 1206, n° 1390; Riddler and Vince 2005b). Accordingly, it can be very difficult to date individual fragments of stone querns of this material. In this particular case there are faint traces of parallel lines

radiating from the central perforation and these are more characteristic of Roman basalt lava querns, and of Roman querns in general, as with a complete greensand upper quern from Monkton, for example (MacDonald, Manning and Riddler 2008, fig 2.56).

Context 130 Sf 19

10.2.8 Fragment of a basalt lava quern, probably an upper stone, with part of the central aperture surviving. Flat grinding edge with very faint traces of rilling visible.

Length: 115.3mm
Thickness: 48.9mm
Weight: 445g

Glass

10.2.9 Two small fragments of vessel glass can be identified as Roman. A lightly curved naturally coloured body sherd (*context 105*) stems from a vessel of indeterminate form, whilst a small fragment of a rim (82), again of naturally-coloured glass, is everted and inturned. This suggests that it stems from a funnel-mouthed jar or jug, similar to an example from Castleford, possibly of second to third century date (Cool and Philo 1998, 152, 169 and fig 59.226).

Context 105

A small, lightly curved body sherd of naturally-coloured glass.

Length: 17.8mm

Thickness: 2.5mm

Context 2012 Sf 82

A small sherd of naturally-coloured glass, neatly folded inwards to provide a solid, inturned rim.

Length: 18.6mm Width: 12.2mm

# 10.3 The Middle Saxon Small Finds

Sceattas

10.3.1 Two worn Anglo-Saxon sceattas were found, their identifications have been confirmed by Martin Allen, (pers. comm. 10/3/2010) who has also added them to the EMC index at the Fitzwilliam Museum, Cambridge.

No. 20 (EMC 2010.0118) is Series R1, AD 710-765, 1.50g in weight.

10.3.2 Abramson states that 'the runic sceattas of Series R are a long-lived, East Anglian continuation of Series C. They were probably produced under the auspices of King Aldwulf (AD 663/4 – c AD713) and his son King Ælfwald (c AD 713 – 749). There could have been mints at Ipswich, Thetford and Norwich' (Abramson 2006, 25).

Obverse: Radiate bust right with pyramidal neck EPA outward, retrograde

Reverse: degenerate beaded standard, cross pattée below.

No. 22 (EMC 2010.0119) is Series D (Type 2c), c AD 700-715, and 1.36g in weight.

10.3.3 This is a Continental Series sceat and Abramson states that 'this substantial and early series was issued in Frisia for commercial trade in Domberg from where they were heavily traded...there are numerous single finds throughout England' (Abramson 2006, 10).

Obverse: degenerate radiate bust right

Reverse: cross pommée with pellets in angles, pattern of pseudo-letters with a crosslet around.

10.3.4 Naylor has recently plotted the distribution of Primary and early Intermediate phase sceattas in Kent, which include Series D (Naylor 2004, fig 5.5). The Sheppey Series D coin is the twelfth example to have been found in Kent and the first to come from the Isle of Sheppey itself (ibid, 92 and fig 5.5). The presence of an East Anglian sceat of the same phase forms a useful complement to the sherds of Ipswich ware found on site. Series Q and R East Anglian issues have also been found at Reculver (ibid, 93).

Pin

10.3.5 The polyhedral head of a copper alloy pin (3) survives in poor condition. It includes a collar between the shaft and the head, and is decorated on the four main faces. This indicates that it is Middle Saxon in date, given that late Roman pins of the same form lack both the collar and any form of decoration (Cool 1990, 165). Pins with polyhedral heads form are one of the most popular types of the Middle Saxon period and occur in considerable quantities on some sites, including Brandon, Flixborough, *Hamwic* and Fishergate at York (Riddler forthcoming; Rogers 1993, 1361; 2009, 34; Hinton 1996, 21-5). The earliest examples come from contexts of the late seventh to

early eighth century and their absence from graves suggests that they were not produced in any great numbers until the eighth century. They continued in use into the ninth century, but probably not into the late Saxon period. Examples have been found elsewhere in Kent at Canterbury and *Sandtun* (Blockley *et al* 1995, 1043-4; Riddler 2001, 228).

Metal-Detected, Plot 1C Sf 3

Head of a copper alloy pin of polyhedral form, surviving in poor condition with traces of a collar between the shaft and the head, and single ring-and-dot motifs on the four main faces of the head, which has a rounded apex.

Length: 15.5mm Width: 6.6mm

## Loomweight

10.3.6 A little over one third of a fired ceramic loomweight (83) survives, produced from a fine, clean brickearth fabric, with occasional inclusions of chalk and grey quartz. It is bun-shaped in form with a comparatively narrow perforation, an oval section, and an original diameter of around 105mm. Bun-shaped loomweights occur in both Middle and Late Saxon contexts and their origins lie in the latter part of the Middle Saxon period (Riddler 2004, 22). From the late eighth to early ninth century onwards they appear alongside intermediate loomweights, though not in the same contexts, and across the ninth to tenth centuries they supplant the intermediate form (Riddler 2001, 241-2). At some sites the change in loomweight type has been seen as a reversion to the production of a coarser cloth, using a loom with heavier weights than the intermediate series (Walton Rogers 2009, 296). Within Kent, bun-shaped loomweights have been found at a number of sites, including Canterbury, Dover, Mersham, Saltwood and Sandtun (Blockley et al 1995, 1173-7; Philp 2003, 50-1, 77, 116 and fig 61; Riddler 2001, 241-4; Willson 1985, 234 and fig 2.30). A kiln for their production was excavated at Rochester (Harrison 1972, 155-6 and fig 20.12).

Context 748 Sf 83

10.3.7 A fragment of a bun-shaped ceramic loomweight, relatively flat on one surface and rounded on the other, oval in section and fired to a buff to orange colour in a fine brickearth fabric with occasional inclusions of chalk and grey quartz. A little over one third of the loomweight survives.

Estimated Diameter: 105mm Height: 47.3mm

## 10.4 The Medieval Small Finds

Coin

10.4.1 A complete but worn silver short cross type penny of John, (1199-1216) survives (no.72). This Penny is of Class 5b or 5c 1205-1210, mint: Canterbury, moneyer: Iohan B, 1.44g in weight.

Obverse: Is unclear due to wear but depicts a crowned bust of the King facing with beard and hair contained within an inner circle and holding a sceptre in one hand.

The legend runs clockwise between the inner and outer circles [HENRI]CVS[REX]

Reverse: A short cross with a cross pommée in each angle.

IOHAN.B.ON.CA

Class 5b is the commonest type of short cross type found in England and Class 5c is becoming more common, this coin cannot be identified further as the distinguishing feature between the sub-classes is the form of the letter X, which cannot be seen as the obverse is very worn.

# 11 The Roman Cremations and undated inhumation

Emma Boast

## 11.1 Introduction

11.1.1 The excavation revealed 25 separate features interpreted by the excavator as being cremation burials of Roman date (CB 1, CB 2 etc.) and a single inhumation (Inhumation 1) which may be of Roman or Post Roman date. These cremation burials were excavated in two phases; phase I- Cremation Burials 1-20 and phase II -Cremation Burials 21-25. Of these assemblages twenty (CB's 1-5, 7-18, 20, 22 and 25) showed evidence of structured deposition including an arrangement of pottery vessels, cremated bone and other artefacts; three burials were heavily disturbed and survived as little more than surface scatters of burnt bone (CB 24) and pottery (CB 6 and 19); one (CB 23) may represent a cremation burial (CB 23) and one (CB 21) is unlikely to represent a cremation burial. The inhumation was also heavily truncated The cremation and inhumation burials are located spatially in seven broad groups (Group 1- CB 1, 2, 4 and 15; Group 2 – CB 6, 8, 12, 13 and Inhumation 1; Group 3 – CB 10, 11, 14, 16 and 17; Group 4 – CB 22, 23 and 24; Group 5 – CB 7, 9 and 19; Group 6 – CB 18 and 20; Group 7 – CB 3 and 5) and are illustrated on figures 11.2 – 11.8. The location of cremation 25 has not yet been identified. The cremation burials vary in date from the Conquest Period (Period 6) to the Mid Roman period (Period 7, Phase I) with deposition in the Early Roman period (Period 7, Phase II) predominating. No dating evidence accompanied the inhumation (Figure 11.1 and 11.3) but based on its orientation and position it may be of Roman or Post Roman date.

# 11.2 Archaeological Background

- 11.2.1 In September 1968, a mid to late second century AD Romano- British cremation burial site was found on the site of the new Sheppey High School. The site was located half way up the east slope of a small hill between Minster and Halfway Houses. A quantity of unstratified pottery may represent twelve or more vessels. Three burial groups were excavated generally consisting of an urn containing cremated bone and one or two platters or beakers. The burials also included a small bead necklace or bracelet of glass and possibly jet beads with imitation pearls (Leach 1969; CgMs 2007:15).
- 11.2.2 In December 1986, a Roman coin hoard was discovered originally contained within a large coarse vessel during building works for a new housing development at Minster.

  The Hoard consisted of 3,235 bronze coins, all *antoninianii* minted between AD 250

- and 281 and, including a number of contemporary forgeries. The hoard is likely to have been deposited around 281-285 AD. It was later sold at Sotheby's to an American dealer (Philp 1987a, 1987b, 1988).
- 11.2.3 A summary of excavations reported by CgMs Consulting Ltd (CgMs 2007) prior to the construction of the new route of the A249 is contained within the evaluation report produced by Oxford Archaeology (Wheaton 2007). Enclosure ditches of probable Roman date were identified during the excavations carried out by CgMs Consulting Ltd for the new route of the A249 located immediately to the north of the site. The enclosure ditches were located at the western roundabout of the new link road adjacent to the Port Authority car storage area. In addition to the enclosure ditches up to 40 cremation burials of Late Iron Age and Roman date were also encountered. These burials were located in three main groups on the rising ground to the north and east of the present site with the largest group consisting of approximately 20 burials. Human bone was recovered from 30 separate features, with five positively identified as urned burials and three as un-urned burials. The pottery indicates a 1st to 2nd century date range for the burials accompanied by pottery vessels (ibid; 11).
- 11.2.4 Recent excavations carried out in late 2009 and early 2010 by Archaeology South East have exposed further 1st and 2nd Century urned cremations on the Northern Relief Road, Sittingbourne to the south east of the site as well as evidence of Salt working hearths of similar date and a cremation pit at Leysdown Road, Leysdown, Isle of Sheppey to the east of the site (Rayner 2010). The cremation burial at Leysdown dates to AD 10-70 and includes three fragmented pottery vessels, four brooches and a cosmetics set.

# 11.3 Original Research Aims

- 11.3.1 The aim of the archaeological work was to investigate and record the significant archaeological features, deposits and artefacts associated with the prehistoric, Romano-British, medieval and post medieval activities that would be adversely affected by the development and contribute significantly to the understanding of past human activities in the context of the historic landscape within the project area (Anker 2007: 2.1.1).
- 11.3.2 Key landscape themes relating to the Romano-British burials were to

- ◆ Understand the 'Distribution and character of Romano-British burials focusing on the relationship with the burials discovered along the A249 and their setting within the wider landscape (ibid: 3.1.2).
- 11.3.3 The objectives regarding the burials (ibid: p 19) were to:
  - Establish the chronology of the associated burials and ancillary features
  - Analyse the spatial distribution of burials in relation to topography and monuments
  - ◆ Analyse the relationship between burial monuments and settlement or agricultural activity if present.

# 11.4 Methodology

11.4.1 The site was stripped under archaeological control using a 360° tracked mechanical excavator with a toothless bucket. Machining ceased when archaeological deposits or geology were reached. The grave assemblages were cleaned by hand to further define and identify any archaeological features exposed. Twenty five cremation burials or possible cremation assemblages of Roman or probable Roman date were identified on the site and a single inhumation of possible Anglo Saxon date. Plans and profiles of the grave assemblages were hand drawn at a scale of 1:10 on drafting film. All contexts were recorded using a Leica 1200 series GPS Rover. The exposed grave assemblages were photographed using digital photographic format. All soil removed from the cremation burials were retained as individual soil samples.

# 11.5 Quantification of the Artefact Assemblages

The Pottery

11.5.1 A total of 3362 sherds of Roman pottery weighing 18.662 kg were recovered from 21 cremation or possible cremation burials on the site (Appendix A). No pottery was recovered from CB 23 and 24 both representing heavily disturbed burials. A single sherd of Late Post Medieval – Modern white earthenware was recovered from CB 21 and it is unlikely that this represents a cremation burial. No pottery was recovered from the single inhumation interpreted as being of possible Roman or Post Roman date. A preliminary review indicates all the pottery is of Conquest period to Mid Roman date (25-75 AD to 150-200/250 AD).

Cremation Burial No.	Quantity	Weight g	No. of vessels represented	Date
1	83	582	2	Early Roman
2	31	93	2	Early Roman
3	173	1023	6, possibly more.	Early Roman

4	107	277	2, possibly 3	Early Roman
5	126	1259	2, possibly 3	Conquest period
6	87	455	Possibly 6	Mid Roman
7	209	594	2 or more	Mid Roman
8	317	2108	3 or more	Early Roman
9	70	403	2 or more	Early Roman
10	249	790	3 or more	Early Roman
11	286	651	3 or more	Early Roman
12	241	1631	3 or more	Early Roman
13	211	1179	3 or more	Early Roman
14	69	462	1, possibly 2	Early Roman
15	76	534	2 or more	Mid Roman
16	544	1777	4 or more	Mid Roman
17	300	950	At least 2	Mid Roman
18			Pottery Mislaid	
19	67	185	1	Early Roman
20	11	72	1, possibly 2	Conquest period
21			Not a cremation	• •
22	70	1984	1	Conquest period
23	0	0	None present	
24	0	0	None present	
25	34	1647	1	Mid Roman
Totals	3362	18.662 kg	At least 52	

Table 11.1 Quantification of the Roman Pottery

# The Iron and Cu Alloy objects

- 11.5.2 A total of seventeen Iron objects were recovered from five cremation burials and one inhumation burial; CB 1, 10, 12, 22, 23 and Inhumation 1. The majority of these represented iron nails or tacks (CB 10, 22, 23 and Inhumation 1) with one possible nail or pin (CB 12) and a small fragment of Iron slag (CB 1). They are all likely to be Roman in date with the exception of 9 iron nails of possible Roman or Post Roman date (Inhumation 1).
- 11.5.3 A total of five Copper Alloy objects were recovered from five separate cremation burials (CB 3, 11, 13, 18 and 20). They are all likely to be Roman in date.

CB No.	Context	Description	Quantity	Small find number
1	237	Iron slag	1	NG
10	343	Fe Square sectioned nail	1	SF 40
12	265	Iron flake	1	Flat, thin. NG
12	220	Fe nail or pin	1	SF 30 (text)
22	2100	Fe Nail	1	Phase II SF 19 (text)
23	2153	2 Fe nails & 1 tack	3	NG and text
Inhumation 1	2088	Fe nails	9	Phase II SF 1-4, 6, 7 and 9-11

 ${\it Table~11.2~Quantification~of~the~Iron~Objects}$ 

CB No.	Context	Description	Quantity	Small find number
3	130	Incomplete copper alloy plate brooch	1	12
11	366	Copper Alloy flake	1	Sample 4
13	241	Cu alloy 'Copper dross'	1	
18	859	Loop headed copper alloy spring mechanism of a bow brooch	1	84
20	913 -v 88	6 fragments of the spring mechanism of a bow brooch	1	89

Table 11.3 Quantification of the Cu Alloy Objects

## 11.5.4 Miscellaneous Artefacts

A single fragment of basalt lava quern was recovered from cremation burial 3. Fragments and scraps of daub have been recovered from 9 burials (CB 4, 7, 8, 11, 12, 14, 15). Scraps of worn or fired clay including briquetage were recovered from three burials (CB 8, 13, 14), fragments of chalk were recovered from one burial (CB 6), possible modern glass was recovered from cremation burial 7 and a fragment of greensand was recovered from Cremation burial 15. Post Medieval Brick and tile were recovered from two burials (CB 6 and 8) and a fragment of Roman Brick from one burial (CB12). Burnt flint was recovered from burials 9, 14 and 16 and a fragment of oyster shell from burial 19. Some of these finds are likely to be intrusive eg the post medieval brick and tile and possible modern glass or residual eg bricketage, Roman brick and quern.

CB No.	Context	Description	Quantity	SF or Sample no.
CB 3	130	Fragment of basalt lava quern	1	SF 19
CD 4	124	Doub for success	1	
CB 4	134	Daub fragment	1	-
CB 7	243/244	Daub flakes	3	Sample 17
CB 8	246	Daub scraps	3	Sample 39
CB 8	250	Scraps of daub	2	Sample 19
CB 8	276	Scrap of daub/pot	1	Sample 38
CB 11	366	Daub scraps	3	Sample 45
CB 12	265	Scraps of daub/pot	8	Sample 36
CB 14	334	Daub scrap	1	Sample 44
CB 15	378	Daub scraps	2	Sample 49
CB 8	262	Scrap of worn fired clay	1	Sample 23
CB 13	227	Small worn fragment fired clay - briquetage	1	SF 31
CB 14	333	Fragments of fired clay/daub	3	Sample 53
CB 14	333	Flake of briquetage	1	Sample 53
CB 6	237	Two fragments of chalk	2	
CB 7	243/244	Scrap vessel glass ?C19 AD	1	Sample 17
CB 15	378	Greensand fragment	1	Sample 49
CB 6	237	C16-17 AD Brick	1	SF 73
CB 6	237	Post Medieval tile	1	SF 45
CB 6	237	Post Medieval Roof tile	1	SF 73
CB 8	250	Scrap of brick	1	Sample 19
CB 12	265	Fragment of Roman brick	1	Sample 36
CB 14	332	Burnt flint	1	SF 54
CB 16	306	Burnt flint	1	SF 69
CB 9	263/264	Burnt flint fragments	2	SF 47
CB 19	885	Oyster shell	1	SF 87

Table 11.4. Quantification of the other artefacts

# 11.6 Quantification of the Human Remains

The Human Remains

11.6.1 A total of 25 deposits of cremated bone thought to be Human in origin were excavated from 23 cremation burials (CB 1-18, 20 and 22-25). In two cases (CB 8 and 16), two separate samples of cremated human bone (Sample numbers 19 and 23; 54 and 55) were taken from the same cremation vessel as separate contexts. Seventeen of the cremation deposits were contained within pottery vessels, three were

apparently uncontained, and three were too disturbed to interpret. A single inhumation of possible Roman or Post Roman date was also excavated. Other human burials associated with a burial mound and likely to be of prehistoric date were also excavated; these are dealt with elsewhere in this volume. The deposits surrounding the cremation deposits and inhumation burial were retained for flotation to retrieve bone fragments that may have been overlooked during hand excavation. Fourteen cremation deposits from twelve cremation burials and a single inhumation burial (Inhumation 1; Skeleton 2090) have been assessed by KORA (Appendices 2 and 3). The human remains are quantified below:

CB No.	Sample No.	Context No.	Context Type	% of Context	Assessed?
1	1	122	Cremation	100%	у
2	2	131	Cremation	100%	y
3	3	138	Cremation	100%	y
4	5	134	Cremation	100%	y
5	12	205	Cremation	100%	y
6	73	237	Cremation	100%	y
7	18	249	Cremation	100%	y
8	19	250	Cremation	100%	y
8	23	262	Cremation	100%	y
9	35	263	Cremation	100%	y
10	57	373	Cremation	100%	y
11	45	366	Cremation	100%	y
12	16	226	Cremation	100%	y
13	20	251	Cremation	100%	y
14	44	334	Cremation	100%	n
15	49	378	Cremation	100%	y
15	51	379	Cremation secondary?	100%	y
16	54	306	Cremation (same vessel as 54)	100%	y
16	55	306	Cremation (same vessel as 55)	100%	y
17	48	371	Cremation	100%	y
18	138	860	Cremation	100%	y
20	142	913	Cremation	100%	y
22	513	2100	Cremation	100%	y
23	516	2153	Cremation	100%	y
24	517	2196	Cremation	100%	y
25	518	2430	Cremation	100%	y
Inhumation 1	-	2090	Skeleton	100%	у

Table 11.5 Quantification of the Human remains

#### 11.7 Quantification of the Ecofact Assessment

#### The Botanical Remains

11.7.1 A total of 54 samples were taken from separate contexts within the cremation burials. Of the total samples taken, 25 constituted 100% samples taken from cremation deposits, 10 were samples taken from the contents of pottery accessory vessels within the graves and 17 of the samples were taken from the deposits within the burial pits surrounding the cremation burials and pottery vessels. One sample was taken from the deposit surrounding the inhumation burial for retrieval of human bone only. 36 samples, of which 32 related to cremation deposits were processed by the Trust for Thanet Archaeology for assessment by Lisa Gray (Section 12). The remaining samples have been processed by SWAT Archaeology. The samples are quantified below.

CB No.	Sample No.	Context No.	Context Type	% of Context	Assessed
1	1	122	Cremation	100%	у
2	2	131	Cremation	100%	у
3	3	138	Cremation	100%	y
3	4	139	Accessory vessel	100%	у
3	6	140	Accessory vessel	100%	у
3	7	138	Accessory vessel	100%	y
3	8	137	Deposit	100%	y
4	5	134	Cremation	100%	y
5	10	192	Accessory vessel	100%	y
5	12	205	Cremation	100%	y
6	73	237	Cremation	100%	y
6	24	260	Deposit		•
7	17	243	Deposit	50%	y
7	18	249	Cremation	100%	y
8	19	250	Cremation	100%	y
8	23	262	Cremation	100%	y
8	38	276	Deposit	100%	y
8	39	246	Deposit	100%	y
8	40	277	Deposit	100%	n
9	35	263	Cremation	100%	y
10	53	343	Accessory vessel		n
10	57	373	Cremation		y
10	58	374	Deposit		y
10	56	344	Deposit		,
11	41	284	Deposit		y
11	42	285	Accessory vessel		y
11	45	366	Cremation	100%	y
11	46	367	Deposit	10070	y
12	16	226	Cremation	100%	y
12	36	265	Deposit	100%	y
12	37	266	Accessory vessel	100%	y
13	20	251	Cremation	100%	y
13	21	252	Accessory vessel	100%	y
13	22	257	Accessory vessel	100%	y
14	43	333	Deposit	10070	y
14	44	334	Cremation	100%	y
15	49	378	Cremation	100%	y
15	50	377	Deposit	100%	y
15	51	379	Cremation secondary?	100%	y
16	54	306	Cremation (same vessel as 54)	100%	y
16	55	306	Cremation (same vessel as 54)	10070	
17	47	372	Accessory vessel	100%	У
17	48	371	Cremation	100%	У
18	138	860	Cremation	10070	У
18	139	862			У
18	139		Deposit Deposit		у
18	140	862 878	Deposit Deposit		У
20	141	913	Deposit Cramation		У
20			Cremation		У
	505	2092	Deposit		У
22	513	2100	Cremation		У
23	516	2153	Cremation		y
23	514	2099	Deposit		y
24	517	2196	Cremation		У
25	518	2430	Cremation		y

Table 11.6 Quantification of environmental samples

# 11.8 Storage and Curation

11.8.1 There are no immediate storage requirements beyond those already undertaken by SWAT Archaeology. At present there is no suitable local museum in which to deposit the archive on its completion. The archive will remain stored at SWAT Archaeology until such a time as a suitable local repository can be found

# 11.9 The Stratigraphic Results

Geography, Topography and Geology

- 11.9.1 The site covers the south west facing slope of a promontory extending from the flat flood plain of the Swale at Neats Court Marshes to a peak at Furze Hill. The cremations from the Neats Court site are located in small clusters (Group 1- CB 1, 2, 4 and 15; Group 2 CB 6, 8, 12, 13 and Inhumation 1; Group 3 CB 10, 11, 14, 16 and 17; Group 4 CB 22, 23 and 24; Group 5 CB 7, 9 and 19; Group 6 CB 18 and 20; Group 7 CB 3 and 5) extending along the gentle lower slopes of the promontory at an elevation of between 4.85 9.24 metres above Ordnance Datum.
- 11.9.2 The natural geology is problematic as the heavy London Clay laminates along bedding planes and fractures along very straight vertical lines. As the surface of the clay is mechanically excavated it tends to 'tear up' in blocks leaving sometimes substantial hollows in the stripped surface. The heavy clay also cracks leaving deep fissures as it dries during the summer months into which cultural artefacts can fall. These fissures, which then contract as the ground becomes damp and wet especially during the winter months, sometimes seal artefacts which have fallen into the fissures at a greater depth to which they were originally deposited.
- 11.9.3 The excavation of a pit for the deposition of a cremation assemblage during the Roman period is unlikely to have been an easy job; in winter the ground would likely to have been sticky at best and sloppy at its worst; in summer the ground would have been heavily indurated, and difficult to dig through. Neither condition would have been likely to produce neatly excavated holes in which to place a burial.
- 11.9.4 In all cases the definition of the edges of the cut of the pits were difficult to define due to the nature of the geology and the cuts that have been recorded represent the excavators best attempt to reconstruct the original.
- 11.9.5 Another problem to bear in mind with the cremations and the inhumation is that all of the assemblages have been truncated to a greater or lesser degree. All of the assemblages were partially exposed during the mechanical excavation of the overburden; the surface of the archaeological horizon lay directly beneath the overburden suggesting that the original ground surface has been truncated. It seems likely that this process of truncation has gradually been occurring over the years through a natural process of soil erosion and agricultural processes on the site. The cremation assemblages excavated on the site only represent the lowest part of the original funeral assemblage placed in a pit.

### 11.10 Summary of the Evaluation

11.10.1 The following is a summary from the results of the cremation burials excavated during the evaluation carried out by Oxford Archaeology in 2007 (Wheaton 2007). Three cremation burials were identified during the evaluation in two separate areas; trench 53 and trench 65. Trench 53 was located in the south western part of area 1 (Oxford Archaeology Area 4) and trench 65 in the north eastern part of area 1 (Oxford Archaeology Area 4). All three of the burials had been truncated by mechanical excavation during the evaluation process.

#### Trench 53

11.10.2 This trench contained a single Romano - British cremation burial, with three accompanying urns (5305, 5306 and 5308) all dating form the 1st to 2nd Century AD. Cremated bone from an adult male individual was recovered from the burial. The burial included three vessels of early Roman type: a central Gaulish Samian Dish (Dragendorff 18/31) dated 120-150 AD, the base of an early 2nd century cremation urn, and a beaker (Monoghan type 2A4, undecorated) dating from c. 130-170 AD, the last two vessels probably both locally made. The burial was disturbed by the mechanical excavator.

#### Trench 65

- 11.10.3 This trench contained two early Roman urned cremation burials (6503 and 6510). They had both been disturbed by mechanical excavation.
- 11.10.4 Burial 6503 measured 0.4 metres diameter and 0.2 metres and included three vessels (6504, 6505 and 6506). The cremation urn (Monaghan type 4A2 in CAT fabric R73) is of 2nd Century AD type. There was also a South Gaulish Samian Cup (Dragendorff 33) and a possible flask of late 1st century type. Cremated remains within urn 6504 were from an adult of uncertain sex.
- 11.10.5 Burial 6510 measured 0.5 metres in diameter and 0.4 metres deep and included three vessels (6507, 6508 and 6509). The cremated Human bone was placed in a locally made urn (6507) (Monaghan type 4A2). The fill of the vessel contained cremated bone from a single adult of uncertain sex. The other vessels comprised a locally made flask (Monanghan Type 1B) and a Central Gaulish Samian dish (Dragendorff 36). The burial is most likely to date from the latter part of the 2nd century.

## 11.11 Summary of the Excavation

Phase I

Cremation Burial 1 (Figure 11.1 & 11.2)

11.11.1 This cremation was located in Area D. The pit cut (123) was sub circular in plan with steep sides and a concave base. The cut as defined by the excavator measured approximately 0.3 metres wide, 0.4 metres long and 0.15 metres deep. The long axis of the pit was orientated north south. The pit contained the incomplete remains of two vessels (Small find 1 and Small Find 2). SF 1 was a fragmentary early Roman sandy ware vessel that had been tipped on its side and only part remained; it contained a deposit (122) containing burnt human bone (Sample 1). The second vessel (Small Find 2) was represented by only a few fragments of Early Roman Upchurch-type ware representing a platter. The pit was backfilled with a deposit (121) of plastic yellowish brown clay presumably derived from the excavation of the pit. The whole cremation assemblage had suffered from considerable post depositional truncation. The date of the burial based on the pottery vessel is 75-100 AD.

## Cremation Burial 2 (Figures 11.1 & 11.2)

11.11.2 The pit cut (133) was sub circular in plan with steep sides and a flat base; the southern edge had been completely truncated. The edges of the cut were difficult to define. The cut was defined by an absence of calcined bone from the upper deposit which suggested a clean edge. It measured approximately 0.25 metres wide by 0.1 metres deep. Overlying the base of the cut was a well defined scatter of calcined human bone within a clay matrix (131; Sample 2). Contained within deposit 131 was a small fragment of prepared clay or pottery and a small probably intrusive fragment of coal. Adjacent to deposit 131 were the remains of a small pottery vessel (132) initially interpreted as consisting of a few scattered sherds and part of the base of the same vessel. Assessment of the pottery indicated that two pottery vessels were in fact present both in Early Roman Upchurch-type ware fabrics; a carinated bowl with a date range of 75-125 AD and a platter with a date range of 75-125/150 AD. It is unclear whether deposit 131 was originally contained within a pottery vessel. Like Cremation Burial 1, this assemblage had also suffered from considerable post depositional truncation.

The overall date range for this assemblage is 100-150 AD.

## Cremation Burial 3 (Figures 11.1 & 11.8)

11.11.3 This cremation burial was given an overall assemblage context number 130. The pit cut (136) as defined by the excavator was sub rectangular in plan with rounded

corners, steep sides and an uneven base. The cut measured approximately 0.55 metres wide, 0.6 metres long and 0.15 metres deep. Overlying the base of the cut was a mixed deposit (137) of natural clay geology and sparse fragments of burnt bone (Sample 8) originating from an overlying pottery vessel (SF 14). The pit contained six fragmentary pottery vessels; the largest (SF 14) a bowl, had been placed approximately in the centre of the pit and contained the main deposit of burnt human bone (Deposit 138; sample 7) in a matrix of dark brown gritty clay. The vessel was fragmentary and had probably been broken either during or following deposition. The remaining five vessels were placed at a higher level around the edges of the pit. SF 13, a small intact Samian dish was found located on the eastern side, on edge abutting SF18 an Upchurch-type ware beaker located in the south east corner. SF 17 an incomplete stamped Southern Gaulish Samian vessel was also found on edge and in the southern part of the burial. The beaker (SF18; deposit 140; Sample 6) and stamped Samian vessel (SF 17; deposit 139; sample 4) both contained fragments of burnt bone in a mid greyish brown gritty clay matrix. These deposits may represent further deposits of human bone or may represent food offerings. Overlying the contents of SF 17 (deposit 139) was a copper alloy lozenge shaped brooch (SF 12).

11.11.4 Directly overlying the contents of SF 14 (138) were the fragmentary remains of an Upchurch-type ware beaker (SF 15); the fragmentary neck and handle of an Upchurch-type ware flagon were located to the south of this vessel (SF 16). These vessels may have been placed on top of a board overlying SF14 with the flagon (SF15/16) tipping during the backfilling of the pit and the remainder of the vessels sagging into the void beneath the board as it decomposed. All the vessels had a date range between 75-125 AD. The pit was backfilled with material derived from the digging of the pit (128) which also contained a fragment of a flint tempered loom weight or brick (SF 19).

The south western edge of the cut had been disturbed during mechanical removal of the overburden due to the difficult nature of the geology (interface 129). The overall date range of deposition for this burial is 75-125 AD.

#### Cremation Burial 4 (Figures 11.1 & 11.2)

11.11.5 This burial was located in Area D. The cut (135) was ovoid in plan with steep sides near vertical sides on the northern edge and an uneven base. The edges of the cut are indistinct on the west and southern edges. The cut measured approximately 0.24 metres long, 0.16 metres wide and a maximum of 0.12 metres deep. A dense cluster of burnt bone fragments (134; Sample 5) measuring approximately 0.05 metres deep overlay the remains of an Early Roman sandy ware jar which in turn overlay the

remains of an Early to Mid Roman Upchurch-type ware flagon. Also present was a possibly intrusive small sliver of mid Roman Eastern Gaulish Samian and two intrusive sherds of early medieval shell tempered ware. The cluster of burnt bone was probably originally contained within the sandy ware jar. This burial had suffered from considerable post depositional truncation. It is possible that the extent of the cut had been created by the pottery vessels being dragged from their original position by the plough.

An overall date range of 125-150 AD is suggested for this burial.

## Cremation Burial 5 (Figures 11.1 & 11.8)

11.11.6 The pit cut (191) was sub rectangular in plan, the southern edge had been destroyed by the clay tearing up during machining. The cut had steep near vertical sides to an irregular slightly concave base. Two or more pottery vessels rested on the base at the eastern end of the cut; a Late Iron Age 'Belgic' style grog tempered jar (SF 23) and fragmentary Late Iron Age/Belgic flint tempered ware sherds representing two or three vessels including a ribbed fineware jar and a knobbed lid (SF 24) were recovered initially thought to comprise one or perhaps two vessels. The sherds comprising SF 24 contained greyish brown clay (deposit 192; sample 10) and did not appear to contain any burnt bone. Further pottery sherds of a LIA 'Belgic' style grog tempered jar and a Late Iron Age/Belgic flint and grog tempered ware vessel were recovered from the sample. A deposit of greyish brown clay containing burnt human bone (deposit 205; sample 12) was located at the western end of the pit. This also contained two sherds of a Late Iron Age'Belgic' style grog tempered ware jar. The burnt bone was distributed throughout the deposit and does not appear to have originally been contained within a pottery vessel. The pit was backfilled using the material derived from the excavation of the pit (189). The date range for this burial is 50-75 AD.

# Cremation Burial 6 (Figures 11.1 & 11.3)

11.11.7 This burial pit survived as little more than two irregular shaped hollows (cuts 259 and 261) measuring approximately 0.65 metres by 0.38 metres and 0.54 metres by 0.39 metres respectively. The bases of both cuts were very uneven and shallow and the dips and hollows were filled with mid to dark brown clay (Deposits 258 and 260; sample 24). Clusters of pottery possibly representing the fragmentary remains of cremation burial assemblage lay on the surface of both deposits. Five clusters of pottery (SF's 36, 43, 44, 73, 74) and part of a Samian vessel (SF 77) overlay deposit 258. Four clusters of pottery (SF 41, 42, 75 and 76) overlay deposit 260. The pottery

scatters and the Samian vessel were contained within deposit 237 which also contained small fragments of burnt bone (sample 73).

This cremation burial had been heavily disturbed and only survived to a maximum depth of 0.10 metres.

## Cremation Burial 7 (Figure 11.1 & 11.6)

11.11.8 The cut for the burial pit (244) was not fully identifiable in this case and was overcut by the excavator to recover the burial assemblage. The extent of the burial pit as defined by the excavator measured 1 metre long by 0.6 metres wide and measured a maximum of 0.15 metres deep. Lying on the base of the burial pit was a Mid Roman fine sandy ware narrow necked jar with a fragmentary Early Roman Upchurch type ware rouletted beaker placed against it (SF 34 and 35). Both vessels had been disturbed and partially spread approximately 0.5 metres towards the south. Among these sherds were additional sherds from a late prehistoric flint tempered vessel, early Roman sandy ware vessel and mid Roman fine sandy ware vessel as well as a sherd of intrusive late Post Medieval earthenware. The jar contained a deposit of cremated bone (249; sample 18). There were no visible cremated bones within the fill of the beaker but the overlying deposit of dark grey silty clay (243) located around the vessel was sampled (243; Sample 17).

The suggested date range for this burial is 175-200 AD

## Cremation Burial 8 (Figure 11.1 & 11.3)

11.11.9 The burial pit (247) as defined by the excavator was sub rectangular in plan; the long axis was orientated approximately north south and measured 0.75 metres long by 0.65 metres wide and a maximum depth of 0.22 metres. On the northern edge is a sharp break of slope at the top breaking sharply to a flattish ledge breaking vertically to the base. The edge extends around to the eastern edge. On the western and southern edges the sides slope steeply to a flattish base.

Overlying the base of the cut was a thin deposit of yellowish brown silty clay (276) derived from the overlying backfill deposits. The deposit was sampled for environmental indicators (Sample 38). Three pottery vessels had been placed in the pit (248; SF 37, 38 and 39). The main vessel (SF 37) was a large bowl arranged approximately in the centre of the pit and appears to have been placed in a rectangular hollow. The vessel had been crushed downward following deposition; either during backfilling or as the contents of the backfilled pit settled, resulting in a thin layer of the contents of the vessel being separated by a layer of pottery in the base (262; sample 23). A substantial deposit of cremated bone was contained in the upper part of

the crushed vessel (250; sample 19). A Samian vessel (SF 38) had been placed in the north eastern corner of the pit on the ledge and in the north western corner of the pit on the same ledge was a small thin walled vessel (SF 39). To the north west of the small thin walled vessel was a dark patch of possible organic material (277; sample 40).

The pit was backfilled with the material derived from the excavation of the burial pit (246; sample 39).

# Cremation Burial 9 (Figure 11.1 & 11.6)

11.11.10A sub circular depression measuring 0.2 metres by 0.15 metres and 0.1 metres deep was all that remained of a burial pit (264). It contained what was initially thought to be a single fragmentary vessel (SF 47) scattered across the base of the pit which may originally have formed part of a larger burial assemblage but which actually represented two vessels in early Roman sandy ware and Upchurch type ware fabric. A small quantity of burnt bone was found within the overlying deposit (263) and retained as a sample (Sample 35).

### Cremation Burial 10 (Figures 11.1 & 11.4)

11.11.11This cremation burial was given a general assemblage context number 343. A sub circular pit cut (345) measuring 0.9 m long by 0.85metres wide and 0.15 metres deep contained two pottery vessels (SF 58 and 59). The Samian plate (SF 58) overlay a deposit containing burnt human bone and charcoal (373; sample 57). The second vessel (SF 59; sample 53) was very fragmentary and had been spread over an area measuring approximately 0.35 m by 0.25 metres and may represent more than one vessel. The deposit around it was sampled for further fragments of pottery and environmental indicators (374, Sample 58). A single square sectioned iron nail (SF 40) was found within the western part of the deposit. The deposit was backfilled with material similar to the surrounding geology (344; sample 56).

## Cremation Burial 11 (Figures 11.1 & 11.4)

11.11.12This cremation burial was given assemblage context number 283. A sub rectangular burial pit (282) with steep, near vertical sides and a flattish slightly concave base contained a deposit of mid yellowish grey clay (367; sample 46) at its base. The deposit is derived from the erosion of the edges of the cut and it contained sherds of pottery derived from the fragmentary vessels placed within the pit. Overlying it in the centre of the pit were fragments of burnt human bone within a mid greyish brown clay matrix (366; Sample 45) representing an uncontained cremation. This deposit

may originally have been contained within a fabric bag. To the north west of the cremation deposit was a small bowl form cup in Early Roman Upchurch ware (SF 52). Directly overlying the cremation deposit was a stamped Southern Gaulish Samian ware dish (SF 51) within which was a further fragmentary vessel in Early Roman Upchurch ware (SF 60) and a small, very fragmentary, unidentifiable copper alloy object (SF 61). The contents of the Samian dish were retained for eco and artefacts (285; Sample 42). The pit was backfilled with material derived from the excavation of the pit (284; Sample 41).

The overall date for this burial is 75-125 AD.

### Cremation Burial 12 (Figure 11.1 & 11.3)

11.11.13The burial pit was sub ovoid in shape (281) and measured 0.87 metres long and 0.67 metres wide with a maximum depth of 0.2 metres. It was steep sided with a flattish base. Three pottery vessels were placed side by side on the base of the cut in a linear arrangement (226; SF 48, 49 and 50). The largest vessel (SF 48) an Early – middle Roman fine sandy ware bowl contained the main deposit of burnt bone (228; Sample 16) and was located at the north western end of the pit. To the east of this vessel, in the centre of the pit was a small fragmentary stamped Samian vessel (SF 49) with no contents. Adjacent to this was a third vessel; a small globular beaker (SF 50) which contained a deposit of burnt bone that may also be human in origin (266; sample 37). All three vessels had been heavily compressed. The pit had been backfilled with the material excavated from the pit (265; sample 36).

The overall date for the burial is 100-150 AD

## Cremation Burial 13 (Figure 11.1 & 11.3)

11.11.14The burial pit (242) was sub ovoid in plan and measured 0.94 metres long, 0.7 metres wide and 0.3 metres deep. The long axis of the pit was orientated approximately north south. The pit had steep irregularly sloping sides which terminated in a sub circular concave based hollow at the northern end. The pit was filled by three vessels (SF 31, 32 and 33). The main vessel; a storage jar (SF 31) was located at the northern end of the pit and placed in the circular hollow. The vessel contained fragments of burnt bone within a dark grey brown clay matrix (251; sample 20). A second vessel (SF 32); a flagon had been placed immediately to the south west of the main cremation vessel resting on the sloping edges of the pit. The contents of the flagon were retained for environmental sampling (257- sample 22). Two small fragments of thin clear glass (SF 46) possibly representing a small glass vessel were located adjacent to the flagon. The very fragmentary remains of a small copper alloy object (SF 29) possibly the tip

of a pin was located on the northern side of the flagon (SF 32) and to the south an iron object (SF 30) possibly a nail or pin.

11.11.15Placed immediately to the south of the main vessel was a shallow Samian bowl (SF 33; Sample 21). Its contents were also retained for environmental sampling and may also contain fragments of pottery from the main vessel (SF 31) which had broken across its surface probably following backfilling of the pit. The pit was backfilled with the material arising from the digging of the burial pit (241).

The overall date for this burial is 75-100 AD

Cremation Burial 14 (Figure 11.1 & 11.4)

11.11.16This cremation burial was given assemblage context number 332.

A shallow sub circular pit (331) measured approximately 0.86 metres long, 0.67 metres wide and 0.09 metres deep. The edges of the pit were difficult to establish due to the nature and moisture content of the geology. It was filled by a single fragmentary vessel representing a flask beaker or jar (SF 54) which contained burnt human bone (deposit 334; sample 44). The vessel was found on its side suggesting that it had been displaced from its original upright position. This probably occurred when the pit was backfilled with the materials arising from the excavation of the pit (333; sample 43).

The date range for this burial is 75-125 AD.

Cremation Burial 15 (Figures 11.1 & 11.2)

11.11.17This cremation burial was given assemblage context number 375.

A sub circular shaped burial pit (376) with steep sides and a flat base contained two pottery vessels (SF 66 and 67). The pottery vessels did not rest on the base of the cut suggesting that they had been placed on top of an object or structure now lost in the archaeological record or that the pit had been overcut. The main vessel (SF 67) had been broken following deposition and may originally have contained a deposit of burnt human bone found intermingled with the remains of the vessel and spread within the south eastern area of the pit (378; sample 49). A second vessel (SF 66); a flagon in Early – Mid Roman Canterbury sandyware had been placed immediately adjacent and to the north of SF 67. The vessel contained burnt human bone (deposit 379; sample 51).

The pit was backfilled with material arising from the excavation of the pit (377; sample 50).

The date range for this burial is 150-200 AD.

### Cremation Burial 16 (Figure 11.1 & 11.4)

11.11.18The burial pit (307) was sub circular in plan with moderately sloping sides and a concave base. The pit as defined by the excavator measured 0.99 metres long and 0.72 metres wide and a maximum depth of 0.27 metres. The pit contained four pottery vessels (SF 68, 69, 70 and 71). Two separate groups of pottery; SF 70 and SF 71 were assumed to be different vessels and excavated as such but may actually represent the same Mid Roman Sandy ware vessel. They were filled with a deposit that may contain burnt human bone (SF 70, Sample 54; SF 71, Sample 55). To the south east of SF 70/71 was a Samian vessel (SF 68) and to the south was a further vessel (SF 69); a flask in Early Roman Upchurch ware fabric. All the vessels had been considerably crushed following deposition. The pit had been backfilled with the materials arising from the excavation of the pit (306).

The date range for this burial is 150-200 AD

## Cremation Burial 17 (Figures 11.1 & 11.4)

- 11.11.19The burial pit (369) consisted of a shallow sub rectangular pit with rounded ends, gradually sloping sides and a flattish base. The pit as defined by the excavator measured 1.55 metres long, 1.09 metres wide and 0.12 metres deep. The pit contained four pottery vessels (SF 62, 63, 64, 65) all with the exception of SF 63 were in a fragmentary state. The main and largest vessel (SF 62) had been placed on the base in the central hollow of the pit. Fragments of burnt bone were visible on the surface of the fill of the vessel (371, Sample 48). Adjacent to the main vessel and placed to the south was a smaller accessory vessel (SF 64). It contained a single deposit that may contain the remains of its original contents (372; Sample 47). This was overlain by a deposit of yellowish brown clay, similar to the natural geology (370).
- 11.11.20Overlying the deposit and adjacent to SF 62 was a small Samian cup (SF 63) that also contained sherds from SF 62 presumably derived from post depositional damage of the larger vessel. The remains of a further vessel; a Samian bowl (SF 65) was located spread over the southern part of the pit. The main vessel (SF 62) and SF 64 appear to have been covered during deposition by a wooden board or similar on which the other vessels had been placed. The void left below the board gradually infilled with clay (370) derived from the overlying deposit used to backfill the burial and from the edges of the pit. The burial assemblage was backfilled using the materials arising from the original excavation of the pit (368).

Cremation Burial 18 (Figure 11.1 & 11.7)

11.11.21The pit cut (861) was sub circular in plan, with two gentle sloping steps on the northern side of the cut. The cut as defined by the excavator measured approximately 0.81 metres long by 0.42 metres wide. Overlying the base of the cremation pit was a mid yellowish brown clay (862; samples 139 and 140) that contained very occasional fragments of cremated human bone derived from the overlying deposits. This was overlain by a deposit concentrated in the centre of the pit measuring approximately 0.19 m wide, 0.4m long with a maximum depth of 0.07 m and containing approximately 20% burnt human bone (860; Sample 138). This represents a deliberate deposition of human remains. Two pottery vessels were located on the northern side of the pit in a very fragmentary state (SF 85 and 86). A small fragmented copper alloy object resting against the base of the cut on the southern edge may represent a simple brooch (SF 84). The burial pit was backfilled with deposit 878 (sample 141).

Cremation Burial 19 (Figure 11.1 & 11.6)

11.11.22This burial pit (886) measured approximately 0.03 m deep and survived as little more than a hollow in the surface of the surrounding geology. A single vessel in early Roman sandy ware was represented by a small collection of associated pot sherds including its base (SF 87) which may represent part of a more extensive burial assemblage that has been very heavily truncated. The surrounding deposit (885) was similar to the clay geology.

This burial dated to approximately 75-100 AD.

Cremation Burial 20 (Figure 11.1 & 11.7)

11.11.23This burial pit (912) also survived as little more than a hollow in the surface of the geology. A single very fragmented vessel in Late Iron Age 'Belgic' style grog tempered sandy ware containing burnt human bone in a matrix similar to the overlying deposit overlay it (SF 88, Deposit 913, Sample 142). Within the vessel fragments were a few tiny fragments of a copper alloy object (SF 89). The vessel was overlain by deposit 911.

Phase II

Cremation Burial 21

11.11.24This pit was interpreted by the excavator as possibly representing a cremation burial.

The pit (2091) was sub circular in plan with steep sides on the southern end and a gradual slope on the northern side with a slightly concave base. It was filled by a

single dark grey clayey deposit (2092) containing a sherd of 19th – 20th century pottery, bone and charcoal. The fill of the deposit was retained as a sample for further analysis (sample 505).

It is unlikely that this deposit represents a cremation burial.

Cremation Burial 22 (Figure 11.1 & 11.5)

11.11.25The burial pit (2101) was circular in plan with gradually sloping sides and a concave base. It measured approximately 0.44 metres in diameter and 0.13 metres deep. A single fragmentary vessel in Early Roman 'Belgic' style grog tempered ware rested on the base of the cut containing a deposit (2100, sample 513) of burnt human bone and a single iron nail (Phase II SF 19). The pit was backfilled with deposit 2099, dark brown clay which was retained for the recovery of further fragments of cremated bone (Sample 514).

The date range for this burial is 50-75 AD.

Cremation Burial 23 (Figure 11.1 & 11.5)

11.11.26The burial pit (2154) was irregular in plan with step sides and a concave base. It measured approximately 0.4 metres by 0.34 metres in size and 0.13 metres deep. It was filled with a deposit of dark brown clay containing burnt bone, frequent charcoal flecks (2153, sample 516) that may represent a cremation deposit. Two Iron nails (Phase II SF 30 and 31) were contained within the deposit and might indicate that the deposit was originally contained within a wooden container such as a box rather than being uncontained. No overlying deposit survived within this pit.

Cremation Burial 24 (Figure 11.1 & 11.5)

11.11.27This deposit (2196) was interpreted by the excavator as a dispersed cremation burial. It consisted of a scatter of cremated bone and occasional flecks of charcoal over an area of 1.65 metres by 0.80 metres. The burial had been badly disturbed by the construction of a pipe trench. The scatter of bone was retained as a sample (sample 517)

Cremation Burial 25

11.11.28The burial pit (2429) measured 0.33 metres in diameter and 0.13 metres deep. The pit was sub circular in plan with steep sloping sides and a flat base. It was filled by a single vessel (SF 34) that contained burnt human bone (2430; sample 518).

*Inhumation Burial 1* (Figure 11.1 and 11.3)

11.11.29The grave cut (2090) was poorly defined due to the soil conditions and later truncation; only the eastern end of the cut was identifiable in plan. It was orientated approximately north south. The cut as defined by the excavator was sub rectangular in plan with rounded corners although the reliability of the edges was deemed poor. The grave cut measured approximately 1.37 metres long, 0.5 metres wide and 0.1 metres deep. Lying on the base of the cut was a skeleton (2089) of a single individual skull. The skeleton was poorly preserved with less than 25 % remaining; only parts of the long bones, skull, pelvis and spine survived. The position of the surviving bone suggested that the skeleton had been placed in a supine position with its arms and legs extended; the arms either at the side or across the body with the hands resting on the pelvis. A total of nine nails, possibly from a coffin or wooden board were found overlying and surrounding the body within the backfill of the grave (2088; Phase II SF 1-4, 6, 7 and 9-11). The orientation and lack of grave goods within the grave suggest that the burial is of Roman or post Roman date.

# 11.12 Statement of Potential

11.12.1 This section forms a summary statement of the value of the data gained in the excavation. It assesses the potential of the data to address the research aims of the excavation.

# Stratigraphic

11.12.2 The stratigraphic sequence of the cremation burials is not complicated. There are no inter-cutting features and each feature is represented as a discrete unit with a cut, a burial assemblage and one or more deposits infilling the grave. The spatial distribution of artefacts within the graves suggests that some events are missing from the stratigraphic record which can be reconstructed. The low level of variation in the stratigraphic sequence indicates there is little further potential for interrogation of the stratigraphic record beyond the distribution revealed in plan.

# Spatial

11.12.3 Spatial interrogation of the distribution of artefacts within the lesser disturbed graves may be able to reveal more about the nature of the cremation burial sequence. The cremation burials themselves do not demonstrate any inter-cutting stratigraphic relationships; instead the intra site locations of the burials on this site and the adjacent Iwade bypass to Queenborough site demonstrate potential for further study in relation to spatial distribution according to date of deposition and relationship to non cremation burial features of similar date. These cremation burials form a small part of

a more widespread tradition of burial overlooking the flood plain of the Swale and Medway both on Sheppey and the mainland.

### Artefactual Evidence

The Pottery

11.13.4 The pottery (Chapter 8) was found in discrete structured assemblages usually consisting of a primary vessel containing cremated bone and accompanied by one or more accessory vessels within the burial pit. There are no direct stratigraphic relationships between each of the structured cremation burials. Heavy disturbance from previous uses of the site and the often difficult excavation conditions, contributed to difficulties in distinguishing between separate fragmented vessels. In some cases a vessel identified and lifted in the field has turned out to represent more than one vessel, and it is important to reconstruct from the analysis of the pottery the exact number of vessels present which may vary from the site records. The identification of a definitive number of vessels represented within each cremation burial will aid in the reconstruction of the funerary sequence as will consideration of form, fabric and position of each vessel. Comparisons of the vessel forms and fabrics within each cremation burial provides further potential for phasing the sequence of deposition of the cremations and identifying variations in status represented by the choice of vessels and the number represented. Comparison of similar data from cremation burials excavated on the Iwade - Queenborough Bypass will provide further potential for the interpretation of cremation burials within the wider landscape.

# The Iron and Cu Alloy grave goods

- 11.12.5 All the Iron and Cu Alloy objects are currently stored in a stable humidity controlled environment. Three cu alloy objects; the brooch, and both brooch mechanisms have been assessed by specialists (Riddler and Minter 2010: Chapter 10). The Iron and Cu Alloy objects have further potential for addressing the funerary sequence within the cremation burials. Evidence of burning on some objects indicates that they originated from 'the pyre stage' within the fuel that was used (eg Iron nails within timber) or as personal possessions worn by the deceased or deposited on the pyre by those present. Unburnt objects within the cremation burial may indicate deposition at 'the burial stage' when the assemblage of vessels and objects was structured.
- 11.12.6 The Iron nails from the inhumation burial have little further potential to add to our analysis of the burial other than confirmation of their function and their spatial location that may suggest the presence of a coffin or board within the grave no longer

represented in the stratigraphy. Following completion of processing and analysis of the other artefacts, human remains and botanical samples, additional Iron and Cu Alloy objects are likely to be identified which will be directed to the relevant specialists and considered within their individual cremation asemblages.

## Other Miscellaneous Artefacts

11.12.7 The miscellaneous artefacts have been identified during the analysis of the pottery assemblage (Chaper 8) and one fragment of basalt lava quern, Small Find 19 has been assessed by specialists (Riddler and Minter 2010: Chapter 10). The miscellaneous objects have further potential for addressing the funerary sequence within the cremation burials as to whether they originated from 'the pyre stage' or 'the burial stage', or whether they are intrusive from later disturbance such as the Post Medieval brick and tile. Following completion of processing and analysis of the other artefacts, human remains and botanical samples, additional miscellaneous objects are likely to be identified which, along with those already identified will be directed to the relevant specialists and considered within their individual cremation assemblages.

#### The Human Remains

11.12.8 Assessment of a selection of the cremated Human bone by KORA (Kent Osteological Research and Analysis) at the University of Kent (Appendix 2) has shown that there is a low potential for identifying human characteristics such as age, sex, stature and pathology of the human remains in the cremation deposits that have been assessed. There is high potential to glean information about the process and efficiency of the cremation practice from the quantity, weight and colouration of the bone present. There is also high potential for identifying pyre goods such as animal bone and pyre deposits such as charcoal within the cremated bone deposits. In all cases the weight ranking indicates whether the remains represent a complete individual or potentially, selected elements from the pyre although the degree of truncation of the cremation burial will need to be taken into account when interpreting this. There is no further potential for the analysis of the inhumation by KORA other than that already carried out (Appendix 3). In addition radiocarbon dates will be obtained for the inhumation following discussion on the suitability and reliability of dating skeletons of possible Roman or Post Roman date with both the Osteological specialists and from the laboratory that will carry out the radiocarbon dating.

# The Botanical remains

11.12.9 An assessment of the Botanical remains by Lisa Gray (Section 12) from samples processed by the Trust for Thanet Archaeology has identified that the faunal remains are of very low potential and are not abundant or diverse enough to justify further analysis. The seeds and grains in those samples assessed have been identified as far as their level of preservation allows.

Ten samples containing identifiable charcoal may have the potential to provide information about continuity and change in pyre fuel and funerary practices. Further work on these aspects of the unprocessed samples would allow comparison between all the cremation deposits recovered from the site, constituting another dataset to contribute to the process of grouping and ranking the cremation burials.

#### 11.13 Revised Research Aims

- 11.13.1 The original general research aims were:
  - ♦ investigate and record the significant archaeological features, deposits and artefacts associated with the prehistoric, Romano-British, medieval and post medieval activities that would be adversely affected by the development and contribute significantly to the understanding of past human activities in the context of the historic landscape within the project area (Anker 2007: 2.1.1).
- 11.13.2 Key landscape themes relating to the Romano-British burials were to
  - 1. Understand the 'Distribution and character of Romano-British burials focusing on the relationship with the burials discovered along the A249 and their setting within the wider landscape (ibid: 3.1.2).
- 11.13.3 The objectives regarding the burials (ibid: p 19) were to:
  - 2. Establish the chronology of the associated burials and ancillary features
  - 3. Analyse the spatial distribution of burials in relation to topography and monuments
  - 4. Analyse the relationship between burial monuments and settlement or agricultural activity if present.
- 11.13.4 In addition to the original research aims the following should be added:

- 5. To identify what information is possible from the Pyre technology and the implications this has on the social and cultural practice of cremation to include the economics of fuel procurement in the landscape.
- 6. Further refine the rank ordering according to date and status of the cremation burials in the chronological sequence that can be established.

### Methodology

- 11.13.5 **Stratigraphic (Aim 1):** The stratigraphic sequence of the site is established with little further potential for interrogation of the stratigraphic record other than refining the narrative description within each group to take account of the specialist identification of vessels and artefacts, ecofacts etc.
- 11.13.6 **Spatial (Aims 1-6):** The spatial potential of the site will be addressed using the following:
  - 1. To interrogate the spatial location of the artefacts within the cremation burials in relation to indicating the nature of the structured deposition of artefacts.
  - 2. To interrogate the spatial location of the cremation burials on an intra site basis in relation to the date of the burials and other features
  - 3. To interrogate the spatial location of the site in relation to other known locations of Roman cremation burials on the Isle of Sheppey and the Swale and Medway Estuaries.

# Artefact Assessments

- 11.13.7 The Pottery (Aims 1-4, 6): The pottery identified within the botanical assessment will be repatriated with the main assemblage. Further work will be undertaken by the specialist to combine the pottery retrieved from individual soil samples where possible to establish a definitive account of the number of vessels present within each cremation burial and their form, fabric and type. All the pottery vessels within the cremation burials should be illustrated on an individual burial basis.
- 11.13.8 **The Iron and Cu Alloy grave goods (Aims 1, 5-6):** All Iron and Cu alloy objects that have not yet been assessed by a specialist should be passed over for identification and analysis. Particular note should be made within the analysis of the artefacts of their condition with regard to their use as pyre or burial goods. It is proposed all the objects within the cremation burials and inhumation; in particular the brooch, brooch mechanisms and iron nails, are illustrated for inclusion within the final report.

- 11.13.9 Other Miscellaneous Artefacts (Aims 1, 5 and 6): All miscellaneous objects should be repatriated to their relevant specialist and taken into account within the narrative account of the cremation burials and final analysis of their object class. Post Medieval and Modern artefacts eg glass and brick and tile require no further analysis. The daub, fired clay and briquetage scraps are very small and do not require further analysis. The basalt lava quern has been assessed and requires no further work other than illustration.
- 11.13.10**The Human Remains (Aims 1, 3, 5 and 6):** The remaining cremation deposits will be sent to KORA for analysis and subjected to the same analytical criteria as described in Appendix 1. Where animal bone has been identified within the cremation deposits these will be passed to the project faunal specialist for analysis. Following discussions with the relevant specialists a Radiocarbon date for Inhumation 1 may be sought.
- 11.13.11**The Botanical Remains (Aims 1, 3, 4, 5, 6):** The remaining botanical samples will be processed according to the same criteria as those contained in Section 12. Further work on the identifiable charcoal will be carried out following further interrogation of the archive and discussion with Lisa Gray.

# 12 Environmental Analysis

Alys Vaughan-Williams (Phase I) Lisa Gray (Phase II)

## 12.1 Introduction (Phase I)

12.1.1 This report summarises the findings arising out of the archaeobotanical assessment undertaken following an archaeological excavation at Neats Court, Queenborough, Isle of Sheppey (NQR 08). The excavation was focused on an Anglo-Saxon site with features including pits, postholes, ditches and hearths. Iron Age and Roman features were also uncovered. Preservation was through charring, desiccation and mineralisation. The aim of this report was to ascertain the concentration and preservation of archaeobotanical material from the site, and to evaluate their potential for establishing: (1) the function of the contexts; (2) economy and diet of the local inhabitants; (3) spatial and temporal variation and (4) the local environment.

## 12.2 Methods (Phase I)

12.2.1 The flots were scanned using a low power zoom-stereo microscope. Identifications were made with reference to the author's modern seed reference collection, Cappers *et al* (2006), Berggren (1981) and Anderberg (1994). Recommendations for further analysis were based on the diversity, concentration and standard of preservation of the charred remains. Plant nomenclature follows Stace (1997). The clay matrix on the site resulted in charred material frequently remaining in the residue. Consequently the flot volume is not generally a true reflection of the quantity of charred material actually recovered. The abundance of charcoal was recorded along with the maximum length of the longest axis when greater than 4mm. The results are summarised in Table 1 below;

# 12.3 Results (Phase I)

Late Iron Age

Pits

12.3.1 Context 517 from pit 518 presented a small flot with occasional charred grass seeds (Poaceae) and occasional desiccated seeds of blackberry (*Rubus fructicosus*). Charcoal was occasional.

Ditches

12.3.2 Primary fill 1351 from ditch 1099 and context 1792 from ditch 1793 both presented small assemblages with occasional grains of barley / wheat (*Hordeum / Triticum*). Preservation of the grain was poor. Charcoal was occasional and small.

Roman

Hearth

12.3.3 Context 508 from hearth 509 did not produce an archaeobotanical assemblage.

Medieval

12.3.4 The majority of the contexts discussed below have not been dated. However they are presently presumed to be Anglo-Saxon / Medieval in date.

Ditches

12.3.5 Forty-six ditches were sampled, from which all but six contexts presented at least occasional cereal grain, mainly wheat (*Triticum*) followed by barley (*Hordeum*). The following contexts presented flots with abundant and dense assemblages (>50 items): 779 cut 780, 843 cut 875, 946 cut 945, 972 cut 971, 1004 cut 1003, 1761 cut 1700, 1835 cut 1838. These assemblages were dominated by wheat grains with the majority also containing barley grains. Weed seeds such as stinking chamomile (*Anthemis cotula*), docks (*Rumex*) and seeds from the grass, pulse (Fabaceae) and goosefoot (Chenopodiaceae) families were occasional. Garden peas (*Pisum sativum*) were present in context 779 from ditch 780. Chaff was present in context 972. Frequent grains and seeds were present in 711 cut 712, 924 cut 923 and 968 cut 967. The remaining contexts provided only occasional and often poorly preserved cereal grain with occasional weed seeds.

Linear Features

12.3.6 Eight linear features were sampled. Wheat and barley grains were abundant in 1024 cut 1021 along with occasional seeds of stinking chamomile, grasses, pulses and bedstraw / woodruff (*Galium / Asperula*). Frequent grains of wheat along with barley grains and / or grass seeds were present in 1012 cut 1011 and 1704 cut 1705. Occasional grains of barley and grass seeds with preservation ranging from poor to good were present in 1082 cut 1081 and 1016 cut 1015.

Layer

12.3.7 Layer 1063 presented a small but dense assemblage of wheat grain and seeds from the grass and pulse families, plus seeds of stinking chamomile.

Postholes

12.3.8 Fifteen postholes were sampled. The majority of these presented small assemblages with occasional (<10) items, namely wheat grains with occasional barley grains also present in context 1816 cut 1817. Abundant material was present in 1691 cut 1692 with wheat grain, seeds from the grass family, oat (*Avena*), an apple / pear pip (*Malus / Pyrus*) and a possible lentil (cf. *Lens culinaris*). Wheat / barley grain was frequent in 787 cut 786 however the preservation was poor. Charcoal was occasional in all but contexts 760 and 1822, and it was frequent in context 1691. Anthracite was present in the following contexts: 760, 942, 999, 1567, and 1816.

Stakeholes

12.3.9 Context 1608 from stakehole 1607 contained anthracite only.

Pits

12.3.10 Twenty pits were sampled. Occasional grains of barley and / or wheat were present in the following contexts: 131 cut 133, 859 cut 862, 1033 cut 1032, 1042 cut 1041, 1444 cut 1335, 1463 cut 1462, 1563 cut 1562, 1780 cut 1781, 1873 cut 1874 and 2025 cut 2024. 1813 cut 1810 contained occasional seeds from the grass family. Context 1985 from pit 1877 presented a small mineralised assemblage of sloe stones (*Prunus spinosa*) and other stones from the plum genus (*Prunus*). A mineralised pulse was also present in context 2025. Occasional seeds of stinking chamomile occurred in contexts 1444 and 1873. Seeds of chickweed (*Stellaria*) were occasional in context 1033. Slag was present in context 2128, pit 2129 and anthracite was present in the following contexts: 1042, 1444, 1573, 1743 and 2025.

Pits / Postholes

- 12.3.11 Three features were sampled, with three contexts were sampled from cut 1715.

  Abundant grains of wheat, barley and occasional seeds including grasses, docks and pea / vetch (Lathyrus / Vicia) were present in context 1716 and 1752. Wheat chaff was also occasional in context 1716. Context 1717 presented occasional but moderately preserved grains of wheat and dock seeds.
- 12.3.12 Context 1823 was a primary fill. Occasional moderately preserved grains of wheat were present. Occasional poorly preserved cereal grain was present in context 1818 from cut 1820.

Cut

12.3.13 Context 1115 was sampled from rectangular feature 1114. No archaeobotanical remains were present. Context 1899 from an unknown cut and feature presented a

small charred assemblage of wheat grain, stinking chamomile seeds and fragments of hazelnut shell.

12.3.14 Context 1837 was sampled from cut 1838. No feature type is recorded. A dense and diverse assemblage was recovered with preservation ranging from poor to good. Grains of wheat and barley dominated the assemblage, followed by occasional seeds from the grass and goosefoot families, and seeds of knotgrass (*Polygonum*), stinking chamomile, cotyledons of broad bean (*Vicia faba*) and fragments of hazelnut shell (*Corylus avellana*).

# 12.4 Interpretation and Discussion (Phase I)

Late Iron Age

12.4.1 The presence of desiccated blackberry seeds in pit 518 may reflect the presence of cess; however their low concentration means that it is unlikely the pit functioned primarily as a cess pit. Blackberries were commonly gathered food during late summer and autumn, and their presence on prehistoric sites is not unusual. The cereal grain present in the ditches was poorly preserved, limiting the extent to which they can be further identified. Full analysis is thought to have a low potential to provide a broader interpretation. However due to the paucity of Iron Age material in general, they should be included in any further analysis to allow quantification and a comparison with contemporary sites.

Roman

12.4.2 No archaeobotanical remains (including charcoal) were present in the flot recovered from hearth 509. This suggests it was not a hearth. There would be no benefit in further analysis of this sample.

Medieval

- 12.3.4 Wheat followed by barley dominated the assemblages recovered from this period. Both were common during the medieval period. Pulses including broad bean, peas and possibly lentils were present indicating their cultivated. Full analysis would clarify this point. An arable environment is indicated through both the presence of cereals and pulses, with some chaff, plus occasional characteristic arable weed seeds such as stinking chamomile and grasses. Gathering or the small scale cultivation of fruits is suggested through sloe stones, apple / pear pips and hazelnut shell. The mineralisation of the sloe stones suggests that particular pit contained cess.
- 12.3.5 Overall the assemblages retrieved from the medieval features presented poor to

moderately preserved charred and mineralised assemblages that have a high potential to answer questions regarding agricultural practises and dietary habits, and a high potential to identify the function of particular features. Their potential to allow spatial analysis is moderate, and they have a low potential to provide further information relating to the environment other than the arable one due to the low abundance of weed seeds generally observed. However if the features cannot be phased or dated, they provide no potential in further analysis.

# 12.4 Recommendations (Phase I)

# 12.4.1 It is recommended that the following samples are analysed:

Iron Age

Pits: <77> (517)

Ditches: <207> (1351), <368> (1792)

*Medieval / Undated (on the proviso that they are phased / dated)* 

Pits: <191> (1042), <196> (1033), <261> (1444), <401> (1873), <427> (1985)

Ditches / Linears: <124> (711), <125> (843), <162> (924), <168> (779), <182> (946),<183> (968), <186> (1004), <188> (975), <189> (972), <193> (1012), <194> (1016),<198> (1024), <233> (1082), <240> (1394), <282> (1497), <336> (1704), <354> (1761), <371> (1785), <372> (1801), <389> (1835), <409> (1875)

Layer: <200> (1063)

Cut (if feature can be identified): <366> (1763), <392> (1837), <435> (1899)

Postholes: <120> (787), <352> (1691), <353> (1760)

Pits / Postholes: <331> (1716), <339> (1716), <340> (1717), <351> (1752)

## 12.5 Introduction (Phase II)

12.5.1 During excavations at the Queenborough and Rushenden Regeneration Site, Neatscourt, Isle of Sheppey (Britchfield 2009, 3), extensive environmental sampling was undertaken. This report describes the contents of nine samples selected as representative of the Site by field archaeologists Geoff Morley and David Britchfield (both *pers.comm.* 2009). The samples chosen were:

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<6> context 2538 'alluvial layer'
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- <25> context 2596 'trample layer'
- <29> context 2560 'part of disturbed beaker cremation'
- <30> context 2566 'cremation: possible contents of beaker vessel'
- <31> context 2567 'cremation: possible contents of beaker cremation before contents tipped'
- <41> context 2136 'main mound deposit'
- <65> context 2646 'trample layer in South East Quarter'
- <95> context 2694 'charcoal rich patch underneath mound'
- 12.5.2 At the time of writing it was not possible to locate samples <41> and <25> so the author selected three samples to process, within the available time, that she felt had the potential to provide useful environmental information and complement those already selected. These samples were:
  - <44> context 2620 'buried soil horizon'
  - <51> context 2595 'one of several samples taken in a grid pattern from a trample layer beneath the mound'
  - <80> context 2668 'basal fill of ditch [2667]'
- 12.5.3 This report will assess the potential of these samples to provide further information about the function, use and environmental conditions at the Site.

# 12.6 Methods (Phase II)

12.6.1 Sampling was carried out by Swale and Thames Archaeological Survey Company and processing was undertaken by the author. Each of these clay rich samples were soaked for several days in a solution of freshwater and 'Calgon' and then processed using a Siraf type flotation system with residue collected in a 1mm mesh and 'flot' in

as 300 micron meshed sieve. The decision to process many of these samples completely was made by the author after processing small volumes of each sample and establishing that the level of organic preservation did not merit further subsampling and that fully processing a sample meant there was more chance of useful material being recovered. This decision was based on the knowledge that many samples remained unprocessed and that column samples were taken from various parts of the site and that these are intended for specialist processing for plant and faunal microfossils (*pers.comm*. G.Morley 2009).

- 12.6.2 The volume of each flot was measured in millilitres. These were sieved through a stack of geological sieves and scanned under a low powered stereo-microscope with a magnification range of 10 to 40x. The abundance, diversity and state of preservation of ecofacts and artefacts in each sample were recorded onto paper record sheets for tabulation (see tables 1-4). These are kept with the author's archive and available on request.
- 12.6.3 The abundance, diversity and state of preservation of the plant remains were assessed and the presence of faunal and artefactual material was noted. Any identifications have been made using modern reference material and manuals (such as such as Beijerinck 1947 and Cappers, *et al.* 2006). Nomenclature and habitat information is taken from Stace (Stace 1997) and Latin names will be given once in brackets and the common name given thereafter and in the table.

## 12.7 Results (Tables 1-4) (Phase II)

Quality of and Type of Preservation

12.7.1 The quality of preservation was good. Most of the plant macrofossils were preserved by charring. Abundant uncharred (unmineralised) root fragments were present in most samples but are likely to be modern. The author has read all of the sample sheets and waterlogged preservation was not recorded during sampling.

# Charred Plant Macrofossils

12.7.2 Identifiable fragments (those greater than >4m³) of charred wood were present in all processed contexts. Fragments of charred rhizomes resembling those of onion couch/false oat (*Arrhenatherum elatius* (L.) P. Beauv. Ex J.& C.Presl. ) grass were present in the cremation deposits contexts 2560 (sample <29>) and 2567 (sample <31>( and the charcoal rich patch

context 2694 (sample <95>). These 'corm-like' (Stace 1997, 864) tubers are a common charred plant macrofossil in cremation deposits and the author has noted these in Romano-British cremations (Gray 2008). There are more common on Bronze Age pyre debris ( see Greig 1991, Moffett 1991, Murphy 1983, Robinson 1988) and have been interpreted as kindling (Murphy 1983, 127) with the rhizomes present due to the whole plant being uprooted (Robinson 1988, 102) before joining the pyre. Another interpretation of these finds is that they were used to create fire-breaks when pyres were built on long grassland (Stevens 2008, 459). The 'corm-like' parts of the tubers were not found in these samples but the thick rhizomes were very reminiscent of this plant and, if further processing of more cremation deposits is carried out, these distinctive plant parts may be found.

12.7.3 Charred seeds were few and can be listed in their entirety here. One seed each of ?clover ( cf. *Trifolium* sp.), sedge ( *Carex* sp.) and campion/stitchwort ( *Silene/Stellaria* sp.) were found in cremation deposit context 2560 (sample <29>). One seed resembling pale persicaria ( cf. *Polygonum lapathifolia* (L.) Gray) was found in cremation deposit context 2567 (sample <31>) and one small seeded vetch type (cf.. *Vicia* sp.) cotyledon was observed in the charcoal rich patch beneath the mound, context 2694, sample <95>.

## Uncharred Plant macrofossils

- 12.7.4 Also already mentioned here waterlogged preservation conditions were not evident and the uncharred root fragments re most likely to be modern. Also present were occasional whole and fragmentary 'willow' type leaves. These are also likely to have been intrusive and entered the sample as it was taken.
- 12.7.5 One possibly mineralised knotgrass ( *Polygonum aviculare* L) seed was recovered from buried soil horizon 2620 (sample <44>). There is no evidence for cess in any of the other samples taken and it is not clear how this seed might have become mineralised other than by exposure to bone (Green 1979, 281. It is possible that it is intrusive from later deposits because mineralised seeds were observed in Medieval samples in the area of the site (Vaughan-Williams 2009).

## 12.8 Potential (Phase II)

Environmental Reconstruction

- 12.8.1 The charred seeds and presence of onion couch/false oat grass rhizomes suggests that the habitat exploited for making the pyres consisted of damp, open grassland, most clearly suggested by the finds seeds of pale persicaria and sedge (Stace 1997, 183, 815-823) but the seeds alone are too small an assemblage to create a clear reconstruction of the contemporary environment and any interpretation of the cremation and pyre debris will need to be viewed thorough the cultural filter of where this fuels was gathered from.
- 12.8.2 The most useful palaeoecological information is likely to come from the column samples. Further analysis of these for pollen, spores and phytoliths may give a more detailed regional background to any further analysis of the charcoal than that provided by the plant macrofossils which, being charred and associated with cremations, may not be evidence of immediately local vegetation.
- 12.8.3 Even faunal evidence was scarce. The bulk samples produced very rare fragment of insects and the only snail seen was one terrestrial borrowing snail ( *Ceciliodes acicula* ), which is likely to be a modern intrusion with the rootlets.
- 12.8.4 If more samples are processed more plant macrofossils or fauna may be recovered that will give, even if scattered thinly across the site, a better idea of the contemporary environment and any environmental changes. But if funds are limited they might be best spent fully analysing the column samples.

## Palaeoethnobotanical Information

12.8.5 It will be possible to compare the plant macrofossils in the cremation/pyre debris with those from similar contexts in many sites. Analysis of the charcoal, if combined with any recoverable pollen data, may reveal useful information about the potential resource environment and any trends in burial practices.

# 12.9 Significance

12.9.1 The significance of the archaeobotanical assemblage is regional in that more still needs to be known about the Bronze Age environment in South–East England (Allen 2009, 4) particularly site specific assemblages rather than just a reliance on more regional pollen data. Both are best interpreted together.

### 12.10 Recommendations (Phase II)

12.10.1 It is recommended that further work on the samples assessed focuses on the charcoal and rhizomes. This will clarify the identification of the rhizomes and enable the types of woods used as fuel to be established and compared with similar sites. This work should focus on the cremation deposits (samples <29> and <31>) and the charcoal patch (sample <95>). It would be useful to include cremation deposit 2566 (sample <30>) because although no rhizome fragments were observed during scanning it does contain charred wood and fragments of grass stem.

12.10.2 If funding is available for further processing, more plant macrofossils may be recovered that will help in any environmental reconstruction and interpretation of use/dis-use of the features sampled. However, from the evidence recovered from this sub-sample of samples, the main form of preservation of plant macrofossils in this period is by charring and likely to be associated with activity related to the construction and use of the barrow rather from the immediate environment..

#### 12.1 Further Assessment

Analysis of charcoal in three samples – 1 day

Consultation of reference material (actual examples or photographs shared with colleagues) for rhizomes  $-\frac{1}{4}$  to  $\frac{1}{2}$  day

Background Research – 1 day

Table creation − ½ day

Report writing -1 day

TOTAL = 3.25 to 4 days

# 13 Animal Bone and Marine Shell Assessment

Dr James Morris, BSc (Hon), MSc. Archaeological Solutions

#### 13.1 Marine shell

- 13.1.1 In total marine shells were collected from 28 contexts. The majority of the marine shells were from oysters (*ostrea edulis*), with shells from the common cockle (*Cerastoderma edule*), common whelk (*Buccinum undatum*) and common periwinkle (*Littorina littorea*) also present (Table 13.1). There was no evidence of opening marks, or parasitic attack present on the shells. It was also not possible to match any of the left and right oyster valves together. The majority of the oyster shells, 65 (50%), consisted of small fragments, due to poor preservation conditions. Cockles were recovered from only two contexts, 109 and 115, similarly the whelk shells were recovered from two contexts, 755 and 881. The thirteen periwinkles were all recovered from one context, 711, and may have been deposited in one event.
- 13.1.2 Oysters and to a lesser extent other marine shells, were consumed in most time periods and are a common occurrence on archaeological sites (Wilson, 1991, 42). It is recommended that no further work is required on the marine shell assemblage and any further archaeological excavations will produce a moderate sized shell assemblage of a similar composition.

Shell type	Total
Oyster	128
Cockle	5
Whelk	2
Periwinkle	13

Table 13.3Summary of the total number of shell types

### 13.2 Animal bone

Introduction

13.2.1 Archaeological excavations at Neats Court resulted in the hand collection of 900 animal bone fragments. An initial scan was carried out to assess the general nature of the assemblage, its preservation and areas of further investigation. The remains were collected from 129 separate contexts, with no one context containing a dominant

amount. The amount of animal bones per context ranged from 56 to one. At this time contextual dating information is unavailable.

#### Methods

- 13.2.2 The faunal remains from each context were scanned in line with MAP2 procedures (Davis, 1992; English Heritage, 1991; 2002) during which each fragment was identified to species. When it was not possible to identify to species the bones were recorded as unidentified. As the scan is to ascertain the assemblage's potential, bird and fish bones are not identified to species and are recorded as 'BIRD' and 'FISH'. Species counts stated are the number of identified specimens (NISP), including skull fragments, vertebrae and ribs.
- 13.2.3 The preservation of each context was rated on a scale from 'good', were all elements were well preserved to 'very poor' were the majority of assemblage has been affected by taphonomic conditions to the detriment of the information obtainable. Although subjective, such a grading allows the preservation of the assemblage to be summarised and comparisons between features and phases to be made. For an assessment of this nature element information was not recorded. The number of fragments with available taphonomic, butchery, ageing and metrical information were also recorded. All data was entered into a Microsoft Access database which will be included in the site archive.

### Results-preservation

- 13.3.4 Only a small proportion of the assemblage was well preserved (Table 13.2). The faunal remains recovered from three contexts, 812, 840 and 1082, were classified as having 'good' preservation. The majority of the contexts produced material which had either 'quite good' or 'moderate' preservation. The faunal remains had been damaged by erosion, canid gnawing and fragmentation (when two or more inter-fitting fragments from the same bone are present).
- 13.3.5 A large proportion (23%) of the faunal remains recovered can be classified as 'quite poor' or 'poorly' preserved. It is noticeable that many of the remains from these contexts are unidentifiable. Also, many of the identified remains consist of loose teeth, which is a common sign of poor preservation conditions, as teeth are one of the best elements at surviving the taphonomic process (Maltby, 1985). It was also noted that contexts 237 and 600 contained a number of burnt elements. The remains had a

white-blue consistency which indicates they have been fully calcified by being subjected to a heat of over 600°c (Shipman et al., 1984).

Preservation	No. Contexts	NISP
Good	3	14
Quite Good	58	343
Moderate	36	237
Quite Poor	17	116
Poor	7	93
Mixed	8	97

Table 13.4 Summary of the assemblages preservation per context and per NISP.

## Results-species present

- 13.3.6 During the scan it was possible to identify 552 (58%) of the fragments to species. The majority of the unidentified fragments consisted of rib shaft and long bone fragments from large and medium sized mammals. Overall sheep/goat are the most common species followed closely by cattle (Table 13.3), combined the bones from these two species represent 80% of the identified assemblage.
- 13.3.7 The other domestic mammals identified include pig, horse, dog and cat. It is noteworthy that a relatively high number of complete horse bones were present within the assemblage. A small number of bird and fish remains were also identified. The bird remains come from those of domestic fowl and domestic goose. The fish remains are possibly from cod.

			Ageing: Tooth		
Species	NISP	Ageing: Fusion	wear	Measurable	Butchery
Cow	204	63	2	20	6
S/G	215	28	7	4	2
Pig	48	13	3		
Horse	40	15	1	8	1
Dog	5	3		1	
Cat	2	1			
Bird	5			2	
Fish	3				
Unidentified	378				
Total	900	123	13	35	9

Table 13.5 Summary of the NISP count per species and the number of elements with available further information. S/G=sheep/goat.

# Results-further information

13.3.8 Due to the relatively poor preservation of a large proportion of the assemblage, further information is limited. During the scan only nine elements with butchery

marks present were noted (Table 13.3). The majority of the butchery marks were recorded on cattle elements. Further butchery information may be limited by the high degree of erosion on the faunal material, which can destroy or disguise butchery marks.

13.3.9 Metrical information is available from 35 of the elements. The majority of the measurable elements are from cattle, however, it most be noticed that most of these elements are phalanges (toes). The amount of metrical information available is limited by the fragmentation of the assemblage. Some herd structure ageing information is available from the assemblage. In total, tooth wear ageing will be possible on 13 mandibles, but the majority of the information comes from epiphysial fusion (Table 13.3). Despite the relatively poor preservation of the faunal assemblage there may be enough fusion data available from cattle, to inform us of the most common age of slaughter. However, at present this does not take into account the dating of the faunal material.

## Summary of potential

- 13.3.10 At present the bone assemblage from Neats Court is relatively small and poorly preserved. This means that the amount of further information available from the assemblage is limited. It is recommended that no further work is necessary on the current assemblage unless the site is to be published or further archaeological work produces a larger faunal assemblage.
- 13.3.11 The preliminary scan of the assemblage indicates that bone survival on the site is relatively poor. If further archaeological work was to take place on the site an animal bone assemblage of limited potential would be expected.
- 13.3.12 It is estimated that 2 days further work would be required to produce a publication report for this assemblage.

# 14 Discussion

David Britchfield

## 14.1 A Buried Prehistoric Landscape

- 14.1.1 It is clear from archaeological evidence that Area A of the site is located on the periphery of prehistoric, Roman and possibly Medieval occupation. Later alluvial layers contained sherds of abraded pottery most likely washed in off higher ground. Archaeological evidence from Area A/3 would suggest that this is located beneath the existing IMG car park. The natural ground level rises to the south and west of Area A forming a natural 'island' within the marsh an ideal location for the exploitation of the surrounding marshland as well as industrial, domestic and religious occupation. Although no direct evidence was present for domestic occupation it is clear that saltmaking techniques were being utilised within the local area.
- 14.1.2 The positive identification of securely dateable features directly below the topsoil clearly illustrates that the later alluvial encroachment within this area of the marshes occurred prior to the Middle-Late Iron Age when the production of salt was an essential part of daily life. That said, the evidence produced was more 'peripheral' in nature, rather than 'direct'. In other words, it would appear that we are actually on the fringe of industry rather than in the middle of it. The frequently fresh condition of the ceramic fragments does confirm that production was taking place nearby even if the level of production was relatively low-key for this settlement's or more probably the island's needs.
- 14.1.3 The presence of the deliberately deposited storage (or cooking) vessel is of particular interest as its function is clearly different from other contemporary vessels within the immediate area. Initially it was thought that this may be a cremation deposit. This idea was ruled out quickly as no cremated bone was present within the well-preserved lower remains of this feature. Deliberate deposition of such a functional vessel may therefore point to a more ritualistic purpose, especially when one considers it location adjacent to the water's edge. Prehistoric sites with religious associations with nature (i.e. water) are well documented within the archaeological record. Chapter 4 of this assessment deals with the importance of ritual burial within such an environment. But how does a domestic vessel compare with a burial? The function and importance on domestic life within the prehistoric period(s) cannot be underestimated. Each was an essential part of life and survival it is possible to see that burial represents the end, and more importantly the beginning (i.e. rebirth), of life.

- 14.1.4 It is therefore clear from archaeological evidence that Area A of the site is located on the periphery of prehistoric, Roman and possibly Medieval occupation. Later alluvial layers contained sherds of abraded pottery most likely washed in off higher ground. Archaeological evidence from Area A/3 would suggest that this is located beneath the existing IMG car park. The natural ground level rises to the south and west of Area A forming a natural 'island' within the marsh an ideal location for the exploitation of the surrounding marshland as well as industrial, domestic and religious occupation.
- 14.1.5 Archaeological investigations associated with Area B have provided a small relatively straight forward window into this much more complex landscape. The archaeological evaluation pointed towards the presence of a buried prehistoric landscape. Ditches, gullies and hearth are indicative of settlement for this period and these were located within a relatively small number of evaluation trenches. It was therefore clear from the outset that lower lying archaeological features would be present beneath the marsh alluvium. As a result it came as no surprise that once this alluvium had been removed archaeological features would be visible.
- 14.1.6 With the exception of the burial mound direct access to this archaeological horizon was limited to a couple of deeper dug areas equating to approximately 1.5% of the total area of Area B. As a result it is difficult to provide an accurate insight into the function and form of this landscape. Archaeological features within the 'pond' area suggest the possibility for a structure, or structures, along with open fires. Nothing found suggests industrial use of the site, so one would assume that we are in an area focused on domestic use. This would fit well with the close grouping of post holes that are set out in a rough circular pattern with a distance of approximately 5m between the two furthest points - a small roundhouse perhaps, with a fire pit located at it centre. Although such a structure appears to be in isolation, archaeological evidence revealed during the evaluation stage of the project has positively identified additional hearths. More structures perhaps? Add this to the existence of ditches and thus the dividing up of the contemporary landscape and a larger picture starts to emerge. An agrarian society indicative of the Bronze Age is one that is based on agriculture as its prime means for support and sustenance and would typically possess field systems, houses, domestic waste and even funerary monuments. All of this exists within the small window that was examined below the marsh clay at Neatscourt - a small window equating to approximately 2% of the overall landscape.
- 14.1.7 Ultimately the prehistoric landscape that exists, protected beneath the alluvium within Areas A, B and C of the proposed development site, will survive insitu. The basis for archaeological mitigation approved for this area relies on minimal impacts caused through any future developments. If however, this is not to be the case, further

mitigation associated with future planning applications would be considered necessary.

### 14.2 Romano-British Cremation Cemetery

- 14.2.1 Results from the investigations within Areas D and E revealed 25 separate Roman cremation burial, which came as no real surprise. In fact the evaluation carried out by Oxford Archaeology (2007a) highlighted the potential for such deposits. Excavations on the nearby A249 also illustrated the presence of a fragmented cremation cemetery.
- 14.2.2 There are two key points of interest with this cemetery (or cemeteries). The lack of a physical boundary marking the extent of the funerary site is not necessarily strange for the Roman period. Burials of this period were often scattered and may actually have been demarcated by surface structures long since vanished. That said, these features are rarely in such isolation. Nowhere within the immediate surrounding area is there evidence for Roman settlement. There are no roads, no structures and no 'background noise' that one would normally associate with Roman settlement. A 'substantial' (CgMs 2009:101) Roman boundary ditch was recorded to the west near Cowstead roundabout, which provides our only indicator that occupation exists nearby.
- 14.2.3 Secondly, it is interested to note the lack of inhumations associated with the burial group. When taking into account of the size of this particular site in addition to the A249 site to the north, only one potential inhumation can be associated with the cremation group. Further analysis (i.e. C14 dating) will be required to date the inhumation remains before such a conclusion can be supported.
- 14.2.4 All in all the scattered distribution of the burial clusters may suggest that we are within a small Roman settlement, possibly agrarian. Should this have been the case, it may have been quite well populated as nearly 70 cremation burials have been recorded within the local area. This contrasts with the lack of secure settlement evidence, which may be domestic, possibly even military. Should such sites exist, it is likely that they are located on higher ground to the north.

# 14.3 Early Medieval Settlement

14.3.1 Archaeological investigations within Area F of the Neatscourt development have recorded Early Medieval settlement unlike any recorded so far on the Isle of Sheppey. To the east a large Early Medieval structure comprising foundation trenches and deep structural post holes provided the hub of the settlement, which continued throughout this period. The actual function of the building remains unclear although a footprint of post holes and structural ditches can be clearly seen (see Figure 7.3). Parallel

- foundation ditches complete with post holes, large load-bearing parallel central post pits forming a possible aisle and overcut storage pits all suggest a large structure, possibly an Early Medieval longhouse or bow-shaped house? Such 'barns' are often as long as the domestic communal longhouse, if not longer, but normally lacked subdivisions.
- 14.3.2 The lack of any extensive industrial activity associated with the structure would suggest that it performed a more domestic role. That said the site fall directly adjacent to the route which would have connected the Kings Ferry crossing to the south, to the Abbey at Minster, to the north. It is possible that this settlement site formed a trading point along the Swale, under the auspices of the Abbey. At present time the settlement appears to be in isolation, but evidence within Area D suggest an extensive contemporary landscape indicating a managed agrarian society that would have depended on agriculture, animal husbandry and trade for it survival. The settlement undoubtedly extends beyond the site to the south where increased exploitation of the marsh resources would have taken place. In fact the natural topography of the site shows the settlement on an area of high ground a peninsular extending into the surrounding marsh towards the River Swale. This would have been an ideal place for settlement.
- 14.3.3 The current picture, however, is domestic. We have the house, or houses a structure surviving for such a length of time may have evolved and would have required maintenance. We have a multi-phased enclosure, with drainage ditches and a possible 'barn'. Droveways link field systems and head off towards the south where grazing on the lower marshland during the drier seasons would have been favourable. Burials are rather absent but the re-use of the prehistoric burial mound may suggest that such places remained sacred during the Early Medieval period. Ultimately, this particular site is of considerable importance. Further work and analysis would only provide was with greater insight into this complex settlement, with parallels that can be drawn nationally and possibly results from those investigations within Areas D and E internationally.

# 15 Conclusions

## 15.1 Quantity of Archaeological Material and Records

- 15.1.1 In addition to artefact assemblages mentioned above, the site archive comprises the following elements;
- Correspondence
- Photographs: 3723 Digital photographs SWAT Film Nos. 09/003. B/W and Colour 35mm slides Film Nos. 01-127
- Photocopies of Ordnance Survey and other maps: NA
- > Drawings: 115 A3 permatrace site drawing, comprising trench plans and associated sections.
- Context Register including: Context Register Sheets (158), Drawing Register Sheets (127), Photographic Register Sheets (124), Levels Sheets (x), Environmental Samples Register Sheets (27) and Context Sheets (3866)
- Digital survey data
- 15.1.2 A full archival catalogue will be prepared following receipt of final specialist assessments, which will be incorporated within a final report.

# 15.2 Storage of Archaeological Material

15.2.1 The complete archaeological archive will be temporarily held by SWAT Archaeology until provision is made by Kent County Council for long-term storage. The archive will be prepared in accordance with *Guidelines for the preparation of excavation archives for long-term storage (UKIC 1990)*.

# 15.3 Statement of Potential

15.3.1 The archaeological excavations at Neatscourt have provided evidence for a fragmented multiphase agrarian landscape. In light of this, it is recommended that further archaeological assessment comprise the recommendations of artefact specialists and further assessment on the function, form and character of the archaeological record in association with national and international parallels. It is recommended that such a report be published in the form of a archaeological monograph.

#### 15.4 Overview

15.4.4 This archaeological excavation has been carried out in accordance with a written Specification produced by Oxford Archaeology. Archaeological remains present within the development area have been assessed and reported, enabling preservation of archaeological deposits by record. The results from this work will be used to aid and inform the Archaeological Officer (KCCHC) of any further archaeological mitigation measures that may be necessary in order to satisfy Archaeological Conditions associated with Planning Application SW/06/1468 & SW/07/01

David Britchfield

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## Glossary of Terms and Abbreviations

Arch. J Archaeological Journal

L.O.E Limit of Excavation

I.F.A Institute of Field ArchaeologistC.B.A Council for British Archaeology

K.C.C Kent County Council

S.W.A.T Swale and Thames Archaeological Survey Company

N.G.R National Grid Reference

P.D.A Proposed Development Area
S.D.M Stratigraphic Deposit Model

O.A Oxford Archaeology

S.E.E.D.A South East England Development Agency

Arch. Cant. Archaeologia Cantiana

# Appendix 1. Osteological Analysis of Cremated Human Remains from Neatscourt.

Kent Osteological Research and Analysis

#### 1. INTRODUCTION

This report contains the osteological analysis of the cremated bone recovered from the Neat Court excavations. Neat Court Barrow was excavated in late 2008 and into 2009 by Swale and Thames Archaeological Survey Company. The site is located on the Isle of Sheppey, Queensborough. Neat Court Barrow, is thought to date from Early Bronze (NQR EX09 2699 earliest inhumation) to Roman (NQR EX09 2612 Roman burial) based on the small finds (pottery), position/orientation of skeletons and settlement structure.

The osteological analysis aims to provide a detailed description of the cremated bone, quantify and differentiate between animal and human bone, and identify evidence of the pyre technology used during the cremation process. When possible, estimate age, biological sex and pathological changes were recorded.

#### 2. METHODS AND PROCESS

The cremated material was analyzed according to the standards laid out in the guidelines recommended by the British Association of Biological Anthropologists and Osteologists in conjunction with IFA (Guidelines to the Standards for Recording Human Remains, 2004) as well as by English Heritage (Human Bones from Archaeological Sites: Guidelines for producing assessment documents and analytical reports, Centre for Archaeology Guidelines, 2002).

- Material was analyzed macroscopically and where necessary with the aid of a magnifying glass for identification purposes.
- Material was weighed using calibrated digital scales to an accuracy of 0.1g.
- Material was analyzed without prior knowledge of associated artifacts.

#### 3. AIMS OF ANALYSIS

Osteological analysis was carried out to determine:

- Type of deposit
- Total weight of bone
- Identification and quantification of human bone
- Demographic data
- Pathology
- Degree of fragmentation
- Efficiency of the cremation
- Presence and type of pyre goods and debris

#### 4. TYPE OF DEPOSIT AND DISTURBANCE

Recording the type of deposit is necessary to make fair comparisons between different deposits from across a site, and between sites. Knowing the type of deposit allows inferences to be made about the preservation of the material. This information is essential for accurate analysis of the cremation process based upon the weight and size of bone fragments.

## 5. IDENTIFICATION AND QUANTIFICATION

Cremated bone deposits have been found on frequent occasions to contain both human and animal bone remains. Often, bone fragments are very small and can be difficult to identify if it is human or animal bone. However, it is clear from the analysis of cremated bone deposits that the position of both types of bone together is intentional. Therefore, important to asses the cremated bone as a whole, as well as to attempt to identify human and animal elements.

Assessment of the quantity of bone recovered may give an indication of preservation of the feature the bone was interred in or if recovered from relatively undisturbed context, may provide valuable information regarding the cremation process. This may relate not only to the actual pyre technology itself but the collection and deposition of bone after the process was complete. McKinley (1993) found that modern cremation process resulted in the production of between 1227.4g and 3001.3g of bone. From this she inferred that the cremation of a whole body and deposition of the remains in an archaeological context would realistically produce between 1001.5g and 2422g of cremated human bone.

Identification of particular elements of the human body serves to confirm the presence of human material and may give insight to particular areas of the body which may have been purposefully collected. The absence of elements may be due to the lack of their survival as a result of fragmentation during the cremation, post-depositional preservation conditions or loss during the cremation itself.

The total amount of bone present in each context was weighed and analyzed for identifiable fragments. These fragments were then weighed and recorded separately according to the area of the body they originated from.

#### 6. DEMOGRAPHICS

Demographic data recorded from human cremated bone gives an indication as to the age and biological sex of the individual. This information is derived from the macroscopic examination and metric assessment of sexually dimorphic elements (e.g. Gejvall, 1981; van Vark, 1975; and Whal, 1982) as well as analysis of dental and bone development recommended by Buikstra and Ubelaker (1994). A large sample of well preserved cremated bone deposits can provide a valuable insight into the demographic structure of the archaeological population and any ethnocentric funerary practices associated with age and sex of the individual.

#### 7. PATHOLOGY

Palaeopathology can be used to infer the health status of groups, and individuals within a population. It can also indicate the overall success of adaptation to surrounding environment. Pathologies are categorized according to their aetiologies; e.g., congenital, metabolic, infectious, traumatic, neoplastic etc. Any pathological modifications to the bone are described. The size and location of any lesion is also noted. Pathology data is usually restricted, however, by intrinsic nature of cremated bone, although if fragment size is large enough, pathological changes may be observed.

#### **8. BONE FRAGMENTATION**

The observation and quantification of bone fragmentation is essential in assessing the impact of the overall data retrieved from cremated bone. It may also be an indicator of practices carried out during the cremation process and give insight into pyre technology. Fragmentation of bone is assessed by sorting all bone fragments and comparing the proportion of bone in each fraction (McKinley, 2004). Measurement of the maximum bone fragment length is recorded.

The fragmentation of bone can occur for several reasons from the raking of the remains during the cremation process, the collection and the subsequent interment of the remains. All of which make it difficult to assess whether bone was deliberately fragmented as part of the cremation ritual (McKinley, 1994b; 2001). It is generally believed that both the excavation and post-excavation processes can lead to the largest amount of damage caused to the remains (Lange *et. al.*, 1997; McKinley, 1994b).

#### 9. EFFCIENCY OF CREMATION

Effective cremation of a human body requires basically two elements: burning at high temperatures and at a sufficient length of time. Differences in temperature and time of exposure will result in variation of how the bone is burned. Complete burning will result in complete oxidation of the organic element of bone, leaving the mineral portion remaining (McKinley, 1994a; Lange *et. al.*, 1987). Holden *et. al.*, (1995a; 1995b) reports that generally, the range of colours seen in burnt bone relates to the temperature to which the bone was exposed:

- Brown/Orange = Unburnt.
- Black = Charred (c.300 $^{\circ}$ ).
- Blue/Grey = Incompletely Oxidized (c.600°).
- White = Completely Oxidized ( $>600^\circ$ ).

The colour may vary from bone to bone as different elements of the body may be exposed to different temperatures for different lengths of time. Therefore, essential to record any differences in colouration according to skeletal elements. The extent of the burning or oxidation of the bone represents the relative success of the cremation processed applied and contemporary knowledge of pyre technology.

Observations of dehydration of the bone should also be recorded. Shrinkage of bone due to dehydration can amount to a 25-30% decrease in cross-section width and accordingly approximately a 5% decrease in length (Lange *et. al.*, 1987). Evidence of dehydration presents itself on the bone fragments in the form of fissuring, transverse, concentric and parabolic cracking, especially on auricular surfaces of long bones and cranial vault fragments (Lange *et. al.*, 1987; McKinley, 1994a). These are generally interpreted as occurring due to the result of cremating the bone when soft tissue was still present.

#### 10. PRESENCE AND TYPE OF PYRE GOODS

Pyre goods are those items that were placed on the pyre and have been deliberately included for interment along with the cremated human bone. These can consist of objects manufactured from glass, ivory or metal, which may have formed items of personal adornment. Metal items may only leave a trace of their presence in the form of staining on the bone, especially those manufactured from copper alloys.

It is most common for animal bone to be included with deposits of human bone (e.g. Wells, 1960). It is generally perceived that these represent animal sacrifice or food offerings to the dead (McKinley, 1994; Bond, 1994,). Williams (2005) has suggested the deliberate admixture of animal and human cremated remains is deeply significant and may be associated with shamanistic rituals often observed ethnographically.

#### 11. PRESENCE AND TYPE OF PYRE DEBRIS

The presence and type of pyre debris is analyzed in order to ascertain the nature of pyre technology and can be used to provide an insight into the type of deposit. Recent experimental reconstructions of pyre sites have determined that distinct features, types of debris left by former pyre sites and the use of different materials, may alter the type and form of deposit (Marshall, 2005).

#### 12. INDIVIDUAL CREMATION REPORTS

Cremations were under 50g are summarized in the Conclusion of this report. Cremations over 50g are reviewed here as well as summarized in the Conclusion.

## NQR EX08 63 48

#### INVENTORY OF BONES AND DENTITION

Bones Present for NQR EX08 63 48

Long Bone fragments

Rib fragments

Cranial flat bone fragments

3 tooth root fragments

#### **TOTAL WEIGHT OF BONE**

Table 1 Weight of bone for NQR EX08 63 48

Group	Weight in grams	
Long Bone	Shafts	174.1 g
Axial Skeleton	Ribs	85.7 g
Skull	Small frags	33.8 g
	Man/max	0.6 g
Unidentifiable bone	Less than 10mm	452.8
Total weight	747.0 g	

#### DEGREE OF FRAGMENTATION AND OXIDATION

Largest fragment = 30mm

Average fragment = less than 10mm

Level of oxidation = white, completely oxidized

## NQR EX08 205 12

#### INVENTORY OF BONES AND DENTITION

Bones Present for NQR EX08 205 12

Distal end of ulna

Rib fragments

Long bone fragments

Cranium fragments of the flat bones

Phalange fragments

#### TOTAL WEIGHT OF BONE

Table 1 Weight of bone for NQR EX08 205 12

Group	Weight in grams	
Long bones	Small shafts	15.3
	Large shafts	7.7
Axial skeleton	Ribs	5.4
Skull	Frags	12.0
Unidentifiable bone	Phalanges	1.8
	Fragments	124.1
Total weight	166.3 g	

#### DEGREE OF FRAGMENTATION AND OXIDATION

Largest fragment = 30mm

Average fragment = less than 10mm

Level of oxidation = grey with some white, nearly complete to completely oxidized

## NQR EX08 228 16

#### **INVENTORY OF BONES AND DENTITION**

Bones Present NQR EX08 228 16

Cranium fragments of the flat bones

Long bone fragments

Rib fragments

Phalange fragments

## TOTAL WEIGHT OF BONE

Table 1 Weight of bone for NQR EX08 228 16

Group	Weight in grams	
Long bone	Small shafts	30.6 g
	Large shafts	13.6 g
Axial skeleton	Ribs	1.4 g
Skull	Frags	23.6 g
Unidentifiable bone	Phalange	2.3 g
	Fragments	255.9 g
Total weight	327.4 g	<u>·</u>

#### **DEGREE OF FRAGMENTATION AND OXIDATION**

Largest fragment = 40mm

Average fragment = 5 mm

Level of oxidation = grey with some white, nearly complete to completely oxidized

## NQR EX08 249 18

#### **INVENTORY OF BONES AND DENTITION**

Bones Present for NQR EX08 249 18

Cranium fragments of the flat bones

Rib fragments

Phalange fragments

Long Bone fragments

#### TOTAL WEIGHT OF BONE

Table 1 Weight of bone for NQR EX08 249 18

Group	Weight in grams	
Long Bone	Ends	6.0 g
	Small shafts	26.8 g
	Large shafts	36.4 g
Axial skeleton	Ribs	4.1 g
Skull	Fragments	25.4 g
Unidentifiable bone	Phalanges	3.3 g
	Fragments	99.8 g
Total weight	201.8 g	

#### **DEGREE OF FRAGMENTATION AND OXIDATION**

Largest fragment = 30mm

Average fragment = 5 mm

Level of oxidation = white, completely oxidized

## **NQR EX 250 19**

#### **INVENTORY OF BONES AND DENTITION**

Bones Present NQR EX 250 19

Cranium fragments of the flat bones

Ribs fragments

Long bones fragments of tibia, humerus, radius, femur

Carpals, Phalange fragments

Pelvis fragments

#### TOTAL WEIGHT OF BONE

Table 1 Weight of bone for NQR EX 250 19

Group	Weight in grams	
Long bones	Small shafts	292.3
Axial skeleton	Pelvis	4.1
	Ribs	174.8
Skull	Frags	126.6
Unidentifiable bone	Fragments	556.5
	Carpals/phalanges	8.6
Total weight	1162.9g	<u>.</u>

#### DEGREE OF FRAGMENTATION AND OXIDATION

Largest fragment = 70mm

Average fragment = 20-50mm

Level of oxidation = grey with some white, nearly complete to completely oxidized

#### **NOTES:**

Based on the weight of this individual, 1162.9g (between 1001.5g-2422g), this is a complete inhumation.

## NQR EX08 306 54 307

#### **INVENTORY OF BONES AND DENTITION**

Bones Present for NQR EX08 306 54 307

Cranium fragments of the flat bones

Long bones fragments, ends of humerus/femur, and ulna

Vertebra fragments

Phalanges proximal ends

Rib fragments

Single molar tooth root

#### TOTAL WEIGHT OF BONE

Table 1 Weight of bone for NQR EX08 306 54 307

Group	Weight in grams	
Long bones	Ends	6.0
	Large shafts	184.4
Axial skeleton	Vertebra	3.3
	Pelvis	7.4
	Ribs	40.6
Skull	Frags	20.7
	Teeth/roots	0.1
Unidentifiable bone	Fragments	567.1
	Phalanges	2.2
Total weight	831.8 g	

#### DEGREE OF FRAGMENTATION AND OXIDATION

Largest fragment = 15mm

Average fragment = 10-15mm

Level of oxidation = white, completely oxidized. There was a group of long bone shaft fragments that were black/grey. This suggests this section was not fully oxidized, unlike the rest of the inhumation.

#### **Extra Debris**

Charcoal 1.1 g

## NQR EX08 366 45

#### INVENTORY OF BONES AND DENTITION

Bones Present NQR EX08 366 45

Long bone fragments

Cranium fragments of the flat bones

Rib fragments

Phalanges fragments

Carpals fragments

Tooth roots, anterior teeth

#### ESTIMATION OF AGE AT DEATH

Adolescent based on the apex completion of a lower premolar root. First or second premolar A1/2 = 11.6 -13.5 yrs.

#### TOTAL WEIGHT OF BONE

Table 1 Weight of bone for NQR EX08 366 45

Group	Weight in grams	
Long Bone	Small shafts	43.6 g
	Large shafts	9.4 g
Axial skeleton	Ribs	6.6 g
Skull	Fragments	27.3 g
	Man/max	1.3 g
Unidentifiable bone	Carpals	2.1 g
	Phalange	4.5 g
	Fragments	454.6 g
Total weight	549.4 g	

#### **DEGREE OF FRAGMENTATION AND OXIDATION**

Largest fragment = 37mm

Average fragment = 10mm

Level of oxidation = white, completely oxidized

## NQR EX08 374 59

#### **INVENTORY OF BONES AND DENTITION**

Bones Present NQR EX08 374 59

Long bone fragments

Cranium fragments of the flat bones

Phalange fragments

Rib fragments

Tooth root

#### **TOTAL WEIGHT OF BONE**

Table 1 Weight of bone for NQR EX08 374 59

Group	Weight in grams	
Long Bones	Ends	0.5 g
	Small shafts	82.0 g
	Large shafts	43.9 g
Axial skeleton	Ribs	5.3 g
Skull	Fragments	1.6 g
	Tooth root	0.2 g
Unidentifiable bone	Phalange	4.3 g
	Fragments	210.5 g
Total weight	348.3 g	

#### DEGREE OF FRAGMENTATION AND OXIDATION

Largest fragment = 41mm

Average fragment = less than 5mm

Level of oxidation = white, completely oxidized

#### **Extra Debris**

Animal bone 1.3g

## NQR EX08 751 31

#### **INVENTORY OF BONES AND DENTITION**

Bones Present for NQR EX08 751 31

Long bone fragments

Cranium fragments of the flat bones

Rib fragments

Phalange fragments

#### **TOTAL WEIGHT OF BONE**

Table 1 Weight of bone for NQR EX08 751 31

Group	Weight in grams	
Long Bone	Small shafts	44.0
	Large shafts	33.8
Axial skeleton	Ribs	15.3
Skull	Small frags	39.6
Unidentifiable bone	Phalange	6.2
	Fragments	351.7
Total weight	490.6 g	

#### **DEGREE OF FRAGMENTATION AND OXIDATION**

Largest fragment = 42mm

Average fragment = less than 10mm

Level of oxidation = grey to white, nearly complete to completely oxidized

## NQR EX08 378 49

#### **INVENTORY OF BONES AND DENTITION**

Bones Present for NQR EX08 378 49

Cranium fragments of the flat bones

Rib fragments

Long bone fragments

#### TOTAL WEIGHT OF BONE

Table 1 Weight of bone for NQR EX08 378 49

Group	Weight in grams	
Long Bone	Small shafts	33.9 g
	Large shafts	27.3 g
Axial skeleton	Ribs	7.8 g
Skull	Frags	35.1 g
Unidentifiable bone	Fragments	325.2
Total weight	429.3 g	

## DEGREE OF FRAGMENTATION AND OXIDATION

Largest fragment = 31mm

Average fragment = 7mm

Level of oxidation = white, completely oxidized

## **NQR EX09 2567**

#### **INVENTORY OF BONES AND DENTITION**

Bones Present NQR EX09 2567

7 Anterior tooth roots

Phalange fragments

Long bone fragments

Cranium fragments of the flat bones

Rib fragments

#### TOTAL WEIGHT OF BONE

Table 1 Weight of bone for NQR EX09 2567

Group	Weight in grams	
Long Bone	Ends	1.5 g
	Small shafts	3.4 g
	Large shafts	4.8 g
Axial skeleton	Ribs	8.8 g
Skull	Small frags	11.0 g
	Tooth roots	0.8
Unidentifiable bone	Phalange	1.3 g
	Fragments	24.2 g
Total weight	55.8 g	

#### **DEGREE OF FRAGMENTATION AND OXIDATION**

Largest fragment = 30

Average fragment = less than 10mm

Level of oxidation = grey with some white, nearly complete to completely oxidized

## NQR EX09 II 2566 30

#### **INVENTORY OF BONES AND DENTITION**

Bones Present NQR EX09 II 2566 30

Long bones fragments of humerus, femur, radius, ulna

Cranium fragments of flat bones, temporalis, sphenoid, zygomatic, mandible, and maxilla

Rib fragments

Phalanges and carpals fragments

Vertebra fragments

Pelvis fragments

Tooth roots

Scapula fragments

Patella fragments

#### **TOTAL WEIGHT OF BONE**

Table 1 Weight of bone for NQR EX09 II 2566 30

Group	Weight in grams	
Long bones	Ends	18.6
	Fragments	525.4
Axial skeleton	Vertebra	77.3
	Pelvis	19.9
	Ribs	243.0
Skull	Frags	258.7
	Teeth/roots	5.5
	Man/max	12.3
Unidentifiable bone	Fragments	1305.5
	Scapula	4.7
	Carpals	8.4
	Phalanges	8.0
	Patella	2.7
Total weight	2490.0 g	

#### DEGREE OF FRAGMENTATION AND OXIDATION

Largest fragment = 40mm

Average fragment = 10-20mm

Level of oxidation = white, completely oxidized. The vertebra had more black/grey fragments than white.

#### **Extra Debris**

Animal bone = 10.5 g

#### **NOTES:**

Based on the weight of this individual, 2490.0 g (between 1001.5g-2422g), this is a complete inhumation.

## 13. CONCLUSION

The table below summarizes the findings of the osteological analysis of cremated bone deposit.

## **NEAT COURT CREMATIONS UNDER 50 grams**

Individual Numbers	Type of deposit	Demographic data: Age	Demographic data: Sex	Total weight of cremated materials	Degree of fragmentation – average fragment size	Maximum Fragment Size	Oxidation of bone	Presence and type of pyre goods or debris
NQR EX08 192 10	) Unknown	Unknown	Unknown	0.7g	Under 5mm	12 mm	White/grey	No
NQR EX08 237 73	3 Unknown	Unknown	Unknown	0.5 g	8mm	6 mm	White/grey	No
NQR EX08 243 17	' Unknown	Unknown	Unknown	8.5 g	13 mm	24 mm	White/grey	No
NQR EX08 246 39	Unknown	Unknown	Unknown	6.1 g	10 mm	13 mm	White/grey	No
NQR EX08 252 21	Unknown	Unknown	Unknown	0.1 g	2 mm	2 mm	White/grey	No
NQR EX08 262 23	3 Unknown	Unknown	Unknown	30 g	10mm	21 mm	White/grey	No
NQR EX08 263 35	5 Unknown	Unknown	Unknown	3.7 g	8 mm	14 mm	White/grey	No
NQR EX08 265 36	S Unknown	Unknown	Unknown	6.6 g	4 mm	12 mm	White/grey	No
NQR EX08 276 38	3 Unknown	Unknown	Unknown	0.5 g	6 mm	9 mm	White/grey	No
NQR EX08 284 41	Unknown	Unknown	Unknown	21.0 g	10 mm	21 mm	White/grey	No
NQR EX08 285 42	2 Unknown	Unknown	Unknown	0.3 g	Under 5 mm	5 mm	White/grey	No
NQR EX08 333 43	3 Unknown	Unknown	Unknown	0.1 g	5 mm	7 mm	White	Animal tooth
NQR EX08 367 46	S Unknown	Unknown	Unknown	4.0 g	6 mm	12 mm	White/grey	No

NQR EX08 373 58	Unknown	Unknown	Unknown	19.9 g	Less than 10 mm	22 mm	White/grey	No	
NEAT COURT CREMATIONS UNDER 50 grams count.									
Individual Numbers	Type of deposit	Demographic data: Age	Demographic data: Sex	Total weight of cremated materials	Degree of fragmentation – average fragment size	Maximum Fragment Size	Oxidation of bone	Presence and type of pyre goods or debris	
NQR EX08 377 50	Unknown	Unknown	Unknown	22.9 g	Less than 10 mm	20 mm	White/grey	No	
NQR EX08 378 49	Unknown	Unknown	Unknown	44.7 g	Less than 1 mm	Less than 1 mm	White/brown	No	
NQR EX09 2560 29	Unknown	Unknown	Unknown	17.2 g	Under 10 mm	21 mm	White/black	No	

# **NEAT COURT CREMATIONS OVER 50grams**

Individual Numbers	Type of deposit	Demographic data: Age	Demographic data: Sex	Total weight of cremated materials	Degree of fragmentation – average fragment size	Maximum Fragment Size	Oxidation of bone	Presence and type of pyre goods or debris	
NQR EX08 62 48	Unknown	Unknown	Unknown	747.0 g	10 mm	31 mm	White/grey	No	
NQR EX08 205 12	Unknown	Unknown	Unknown	166.5	10 mm	30 mm	White/grey	No	
NQR EX08 228 16	Unknown	Unknown	Unknown	327.3 g	5 mm	40 mm	White/grey	No	
NQR EX08 249 18	Unknown	Unknown	Unknown	201.7 g	5 mm	30mm	White/grey	No	
NQR EX08 250 19	Unknown	Unknown	Unknown	1163.0 g	20-50mm	70 mm	White	No	
NQR EX08 306 54 307	Unknown	Unknown	Unknown	831.8 g	10-15 mm	17 mm	White/black	Animal bone Charcoal	
NQR EX08 366 45	Unknown	Adolescent	Unknown	549.8 g	10 mm	37 mm	White	No	
NQR EX08 374 59	Unknown	Unknown	Unknown	347.4 g	Less than 5 mm	41 mm	White	Animal bone	
NQR EX08 751 31	Unknown	Unknown	Unknown	490.0 g	Less than 10 mm	42 mm	White/grey	No	
NQR EX08 378 49	Unknown	Unknown	Unknown	429.5 g	7 mm	31 mm	White/grey	No	
NQR EX09 2567	Unknown	Unknown	Unknown	56.2 g	Less than 10 mm	30 mm	Grey	No	
NQR EX09 II 2566 30	Unknown	Unknown	Unknown	2490 g	10-20 mm	40 mm	White/grey	Animal bone	

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# Appendix 2. Osteological Analysis of Human Remains from Neatscourt

Kent Osteological Research and Analysis

1. PROJECT BACKGROUND

#### 1.1 SITE LOCATION

Neat Court Barrow was excavated in late 2008 and into 2009 by Swale and Thames Archaeological Survey Company. The site is located on the Isle of Sheppey, Queensborough. Neat Court Barrow, is thought to date from Early Bronze (NQR EX09 2699 earliest inhumation) to Roman (NQR EX09 2612 Roman burial) based on the small finds (pottery), position/orientation of skeletons and settlement structure.

#### 1.2 PRESERVATION

The initial excavation of the inhumations ranged from very well represented (NQR EX09 2673) to very poorly preserved (NQR EX09 2666). Inhumations were lifted in several sections and brought to KORA for post excavation and analysis. Each package was photographed, and removed from the matrix. Once removed, the bone became very fragile. For this reason, much of the morphological analysis was done *in situ* in the lab. Overall preservation for the 8 skeletons was poor, with several of the inhumations were represented by 50% or less of the overall skeleton.

Table 1.1 Preservation of skeletons

	Number of individuals
Less than 25%	3
25% - 50%	3
50% - 75%	1
Greater than 75%	1
Total	8

Biological sex and age were estimated for 5 of the 8 individuals. Stature could not be estimated on any of the individuals due to the poor preservation of the long bone. One individual (NQR EX09 2673) was found with osteoarthritis on the proximal head of the left radius. This was the only pathology found in all 8 individuals.

#### 2. METHODS

#### 2.1 ESTIMATION OF AGE AT DEATH

Methods to estimate the age at death were based upon the pubic symphsis, auricular surface, cranial suture closures and dental wear. Five juvenile and four adult age categories were created (Table 2.1). When estimating the age at death for individuals, certain variables must be considered, the most important is the life history of the individual (Cox, 2000). Disease and dietary differences can also affect the estimation of age at death. Therefore, consideration must be given to the region and populations that are being assessed (Deter, 2009; Mahoney, 2006; Schwartz, 1995).

#### Table 2.1 Age Categories

Juvenile Adult

Perinate = 3 mts to Birth Young Adult 1 17-25 Infant = 1wk to1 year Young Adult 2 26-35

Early Childhood = 2 to 5 years Middle Aged Adult 36-45 Late Childhood = 6 to 12 years Old Adult 45+

Adolescence = 13 to 16 years

#### 2.1.1 Pubic symphysis

The morphological degeneration of pubic symphsis surface (Brooks and Suchey, 1990) is considered to be among the most reliable criteria for estimating age-at-death in adult human remains (Buikstra and Unelaker, 1994). The KORA age estimates were based on the Brooks and Suchey (1990) method, which is summarised in Buikstra and Ubelaker (1994).

#### 2.1.2 Auricular Surface

Morphological changes accumulate with age, and in the sacro-iliac joint are usually independent of osteoarthritic or osteophytic change (Schwartz, 1995). As the sacro-iliac joint is very complex, an estimation of age-at-death from the auricular surface is more difficult than for the pubic symphysis. It is, however, very important for bioarchaeologists, as it is often very well preserved archaeologically (Buikstar and Ubelaker, 1994; Krogman and Isçan, 1986; Schwartz, 1995). The left auricular surface, (right side was used if left was not present or unable to assess) was assigned one of the eight phases described by Ubelaker (1989), based upon earlier work by Lovejoy *et al.* (1985) and Meindl and Lovejoy (1989).

#### 2.1.3 Cranial assessment

Ectocranial vault suture closure is associated with more extreme age than the previous two methods and is more accurate in the higher age categories. While suture closures do not appear to be sexually or racially bias, it does have the disadvantage of broad age ranges (Key et al. 1994). They are based on the degree of ectocranial suture closure of the cranial vault and lateral aspect of the skull (Schwartz 1995). Most researchers believe that age estimates based on suture closure are only useful when other methods cannot be used, or utilised in conjunction with other methods (Buikstra and Ubelaker, 1994; Key *et al.*, 1994; Meindl and Lovejoy, 1995). The latter stance is adopted by KORA using Meindl and Lovejoy (1985).

A composite score was taken for the vault sites (mid-lambdoid, lambda, obelion, anterior sagittal and bregma) and the lateral-anterior sites (pterion, midcoronal, spheno-frontal, inferior spheno-temporal, superior spheno-temporal). Compiled scores from these vault landmark sites were compared to Meindl and Lovejoy (1985) table to estimate the age at death. This method cannot be used on cranial fragments.

#### 2.1.4 Dental attrition wear

Dental wear independent of diet, can used to estimate age. Miles (1963) devised a scheme which relates the wear of the lower molar teeth to the age of the individual. In order to use this method, one must ensure that the skeleton has a normal pattern of dental eruption and occlusion and that the wear gradient along the molar row is similar to that established by Miles (1963), i.e. the M1, M2 and M3 should give roughly similar age estimates. Dental attrition wear can give a reliable age range if all three molars are present.

#### 2.2 ESTIMATION OF BIOLOGICAL SEX

Biological sex estimation depends on the reliable detection of sexually dimorphic characteristics in the human skeleton (Brothwell, 1981; Cox and Mays, 2000; Krogman and Isçan, 1986). Assessment of the morphological features of the cranium are by direct observation (Krogman 1955). When data from the cranium and pelvis are combined, the accuracy of the sex estimations are increased (Mays and Cox, 2000). Sex-based characteristics are partially age related, appearing or becoming more pronounced at puberty, and many are affected by extreme old age (Krogman and Isçan, 1986; Buikstra and Ubelaker, 1994; Schwartz, 1995). KORA uses morphological features of both the pelvis and the cranium when possible for estimation of biological sex. In very fragmented individuals where morphological analysis could not be done, metric analysis of the femur was used.

#### 2.2.1 Pubis assessment

The pelvis has several reliable features for sex estimation. The scored morphological features in the pelvis were:

Overall shape/structure Prearuicular suclus

Ventral arch Pubic symphysis height

Greater sciatic notch Pubic rami

Width of sacral ala Sub-pubic concavity

Anterior sacral curvature Inferior ramus

Sacral auricular surface Obturator foramen

Iliac tuberosity Ishchial tuberosity

Iliac blade Ischial spine

Iliac crest Medial ischio-pibic ridige

Auricular surface

#### 2.2.2 Cranial assessment

Cranial sex estimation was primarily based on morphology. Certain morphological features of the cranium tend to be larger or more robust in males than in females (Buikstra and Ubelaker, 1994). Main attributes of the cranium used were:

Overall shape/structure Nuchal area

Glabellar profile Occipital protuberance
Frontal slope Mandibular condyles
Supraorbital ridges Mandibular ramus
Orbital outline Mental protuberance
Nasal bones Angle of mandible

Mastoid process

Sex classifications for the cranium and for the pelvis were based on a 1–5 scale (stage 1, definitely female - stage 5, definitely male) from *Standards for Data Collection from Human Skeletal Remains* (Buikstra and Ubelaker, 1994). Sex estimation techniques were scored independently of one another and a composite score was given.

#### 2.2.3 Metric assessment

When morphological features can not be assessed, metric analysis is used to estimate biological sex. Measurements that are taken are the vertical diameter of the femoral head (Stewart, 1979) and circumference of femoral mid-shaft (Black, 1978).

Metric analysis guidelines based on Stewart (1979) and Black, (1978).

Femoral vertical head diameter >47.6mm 46.6-47.5mm 43.6-46.5mm 42.6-43.5mm

Femoral mid-shaft circumference Greater than 86mm Less than 86mm

#### 2.3 STATURE

#### 2.3.1 Stature estimation

Stature was estimated using several methods. These methods were applied when preservation allowed. The methods used by KORA are the long bone length (Trotter, 1970), femur/stature ratio (Feldsman *et al*, 1990) and Fully's method (Fully, 1956). The long bone length (Trotter, 1970) uses the length of all available long bones, taking the maximum length. Tables are then used to estimate the stature of each bone, and a medial result is used to best estimate stature. Femur/ stature ratio is estimated by 3.74x (bicondylar length of femur) (Feldsman *et al*, 1990). The Fully method (Fully, 1956) stature is estimated by measuring the: (cranial height) + (vertebral body heights) + (femoral bicondylar length) + (tibia length) + (height of talus and calcaneus) + soft tissue correction. When necessary, stature was estimated from fragmented long bones (femur, tibia), using the regression equations devised by Jacobs (1992).

#### 2.4 PATHOLOGY

#### 2.4.1 Health and disease

Several methods are available to record palaeopathologial skeletal and dental remains. Methods used by KORA are provided by Buikstra and Ubelaker (1994), and Hillson (2000, and 2001). These systems account for some of the previously discussed problems, such as an individuals age, sex and the location of dental disease upon individual dentition. The methods used by KORA also includes the recording of other dental conditions such as dental enamel hypoplasia and attrition by incorporating existing and appropriate recording methods (Molnar *et al.*, 1983).

- 3. INDIVIDUAL SKELETON REPORTS
- 3.1 SKELETON NQR EX09 2089

Inhumation NQR EX09 2089 was brought to KORA in 10 foil wrapped packages. The contents within were still in the clay like matrix.

#### **PRESERVATION**

Preservation of NQR EX09 2089 was very poor with less than 25% of the inhumation recovered. The inhumation was brought to KORA still in matrix with labels of the bones contained. Once removed from matrix bone identification was not possible.



#### INVENTORY OF BONES AND DENTITION

All bones were fragments from 40mm-100mm. The archaeologists specified what they were however once in the lab, bones could not be identified as archaeologist specified. Therefore this report does not say specifically what the fragments are.

One upper right second molar cusp was found within matrix labelled "Skull".

#### **SUMMARY**

NQR EX09 2089 was 13-16 yrs (Adolescent) based on the completion of second molar root.

NQR EX09 2326 was still within the matrix in two packages. One contained fragments of the right humerus, radius and ulna. The other package contained cranial fragments and dentition.

#### **PRESERVATION**

This inhumation was in very poor preservation, with less than 25% of the inhumation was recovered.



#### INVENTORY OF BONES AND DENTITION

Fragments of the parietal, temporal, occipital, frontal bones

Right humerus

Right ulna and radius shaft fragments

Table 1 Dentition present for NQR EX09 2326

Upper l	Upper Right DENTITIO									TION Upper Left							
M3	M2	M1	P2	P1	С	12	I1	I1	I2	С	P1	P2	M1	M2	M3		
			X	X	X						X						
	X	X	X	X	X	X	X	X		X	X	X					
M3	M2	M1	P2	P1	С	I2	I1	I1	I2	С	P1	P2	M1	M2	M3		
Lower	Lower Right																

#### **SUMMARY**

NQR EX09 2326 was in very poor preservation with less than 25% recovered. This individual was most likely young adult based on the completion of the second M2 root (13.9yrs), and minimal occlusal wear on both the molars.

This inhumation was in a crouched position. On the right side with the hands near the face and the knees brought up close to cranium.



the

### **PRESERVATION**



Skeleton NQR EX08 2545 was in poor preservation, with 25-50% of the inhumation recovered. Bones were very fragile and fragmented once removed from the clay matrix.



### INVENTORY OF BONES AND DENTITION

Table 1 Bones present NQR EX08 2545

Cranium	L	R	P	Foot	L
Mandible	F	F		Talus	X
Frontal			F	Calcaneus	X
Parietal	F	F		Hand	
Occipital			F	P.prox	F
Temporal	F	F		P.int	F
Sphenoid	F	F		Vertebrae	P
Maxilla	F	F		C1-S5	Frags
Scapula	F			Ribs	Frags
Humerus	F	F			
Radius	F	F			
Ulna	F	F			
Acetabulum	F				
Ilium	F				
Ischium	F				
Femur	F	F			
Patella	F	F			
Tibia	F	F			
Fibula	F	F			

Table 2 Dentition present for NQR EX08 2545

Upper	Right		Upper Right DENTITION												r Left
M3	M2	M1	P2	P1	С	I2	I1	I1	I2	С	P1	P2	M1	M2	M3
X	X	F	F	X	X		X	X		X	X	X	X	X	F
M3	M2	M1	P2	P1	С	I2	I1	I1	I2	С	P1	P2	M1	M2	M3
Lower	Lower Right								Lower Left						

### ESTIMATION OF AGE AT DEATH

Table 3 Adult age estimation for NQR EX08 2545

Method	Age group
Dental wear	LR = 40-46 yrs
	LL = 38-44 yrs
Composite score	45+

NQR EX08 2545 had a composite score of 45+yrs, the Old Adult group

# ESTIMATION OF BIOLOGICAL SEX

# Table 4 Biological sex estimation

Pubic assessment	
Circumference of femoral mid-shaft	87mm
Composite score	Probable male

NQR EX08 2545 had a composite score of 4, probable male.

# NOTES

Evidence of cremation. Some slight oxidation on bone, black to grey sections on long bones. .

Very robust

Foot bones were very fragmented, and not able to side.

### **SUMMARY**

NQR EX08 2545 was a probable male, 45+yrs (Old Adult). The preservation was poor with 25-50% recovered.



NQR II EX09 2611 was well represented when first excavated, (image below), however the nature of the clay and preservation of the bone made the bone very fragmentary once removed from matrix. This individual was lifted in several pieces and brought to the lab in several packages (pictured on the left).



### **PRESERVATION**



The overall preservation of NQR 11 EX09 was moderately preserved with 50-75% of the individual recovered. The nature of the matrix, "London Clay" seriously damaged the external cortical bone.



# INVENTORY OF BONES AND DENTITION

Table 1 Bones present NQR II EX09 2611

Cranium	L	R	P	Foot	L	R	Vertebrae	P
Mandible	F	F		Talus	X	X	C3	X
Frontal			F	Calcaneus	X	X	C4	X
Parietal	F	F		Cuboid	X	X	C5	X
Occipital			F	Navicular	X	X	C6	X
Temporal	F	F		Cune1	X		C7	X
Maxilla	F	F		Cune 2	X		T1	X
Sternum			F	Cune 3	X		T2	X
Manubrium			F	Hand			T3	X
Body			F	Scaphoid	X		T4	X
Xiphoid			F	Triquetral	X		T5	X
Scapula	F	F		Trapezium	X		Т6	X
Clavicle	F	F				1	T7	X
Humerus	F	F					T8	X
Radius	F			-			Т9	X
Ulna	F	F		-			T10	X
Acetabulum	F	F		-			T11	X
Ilium	F	F		-			T12	X
Ischium	F	F		-			L1	X
Femur	F	F					L2	X
Tibia	F	F		-			L3	X
Fibula	F	F		-			L4	X
	1						L5	X
							S1	F
							S2	F
							S3	F
							S4	F
							S5	F
							Rib	17
							Frags	

Table 2 Dentition present NQR II EX09 2611

Upper	Right				DENTI	Upper							r Left		
M3	M2	M1	P2	P1	С	I2	I1	I1	I2	С	P1	P2	M1	M2	M3
X	X	X	X		X	X	X	X	X	X	X		X	X	X
X	X	X	X	X			X	X	X	X	X		X		X
M3	M2	M1	P2	P1	С	I2	I1	I1	I2	С	P1	P2	M1	M2	M3
Lower	Lower Right								er Left						

### ESTIMATION OF AGE AT DEATH

Table 3 Adult age estimation of NQR II EX09 2611

Method	Age group
Dental wear	UR = 18-22 yrs
	UL = 20-22 yrs
	LR = 18-20 yrs
	LL = 17-20  yrs
Composite score	17-25

NQR 11EX09 2611 had a score of 17-25 yrs, the Young Adult group. The upper third molar had erupted, but believed to not be in full occlusion.

#### ESTIMATION OF BIOLOGICAL SEX

Table 4 Biological sex estimation for NQR 11 EX09 2611

Morphological Cranial assessments		Based on in situ observations	
Overall shape/structure	4	Occipital protuberance	5
Supraorbital ridges	4	Mental protuberance	5
Angle of mandible	5		
Metric assessment		Measurements	
Vertical head of femur		50.8 mm	
Mid-shaft circumference		95 mm	
Composite score		Definite Male	

NQR 11 EX09 2611 had a composite score of 4.6 from the morphological features, and definite male metric analysis. This individual was male.

#### **NOTES**

Bone was very fragmented once matrix was removed.

Matrix was very difficult to remove, with out damaging the bone.

Evidence of cremation through out the bony remains as well as the matrix. The dentition was discoloured, (grey, to brown), and dentition was fractured at the CEJ.

#### **SUMMARY**

NQR II EX09 2611 was a Young Adult (17-25yrs) male. There was some ash throughout the bone remains and within the matrix, which may suggest exposure to extreme heat post mortem. Many of the dentition was discoloured, and fractured at the cementoenamel junction. The length of the exposure or the temperature was not for any length of time since the bone was not fully oxidized.

NQR EX09 2614 was brought to KORA in several bags, still in the matrix. Because of the nature of "London Clay", the preservation of the remains after removal of the matrix was poor. Discoloration of some of the bone, rusty coloration of enamel on the teeth, and ash within the matrix makes possible that NQR EX09 2614 was exposed to intense heat post mortem.



### **PRESERVATION**



The bone was in a poor preservation, with 25-50% recovered. The cranium was very fragmented however the crowns of the dentition remained intact.



# INVENTORY OF BONES AND DENTITION

Table 1 Bones present for NQR EX 09 2614

Cranium	L	R	P	Foot	L	R	Vertebrae	P
Frontal			F	P.prox		F	C1	F
Parietal	F	F		Hand			C2	F
Occipital			F	Scaphoid		X	C3	F
Temporal	F	F		Triquetral		X	T1	F
Maxilla		F		Trapezium		X	T2	F
Scapula		F		Capitate		X	T3	F
Clavicle	F	F		Mc1		X	T4	F
Humerus	F	F		Mc2	F	F	Rib	F
							Frags	
Radius	F	F		Mc3	X			
Ulna	F	F		Mc4	F			
Acetabulum		F		P.prox	F	F		
Ilium		F		P.int	F	F		
Ischium		F		P.dist	F	X		
Pubis		F						
Femur	F	F						
Tibia	F	F						
Fibula	F	F						
Patella	X							

Table 2 Dentition for NQR EX 09 2614

Upper	Right					D	ENTITI	ON			Upper Left				
M3	M2	M1	P2	P1	С	I2	I1	I1	I2	С	P1	P2	M1	M2	M3
X		X	X		X	X	X	X	X	X	X	X		X	
		X	X	X			X	X			X	X	X		X
M3	M2	M1	P2	P1	С	I2	I1	I1	I2	С	P1	P2	M1	M2	M3
Lower	Lower Right								er Left						

### ESTIMATION OF AGE AT DEATH

Table 3 Estimation of age at death for NQR EX09 2614

Method	Age group
Dental wear	Left 16-24 yrs UR 18-20 yrs
Composite score	17-26

NQR EX09 2614 had a composite score of 17-25yrs, the Young Adult 1 group.

# ESTIMATION OF BIOLOGICAL SEX

Table 4 Estimation of biological sex for NQR EX09 2614

	Mean measurement
Right femoral head	42.2mm
Left femoral shaft circ.	78mm
Right femoral shaft circ.	75mm
Composite score Probable female	

Individual NQR EX 09 2614 had a composite score of the probable female group.

# NOTES

The presence of ash and bones discoloration indicated a cremation. The enamel was often a rusty colour, associated with intense heat.

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# SUMMARY

NQR EX09 2614 was a Young Adult (17-26yrs), probable female.

NQR EX09 2635 was well preserved on site, however once lifted, bone quickly broke apart. Images were taken of specimens *in situ* prior to removal of matrix.





# **PRESERVATION**

Individual NQR EX09 2635 was in poor preservation with 25%-50% present.





### INVENTORY OF BONES AND DENTITION

Table 1 Bones present for NQR EX09 2635

Cranium	L	R	P	Foot	L	R	Vertebrae	P
Mandible	F	F		Talus	X		C1-L5	F
Frontal			F	Calcaneus	F	F	Rib Frags	-
Parietal	F	F		Navicular	X			
Occipital			F	Cune1		F	-	
Temporal	F	F		Cune 2		F	_	
Sphenoid	F			Mt1		F	_	
Zygomatic		F		Mt2		F	_	
Maxilla		F		Mt3		F	-	
Scapula		F		Mt4		F	_	
Clavicle		F		P.int		F	_	
Humerus		F				<u> </u>		
Radius		F						
Ulna		F						
Acetabulum		F						
Ilium		F						
Ischium		F						
Pubis		F						
Femur	F	F						
Patella		F						
Tibia	F	F						
Fibula	F	F						

Table 2 Dentition present for NQR EX09 2645

Upper	Right		DENTITION										Upper Left		
M3	M2	M1	P2	P1	С	I2	I1	I1	I2	С	P1	P2	M1	M2	M3
X	X	X	X	X	X	X	X	X	X	X		X	X	X	X
	X		X	X		X	X	X	X		X	X	X	X	X
M3	M2	M1	P2	P1	С	I2	I1	I1	I2	С	P1	P2	M1	M2	M3
Lower	Lower Right								Lower Left						

### ESTIMATION OF AGE AT DEATH

Table 3 Estimation of age at death for NQR EX09 2645

Method	Age group
Dental wear	UR = 38-45 yrs

	UL = 38-44 yrs LL = 40-45 yrs
Composite score	45+

NQR EX 09 2635 had a composite score of 45+ that puts them into the Old Adult group.

#### ESTIMATION OF BIOLOGICAL SEX

Table 4 Biological sex estimation NQR EX09 2645

Pubic assessment	
Greater sciatic notch	4
Auricular surface	4
Femoral Measurement assessment	
Vertical femoral head length	44.98mm
Femoral mid-shaft circ.	90mm
Composite score	Probable male

NQR EX09 2645 had a composite score that puts then in the probable male group.

#### **NOTES**

The surviving bones were quite robust and indicative of a male.

Ash was present in the matrix and some of the bones had been discoloured to a grey due to exposure to extreme heat post mortem.

Bands of hypoplasia were observed on some of the anterior dentition.

#### **SUMMARY**

NQR EX 09 2635, was an Old Adult (45+), probable male.



NQR EX09 2666 was represented by cranial fragments only. No estimation of age, and biological sex were able to be carried out on this individual. No pathological conditions were present.

### **PRESERVATION**

The overall preservation of NQR EX092666 was very poor (less than 25% present).





### INVENTORY OF BONES AND DENTITION

Cranial fragments, (parietal, frontal and occipital), femoral shaft along with some unidentifiable long bones, and dentition was also recovered.

Table 1 Dentition present for NQR EX09 2666

Upper	Right		DENTITION Upper Left												
M3	M2	M1	P2	P1	С	I2	I1	I1	I2	С	P1	P2	M1	M2	M3
	X		X	X	X		X			X	X	X	X		-
			X	X	X							X			
M3	M2	M1	P2	P1	C	I2	I1	I1	I2	С	P1	P2	M1	M2	M3
Lower	Right			·				Low	er Left	•			·		

### **SUMMARY**

NQR EX09 2666 was very poorly preserved (less than 25% present) inhumation.



Once NQR EX09 2673 (image to the left) was lifted in 16 individual packages with bones still in matrix (image below).

### **PRESERVATION**



Individual NQR EX09 2673 was well represented with most of the remains brought into the lab (more than 75% remaining), but actual preservation of bone was very poor. Once removed from the matrix, the bone was very fragile.



### INVENTORY OF BONES AND DENTITION

Table 1 Bones present for NQR EX09 2673

Cranium	L	R	P	Foot	L	R	Vertebrae	P
Mandible		F		Talus	F	F	C1	F
Frontal			F	Calcaneus	alcaneus F F		C2	F
Parietal	F	F		Cuboid	F	F	C3	F
Occipital			F	Navicular	F	F	C4	F
Temporal	F	F		Cune1		F	C5	F
Zygomatic		F		Cune 2	F	F	C6	F
Maxilla		F		Cune 3	F	F	C7	F
Palatine		F		Mt1	F	F	T1	F
Nasal			F	Mt2	F	F	T2	F
Scapula	F	F		Mt3	F	F	T3	F
Clavicle	F			Mt4		F	L1	F
Humerus	F	F		Mt5	F	F	L2	F
Radius	F	F		P.prox	F	F	L3	F
Ulna	F	F		P.int	F		L4	F
Acetabulum	F			P.dist	Only	Sesamoids	L5	F
Ilium		F		Hand			S1	F
Ischium		F		Trapezium	F		S2	F
Pubis		F		Trapezoid	F		S3	F
Femur	F	F		Capitate	F		S4	F

Patella	F		Mc1		F	S5	F
Tibia	F	F	Mc2		F	Rib	F
						Frags	
Fibula	F	F	Mc3	F	F		
			Mc4	F	F		
			Mc5	F	F		
			P.prox	F	F		
			P.int	F	F		
			P.dist		F		

Table 2 Dentition present for NQR EX09 2673

Uppe	r Right					DE		Upper Left							
M3	M2	M1	P2	P1	С	I2	I1	I1	I2	С	P1	P2	M1	M2	M3
X			X	X											X
X	X	X			X	X	X	X	X	F	F	F			
M3	M2	M1	P2	P1	С	I2	I1	I1	I2	С	P1	P2	M1	M2	M3
Lowe	r Right						L	ower Le	eft						

# ESTIMATION OF AGE AT DEATH

Table 3 Adult age estimation for NQR EX09 2673

Method	Age group
Dental wear	LR = 22-28yrs
	M3 was in full occlusion and roots compete
Composite score	17-25

NQR EX09 2673 had a composite score of 17-25yrs, the Young Adult group.

### ESTIMATION OF BIOLOGICAL SEX

Table 4 Biological sex estimation for NQR EX09 2673

Cranial assessments				
Overall shape/structure 5		Angle of mandible	5	
Glabellar profile	5	Occipital protuberance	5	
		Mental protuberance	4	
Metric analysis		Measurements		
Vertical head of femur		49.5mm		
Mid-shaft circumference		94mm		
Composite score		Male		

Individual NQR EX09 2673 was very fragmented and estimating biological sex was mostly done while the bones were *in situ*. The morphological characteristics and the metric analysis showed NQR EX09 2673 to be probable male.



### **PATHOLOGY**



A polished articular surface of the proximal end of the radial head, known as eubination, suggests osteoarthritis at this joint, (elbow).

#### **NOTES**

Matrix on this individual was very difficult to remove without destruction of the bone surface.

Most all identification was done in situ when possible, e.g. sex.

Several of the bone was present with particles of ash, and ash was still attached to the bone surface, (sample taken). However, there was little evidence of cremation on the bone itself, ie colour, modification, or reshaping. The some of the dentition was fractured and grey from the heat of the fire. The best preserved bones were usually those of the mid-shafts of long bones.

#### **SUMMARY**

NQR EX09 2673 was a probable male, aged 17-25yrs (Young Adult) with evidence of osteoarthritis on the proximal end of the left radius. NQR EX09 2673 was very fragile once removed from matrix, however more than 75% of the individual was present.

### 3.9 MISCELLANEOUS BONE FRAGMENTS

Site	Individual number	Bone	
NQR EX09	2538	Human teeth, incisor, and premolar	
NQR EX09	2544	Long bone frags	
NQR EX09	2558	Sheep/goat teeth	
NQR EX09	2563	Animal teeth. Pig (suidae sus) lower third molar	
NQR EX09	2564	Cremated rib fragments	
NQR EX08	2571	Rib fragment, crushed thorasic vertebra	
NQR EX09	Human remains	Left distal tibia, fibula, phalange fragments, proximal head of 2end phalange, talus	

### 4. PROJECT SUMMARY

Site	Individual number	Age group	Biological Sex	Percent present	Pathology
NQR EX09	2089	Unknown	Unknown	Less than 25%	None
NQR EX09	2326	Unknown	Unknown	Less than 25%	None
NQR EX08	2545	Old Adult	Probable male	25-50%	None
NQR EX09	2611	Young Adult 1	Probable male	50-75%	None
NQR EX09	2614	Young Adult 1	Probable female	25-50%	None
NQR EX09	2635	Old Adult	Probable male	25-50%	None
NQR EX09	2666	Unknown	Unknown	Less than 25%	None
NQR EX09	2673	Young Adult	Probable male	More than 75%	Osteoarthritis on left radial head

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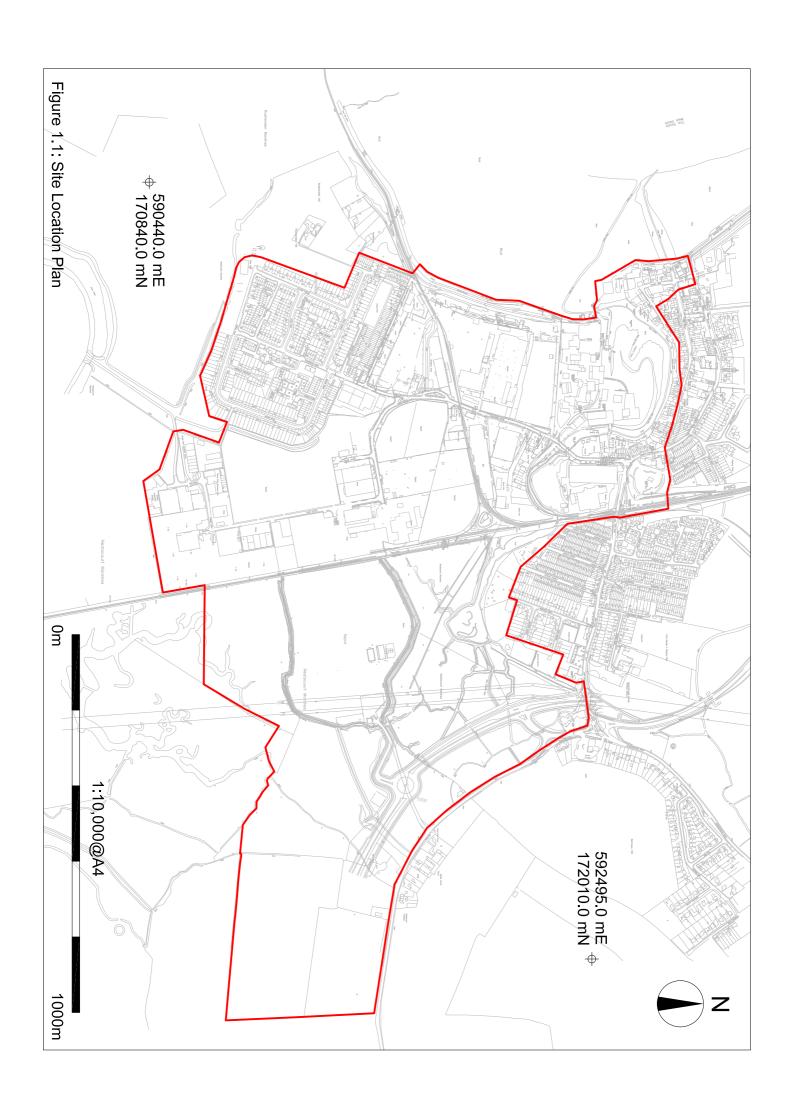
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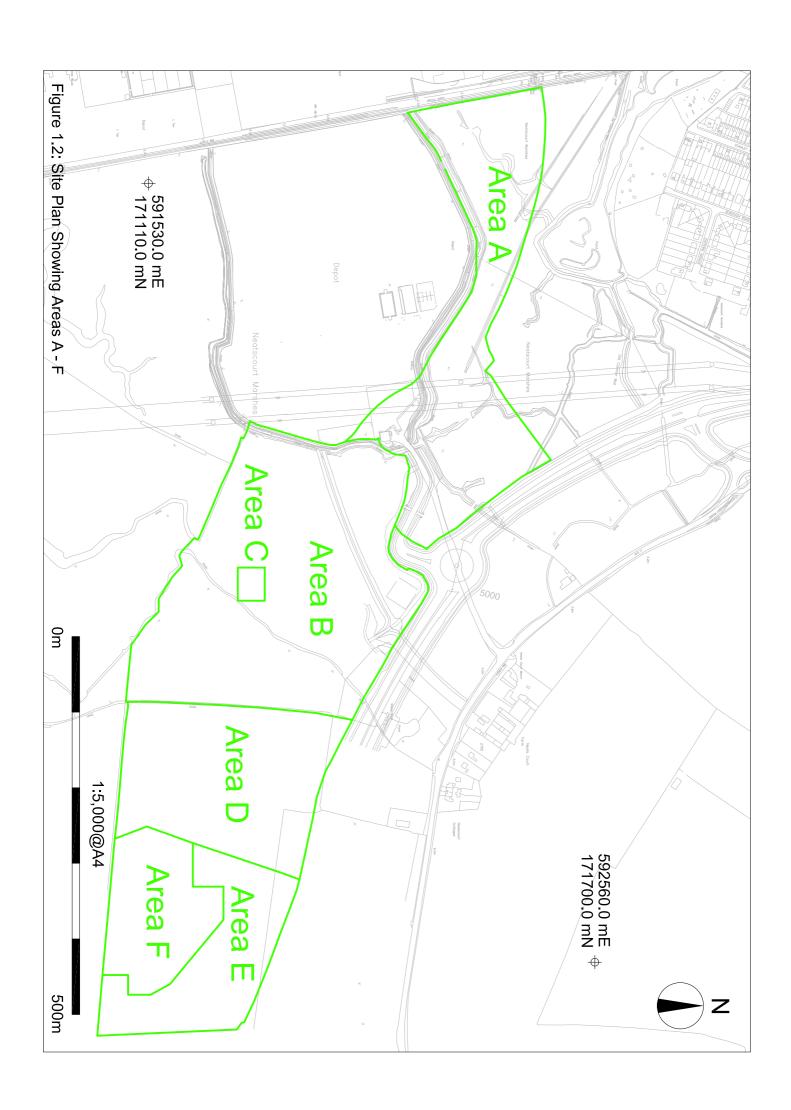
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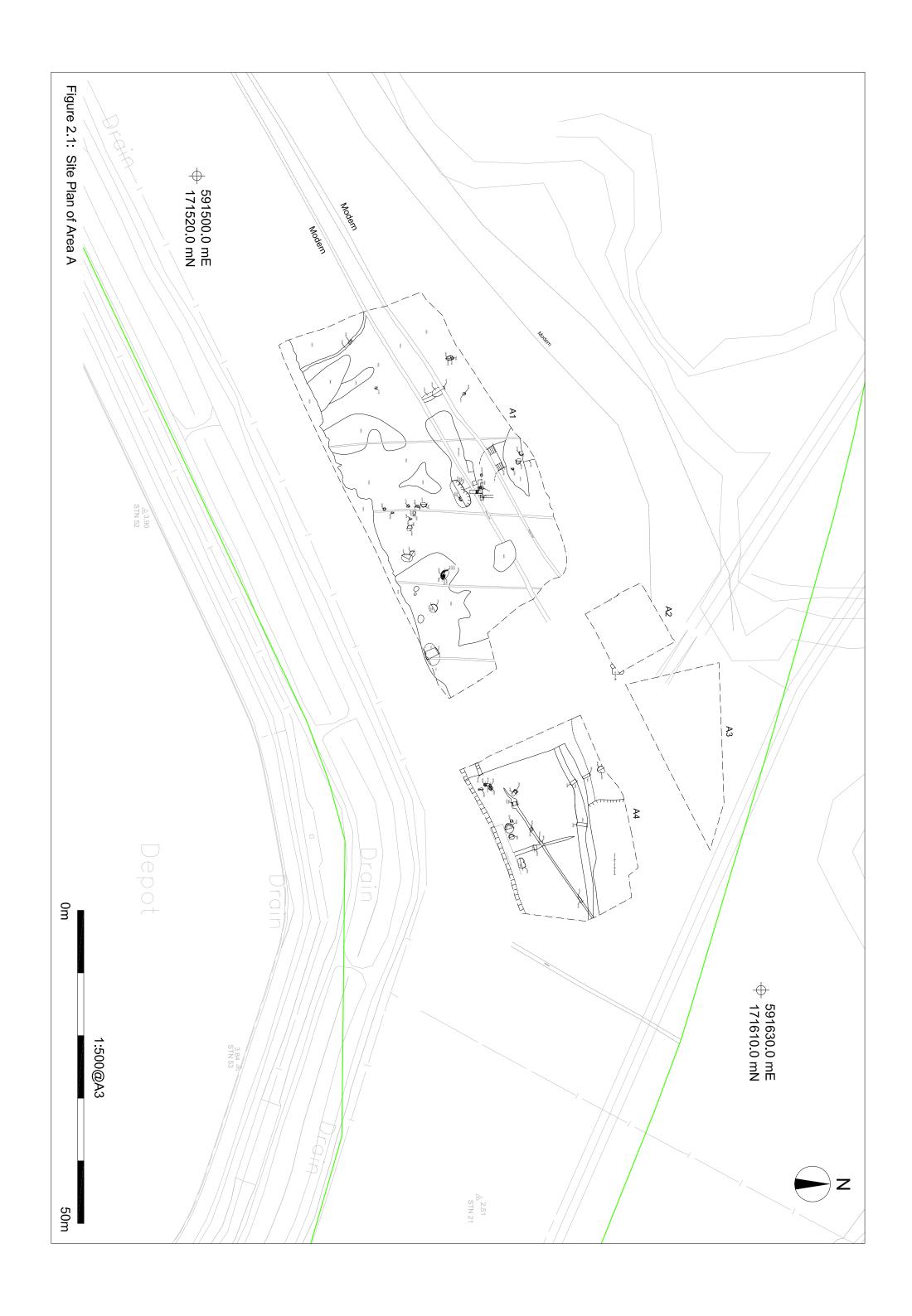
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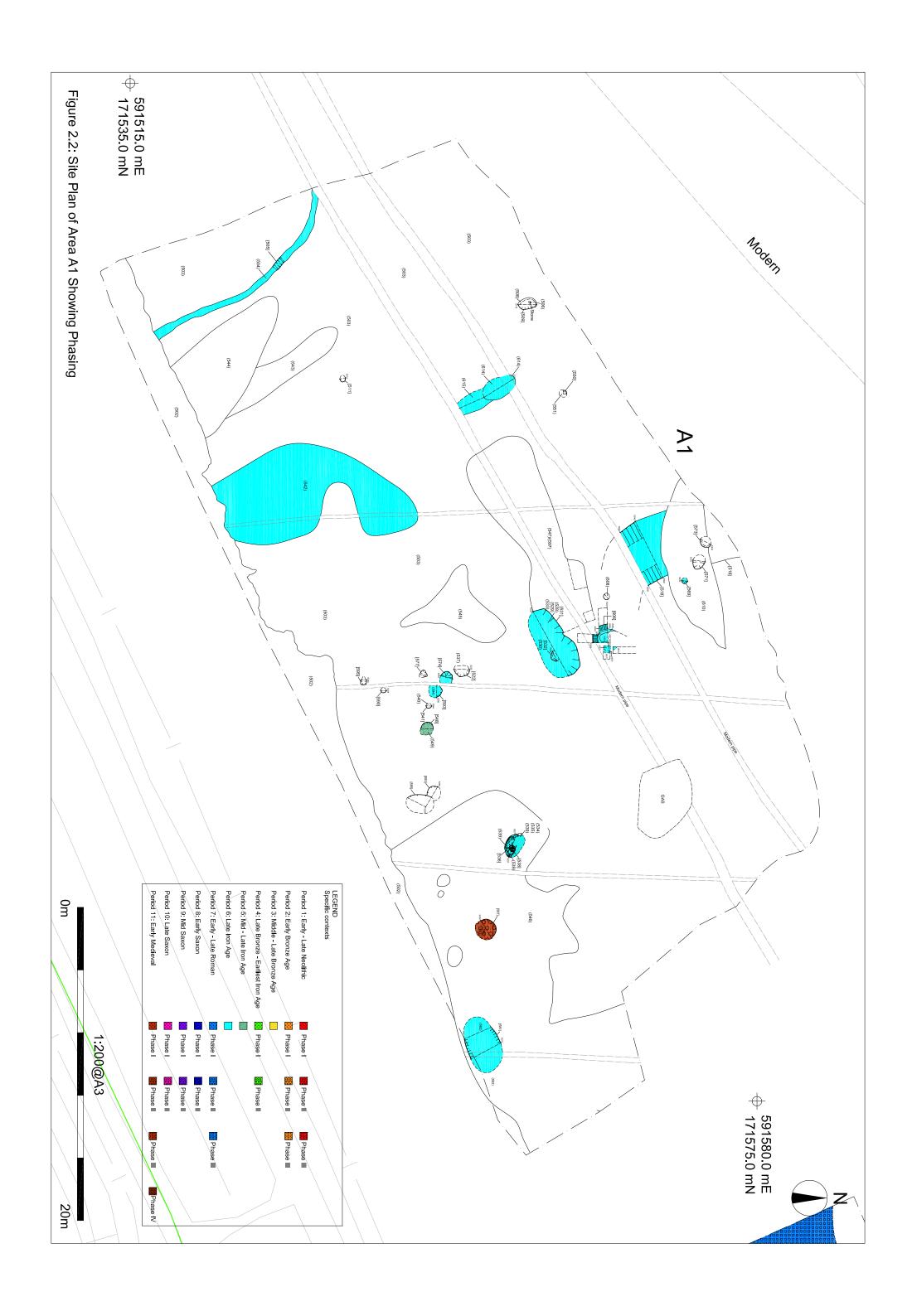
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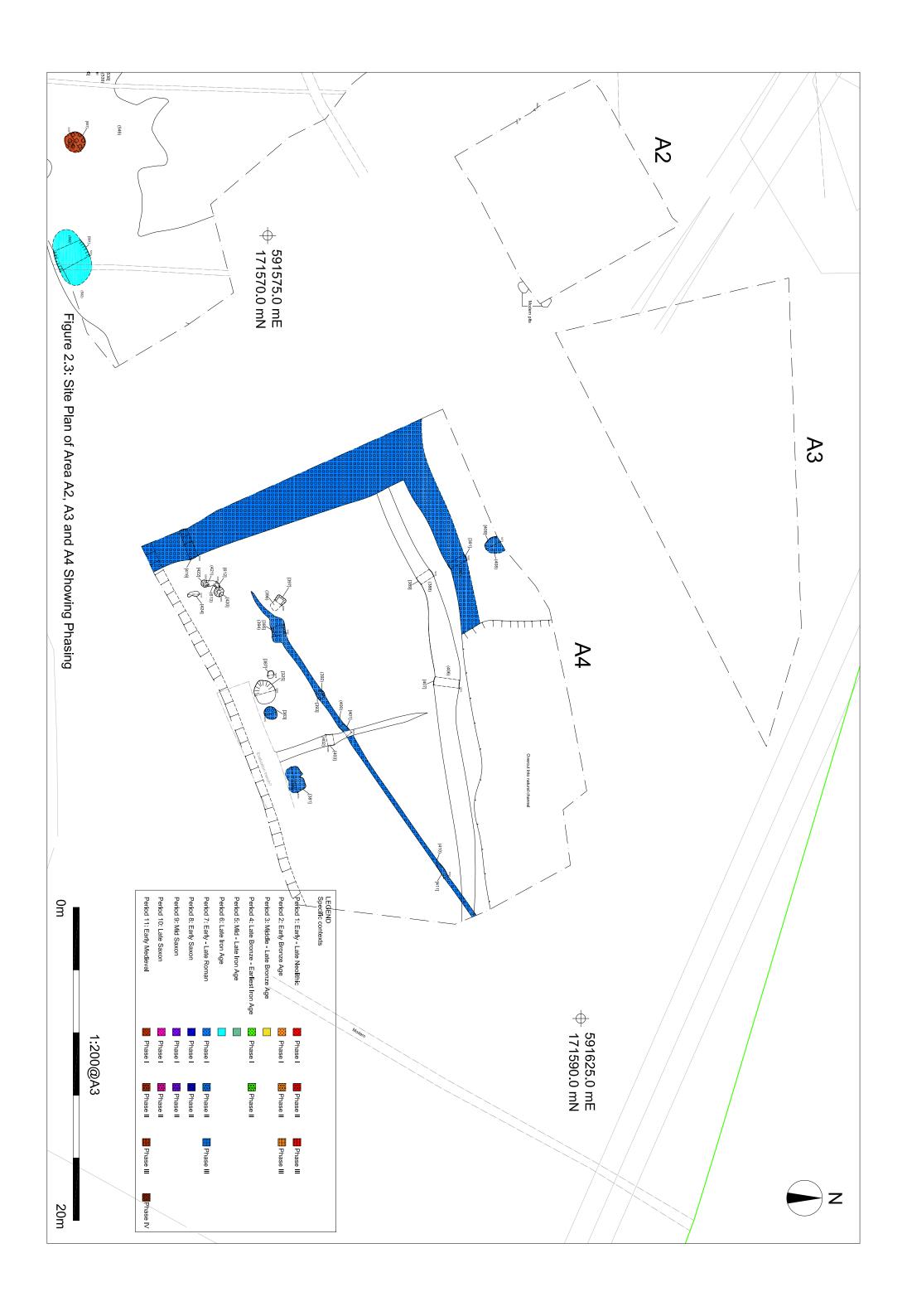
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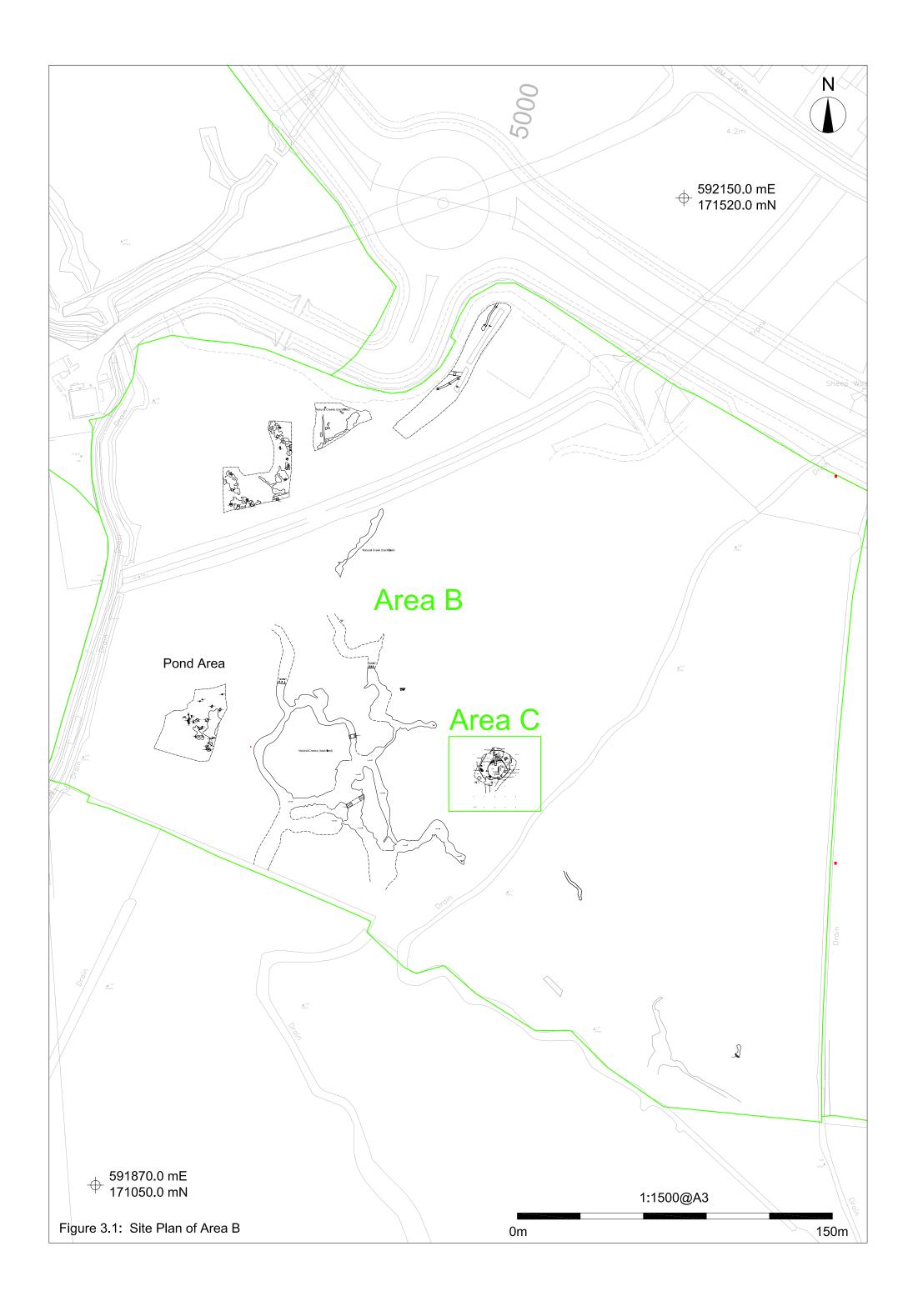


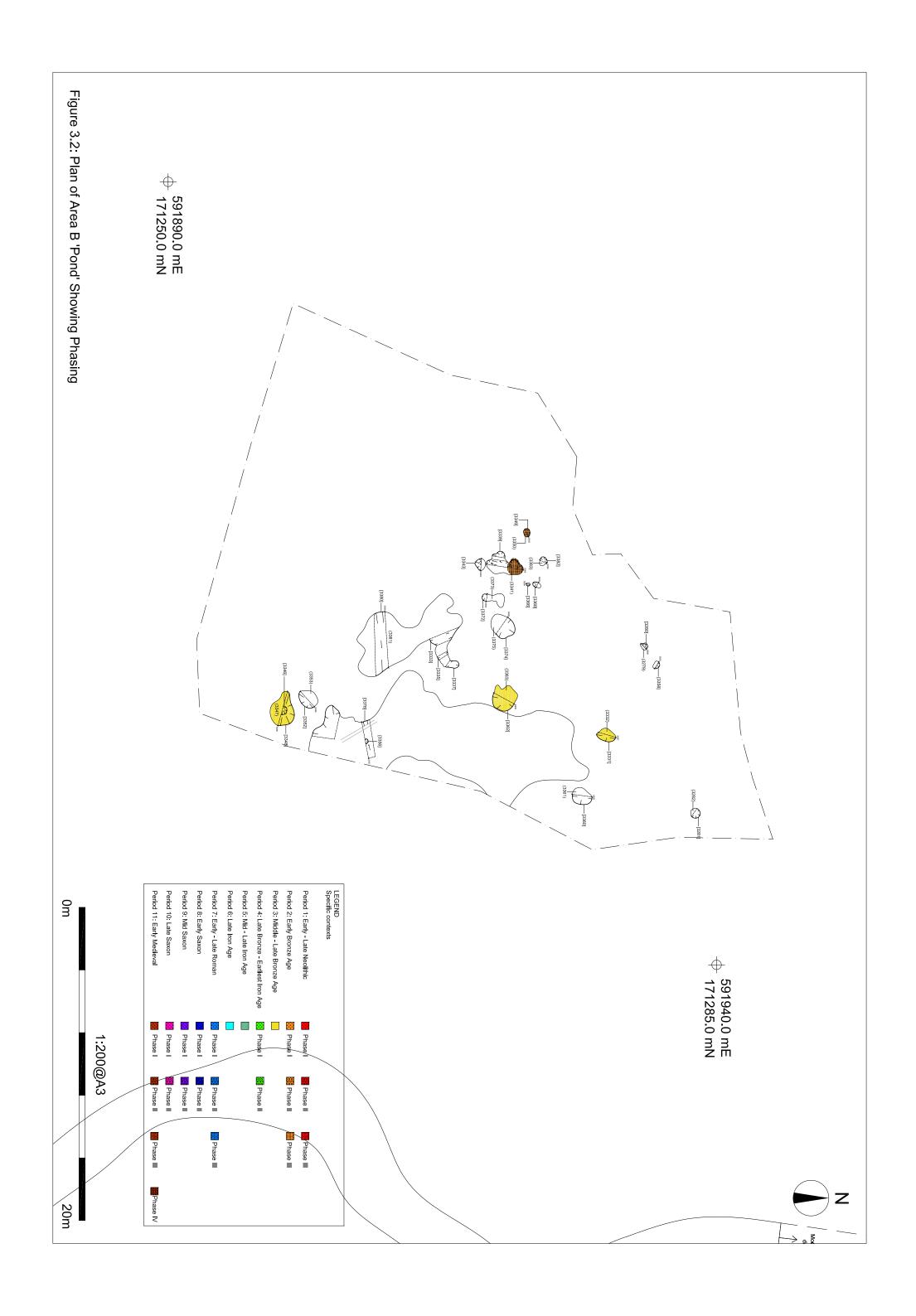


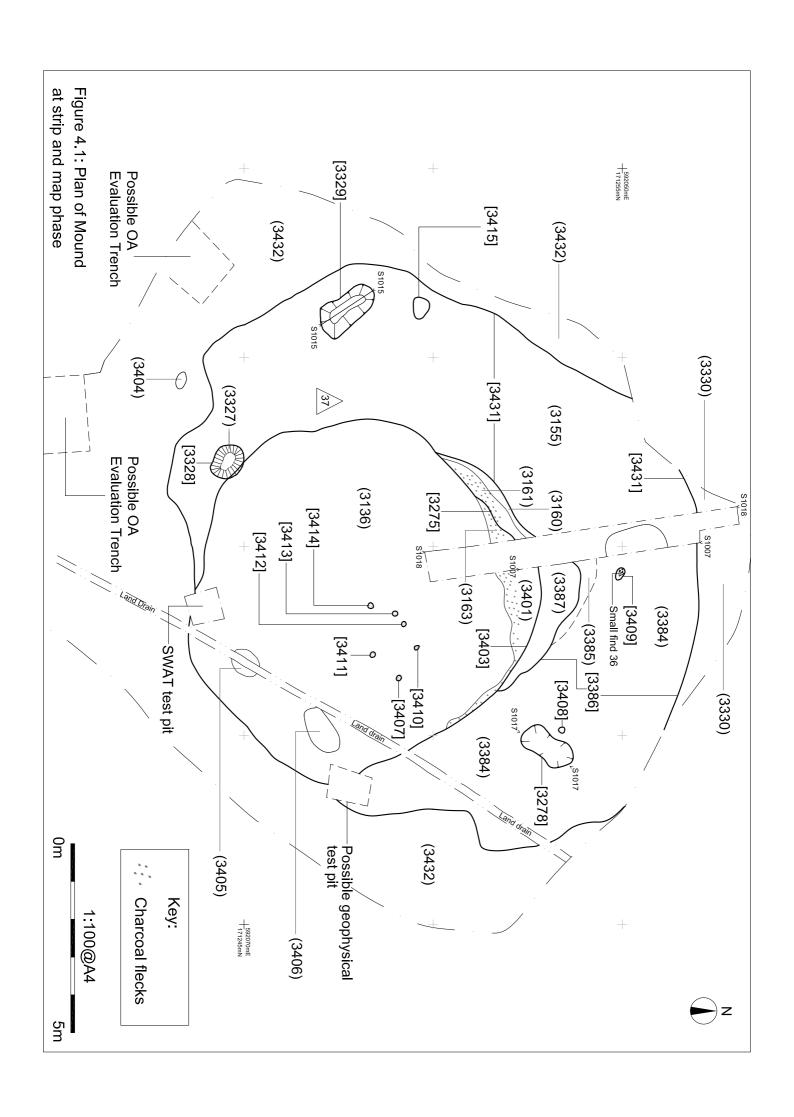


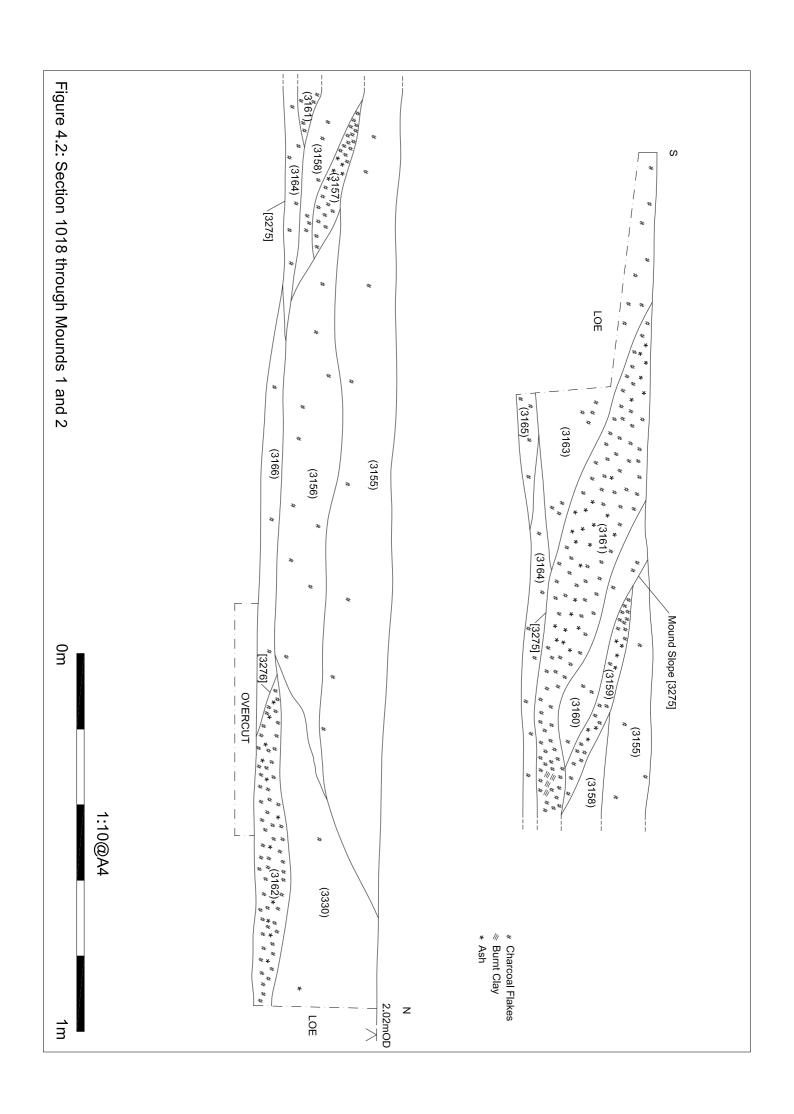


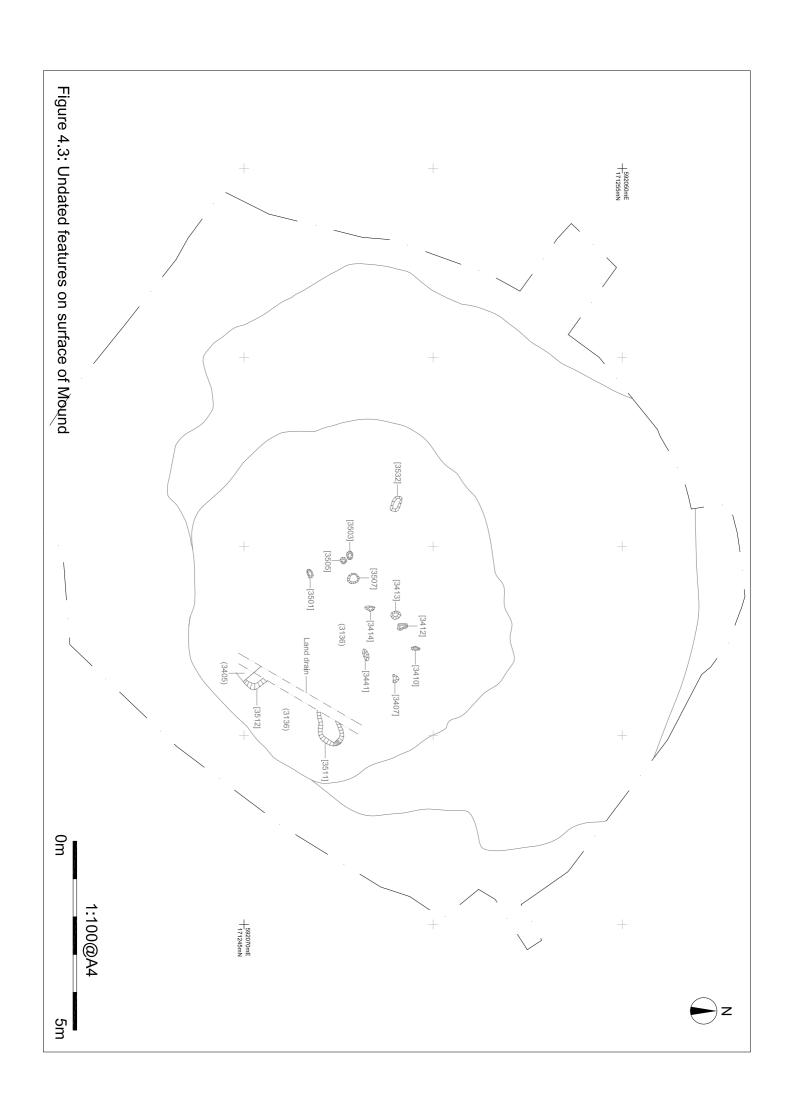


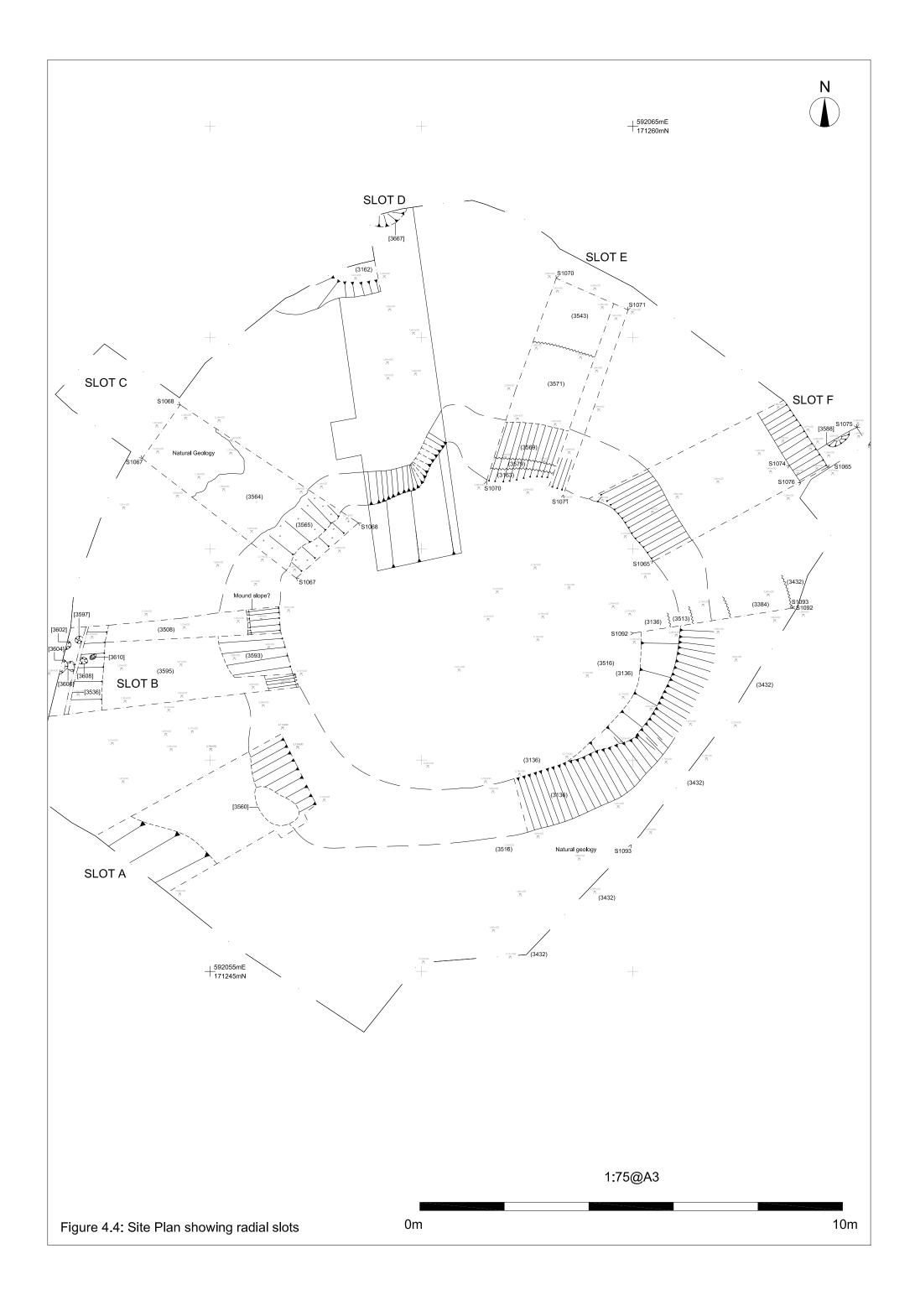


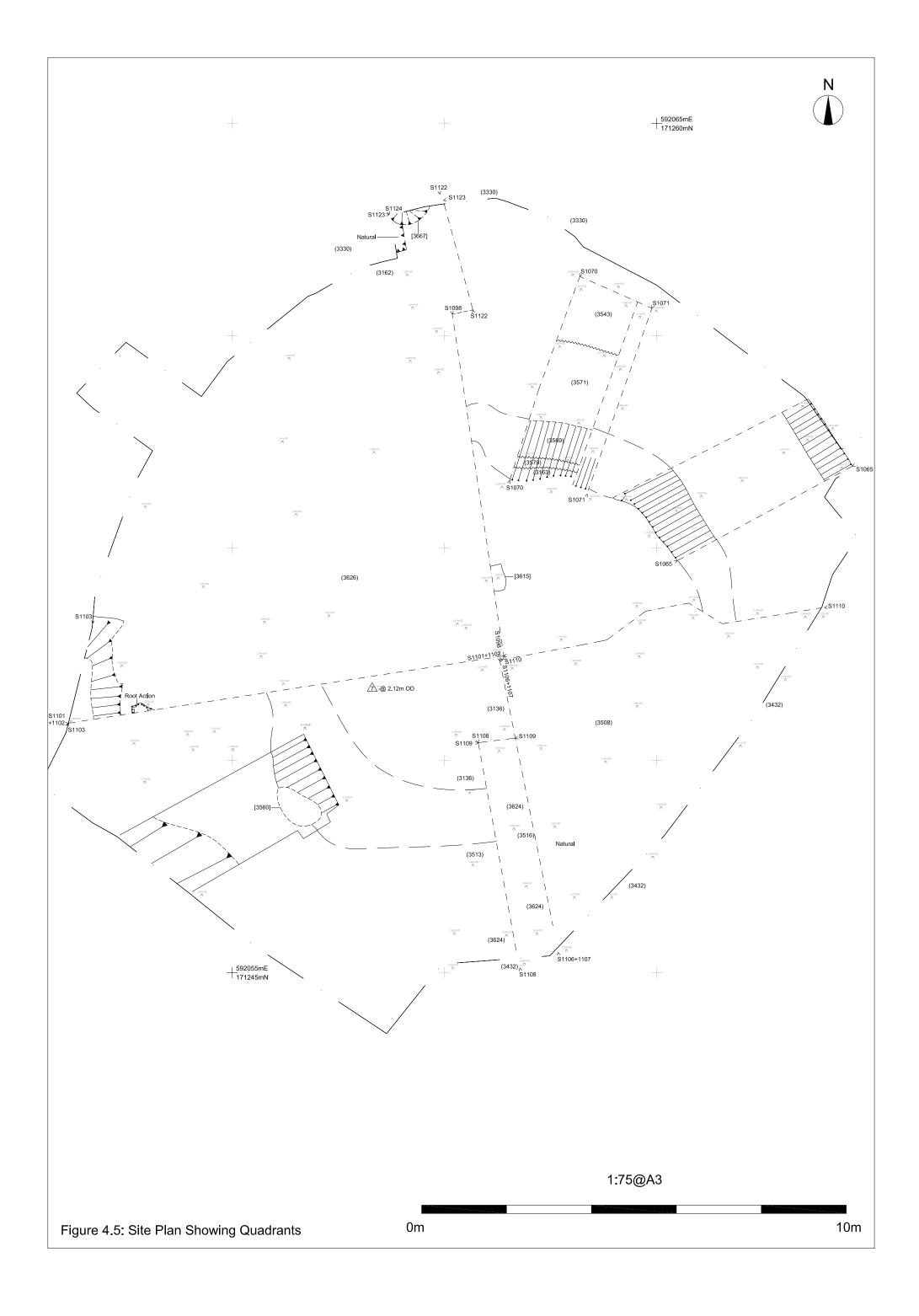


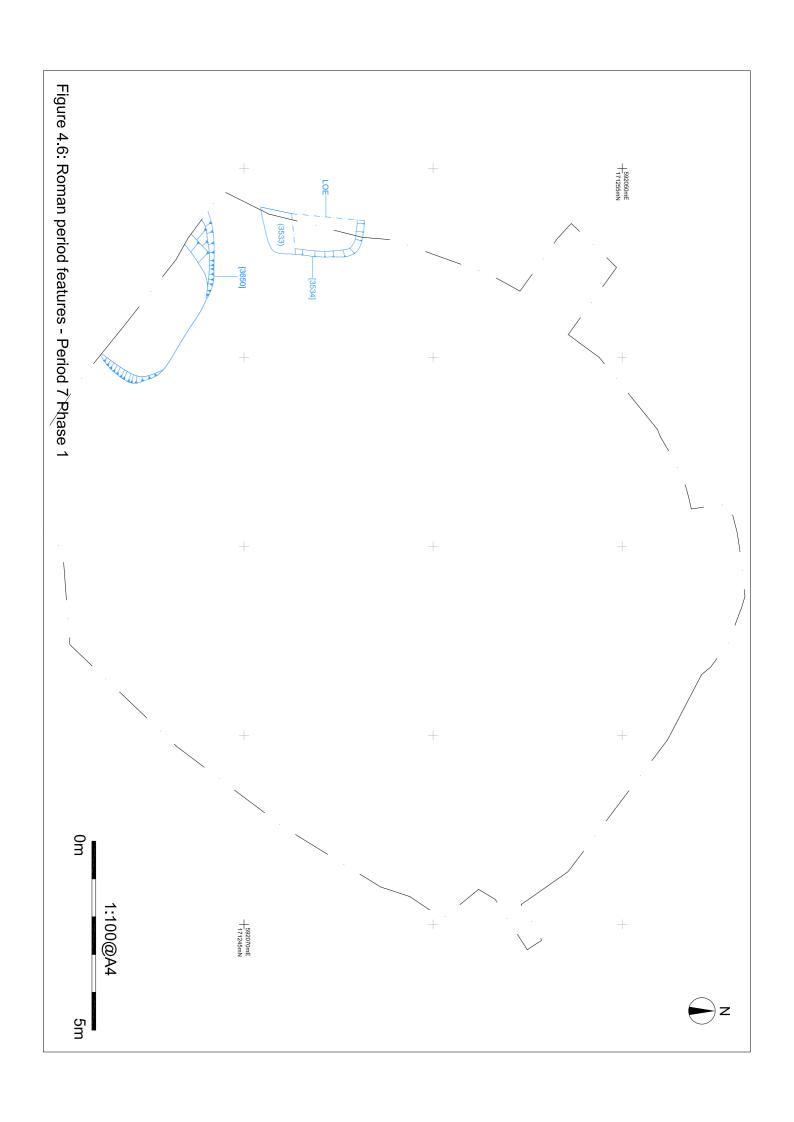


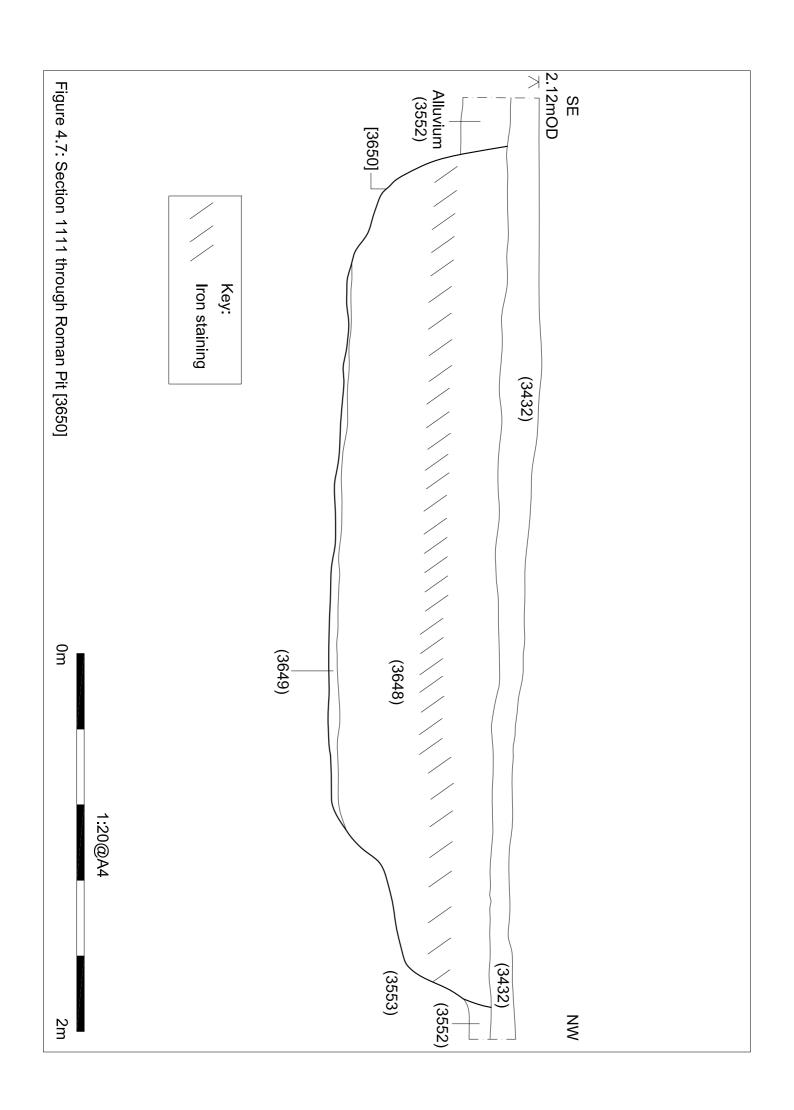


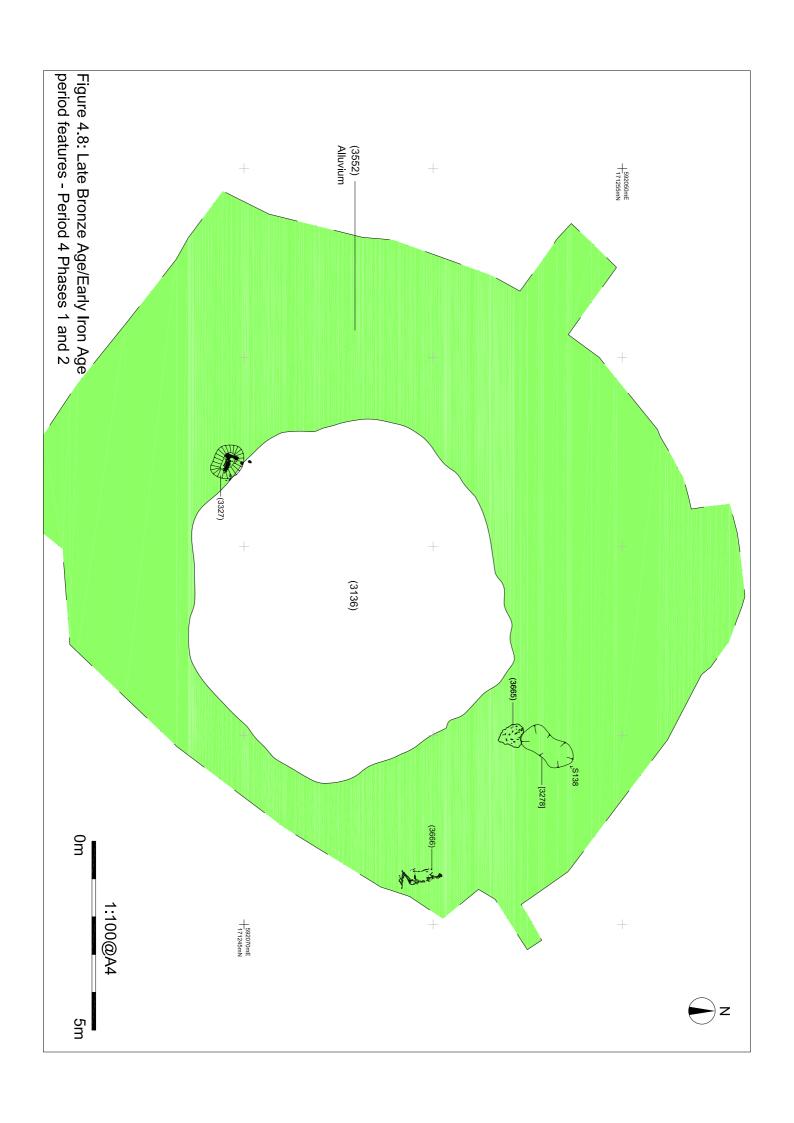


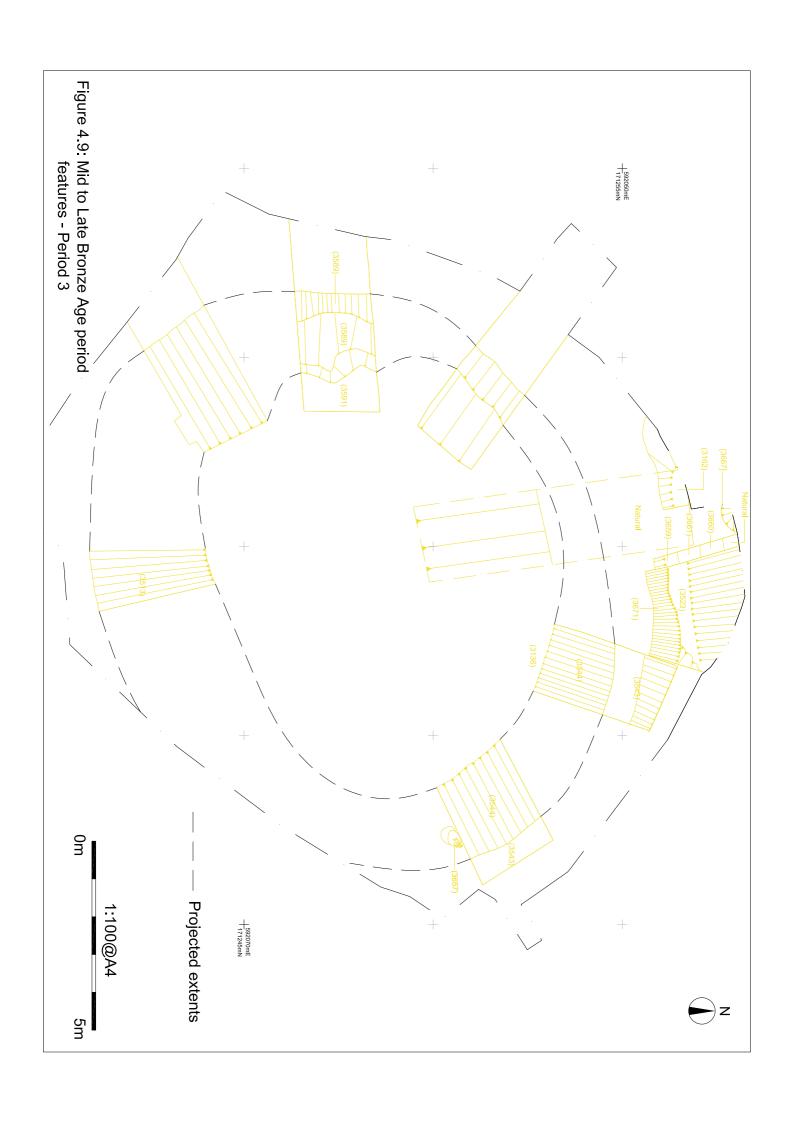


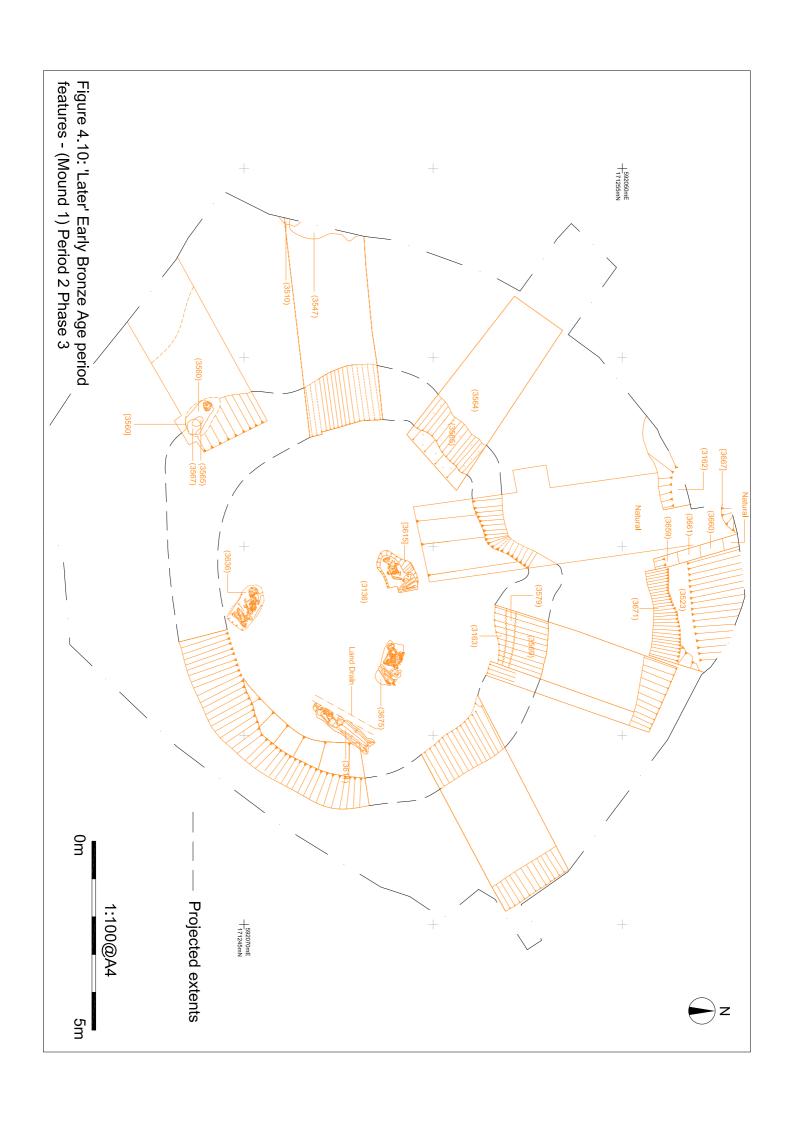


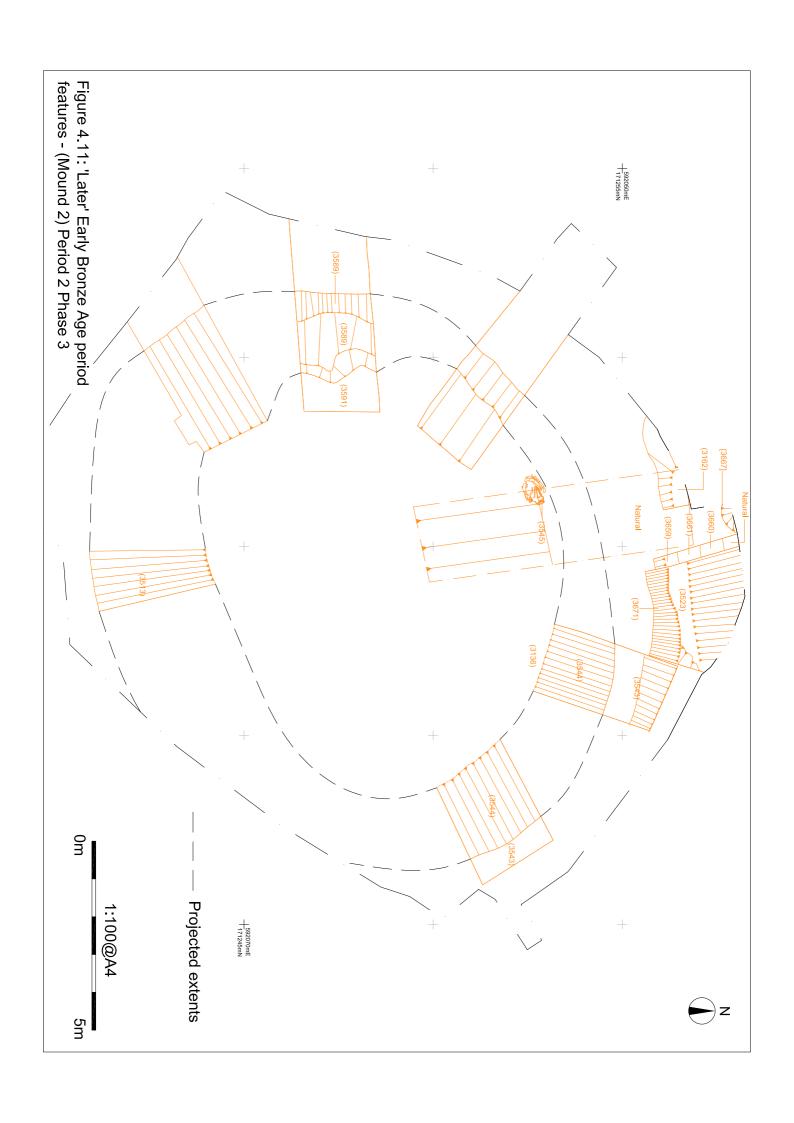


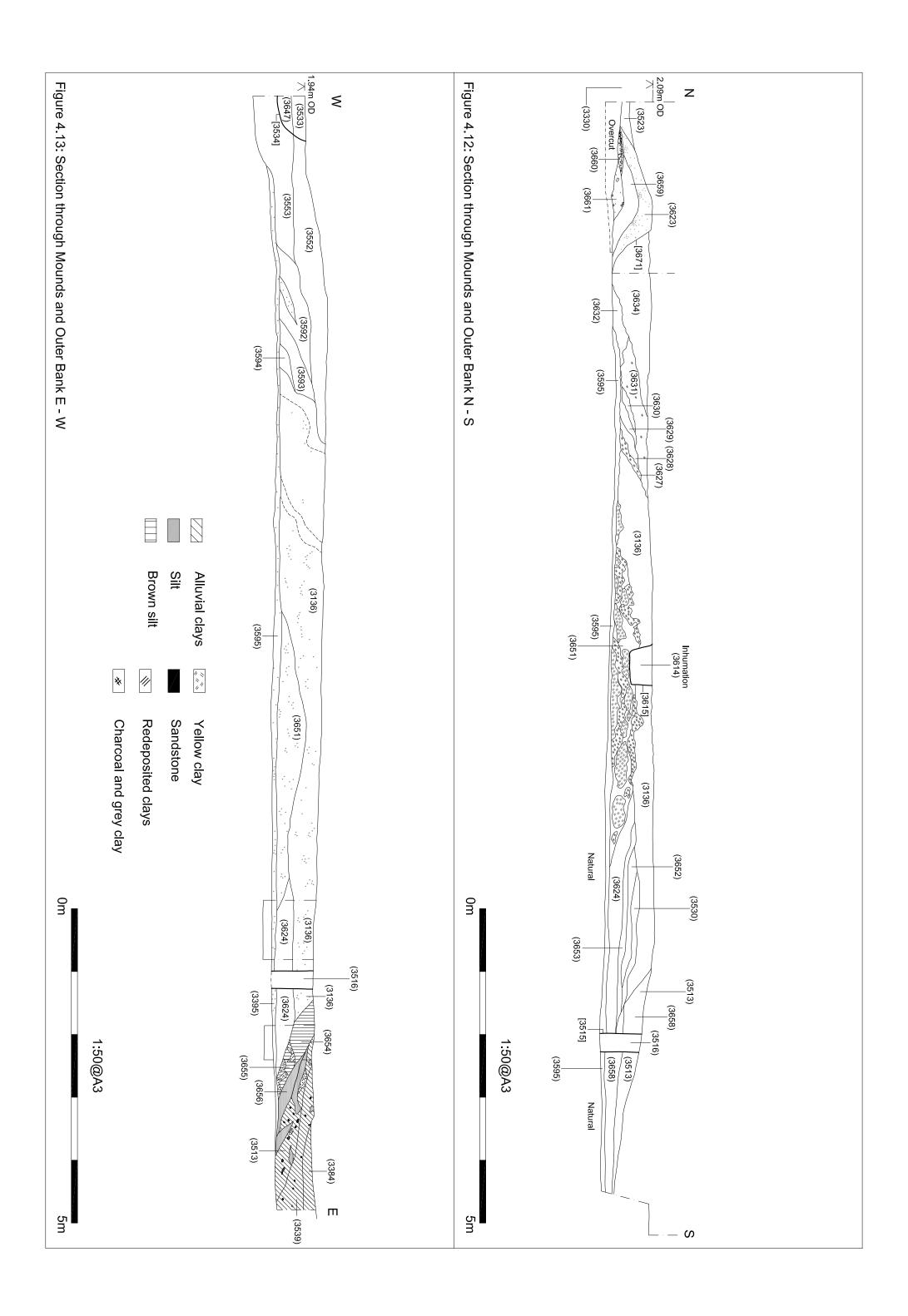


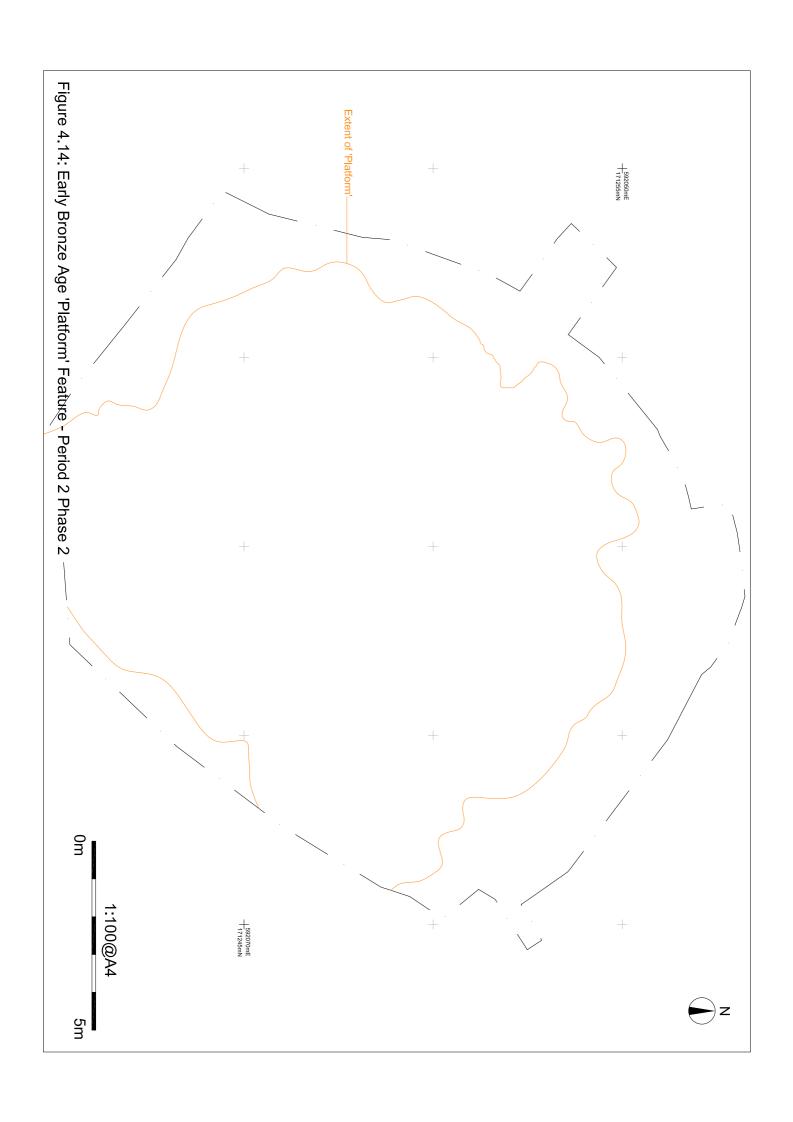


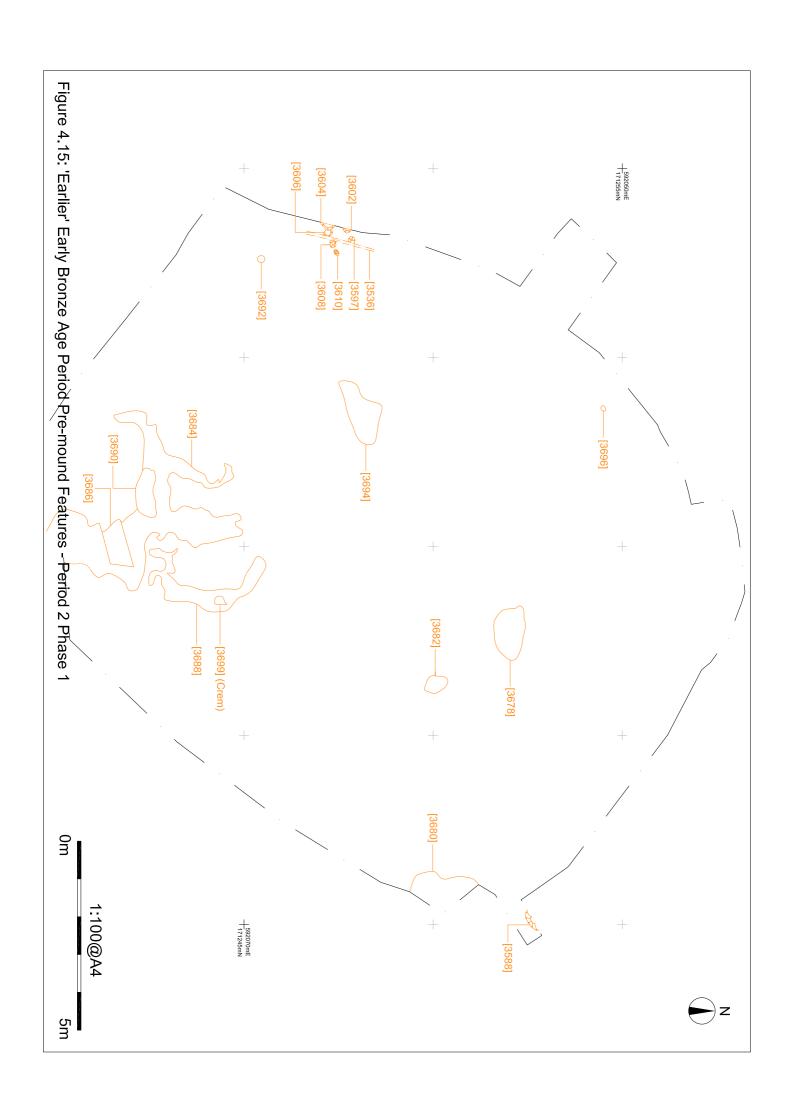


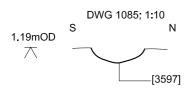


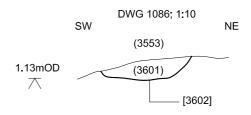


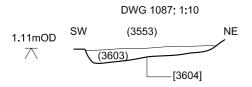


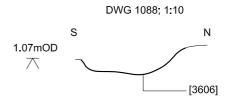


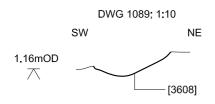












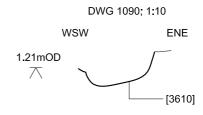


Figure 4.16: Pre-mound Post Holes - Period 2 Phase 1



