Archaeology South-East

ASE

ARCHAEOLOGICAL INVESTIGATIONS AT ST CLEMENT'S VALLEY, GREENHITHE, KENT.

Archaeological Report and Updated Project Design

NGR: 558405 174560
(TQ 58405 74560)

Planning Reference: DA/12/01404/FUL

ASE Project No: 6552
Site Code: SCV 13

ASE Report No: 2014129
OASIS ID: archaeol6-177433
Dartford Museum

By Gary Webster

With contributions by
Dr Lucy Allott Luke Barber, Karine Le Hégarat,
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Abstract

An archaeological strip, map and sample exercise was carried out by Archaeology South-East at St Clements Valley, London Road, Greenhithe, Kent. The fieldwork was commissioned by CgMs Consulting Ltd in advance of a residential development on the site.

The earliest evidence recorded was a pit containing a small amount of Middle Neolithic pottery. Although most of the features are poorly dated, the remainder of the archaeology can probably be broadly assigned to the later prehistoric period, and most likely to the later 2nd/earlier 1st millennium BC. The main element is an enclosure bounded to the south by a trackway. A large number of pits/post-holes were recorded within the enclosure although these were of quite variable size and profile and, in most cases, there was little clear evidence about their function. The lack of finds or environmental evidence from the site as a whole probably suggests that the function of the site was largely agricultural.

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1.0 INTRODUCTION

1.1 Site Background

1.1.2 Archaeology South-East (ASE), the contracting division of the Centre for Applied Archaeology (CAA), Institute of Archaeology, University College London (UCL) was commissioned by CgMs Consulting Ltd, on behalf of Bellway Homes, to undertake an archaeological strip, map and sample exercise at St Clements Valley, Greenhithe, Kent (Figure 1, TQ 58405 74560).

1.2 Geology and Topography

1.2.1 The site lies to the south of the River Thames, southeast of the Queen Elizabeth II Bridge. Its northern boundary is defined by the A226 with the B225 lying to the east. Directly to the west is a residential housing estate.

1.2.2 The north of the site, which is the focus of the strip, map and sample exercise, comprised part of an open field, part of which had previously used as allotments. Elsewhere on the wider site, a former quarry was located to the south and west, woodland extends south and east, and more open land is present to the west, east and south.

1.2.3 According to the British Geological Survey (BGS 2014), the bedrock geology in the north and east of the site is Chalk of the Seaford and Newhaven Chalk Formations. Superficial Head deposits of clay, silt, sand and gravel have also been recorded across the site.

1.3 Planning Background

1.3.1 The site has been subject to a programme of archaeological work in advance of a proposed residential development. Planning consent (DA/12/01404/FUL) has been granted for the development subject to conditions, including condition 3 which states that:

- Prior to commencement of any construction works archaeological field evaluation works shall be carried out in accordance with the Specification for an Archaeological Evaluation hereby approved.
- Following on from the evaluation works, an evaluation report shall be submitted and any safeguarding measures to ensure preservation in situ of important archaeological remains and/or further archaeological investigation shall be implemented in accordance with a specification and timetable which has been submitted to and approved by the Local Planning Authority.

1.4 Circumstances and Dates of Work

1.4.1 In 2011, GL Hearn commissioned Museum of London Archaeology to carry out a Historic Environment Assessment of the site (MoLA 2011).

1.4.2 In 2012 a borehole survey was carried out by Merebrook Consulting, focussing mainly on the west of the site (Merebrook Consulting 2012).

1.4.3 ASE was commissioned by CgMs Consulting to undertake a Historic

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Landscape Assessment (ASE 2013a), focussing on the potential survival of a railway in the chalk quarry in the western part of the site.

1.4.4 CgMs produced a '*Specification for an Archaeological Evaluation'* of the site in June 2013 (CgMs 2013). This drew on all of the previous documents to ensure that archaeological evaluation trenches were located in areas that would hold potential for archaeology.

1.4.5 An archaeological evaluation was carried out by ASE in November 2013. Fifteen evaluation trenches were excavated on the northern and eastern part of the site (ASE 2013b). Following the evaluation, Wendy Rogers, Senior Archaeological Officer at Kent County Council (KCC) determined that further archaeological mitigation work was required in the northern section of the site, in order to fulfil condition 3.

1.4.6 CgMs produced a '*Specification for and Archaeological Strip, Map and Sample Excavation'* for the site in February 2014. This showed the area that was to be excavated and outlined the methodology that was to be used during the excavation (CgMs 2014).

1.4 Archaeological Methodology

1.4.1 All excavation work was carried out in line with Kent County Council 2007, *Standard Specification for an Archaeological Watching Brief/evaluation/excavation*) and in line with the specification document (CgMs 2014). The strip map and sample area, agreed in the specification was centred on the archaeology found within the evaluation, which was focussed in the northern part of the site. The SMS area shown on Figure 2 was laid out using Digital Global Positioning System (DGPS) technology.

1.4.2 Subsoil and other overburden of recent origin were machine stripped using a tracked mechanical 360° excavator. All mechanical excavation was undertaken in spits under the direct supervision of experienced archaeologists. Machine excavation proceeded until archaeological features were uncovered or until the surface of natural geology was exposed. The resultant surfaces were cleaned as necessary and a pre-excavation plan prepared using DGPS planning technology in combination with Total Station surveying. The plan was updated by regular visits to site by Archaeology South-East Surveyors who plotted excavated features and recorded levels in close consultation with the Supervisors.

1.4.5 The following excavation sampling strategy was employed:

- Ditches and gullies had all relationships defined, investigated and recorded. All terminals were excavated. Sufficient of the feature lengths were excavated to determine the character of the feature over its entire course; the possibility of recuts of parts, and not the whole, of the feature were considered.
- Pits were initially 50% excavated to safe depths (generally 1.2m) and fully recorded.

1.4.7 All excavated deposits and features were recorded according to current professional standards using the standard context record sheets used by ASE. Sections were hand drawn at a scale of 1:10.

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1.4.8 A full digital photographic record of all features was maintained. The photographic record also includes working shots to represent more generally the nature of the fieldwork.

1.4.9 All finds recovered from excavated deposits were collected and retained in line with the ASE artefacts collection policy.

1.4.10 Environmental sampling was carried out in line with current English Heritage (2011) guidelines. Bulk soil samples of 40 litres (or 100% of smaller deposits) were collected from a representative range of features in order to study palaeo-environmental indicators such as charcoal, charred macroplant remains, fauna and mollusca as well as to recover small artefacts.

1.5 Organisation of the Report

1.5.1 This report has been prepared in accordance with the guidelines laid out in *Management of Research Projects in the Historic Environment (MoRPHE), Project Planning Notes 3 (PPN3): Archaeological Excavation (English Heritage 2008).*

1.5.2 The report seeks to place the results from all phases of work within their local archaeological and historical setting; to quantify and summarise the results; specify their significance and potential, including any capacity to address the original research aims.

1.5.3 All finds and environmental archives are all recorded under a single site code: SCV 13.

1.5.4 This report details the findings of the archaeological strip, map and sample exercise which took place between the 3rd and 13th March, 2014. The work was carried out by Gary Webster (Archaeologist) and Sarah Ritchie (Archaeologist), Steve Price (Assistant Archaeologist), Lee Harvey (Assistant Archaeologist), Lucy May (Assistant Archaeologist) and Kristina Krawiec (Surveyor). The work was project managed by Paul Mason and the post-excavation work was managed by Jim Stevenson and Dan Swift. The pertinent results from the evaluation (within the excavation site boundaries) have been integrated and assessed with the results from the main phase of excavation. None of the other evaluation trenches are included.

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1.6 Site Archive

1.6.1 ASE informed Dartford Museum that a site archive would be generated and are awaiting their response. The site archive is currently held at the offices of ASE until long term storage can be arranged. The contents of the archive are detailed below in Table 1.

Number of Contexts	114
No. of files/paper record	2
Plan and sections sheets	3
Bulk Samples	10
Photographs	83
Bulk finds	1 Box
Environmental flots/residue	10

Table 1: Quantification of site archive

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2.0 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

2.0.1 Below is a summary of the pertinent parts of the archaeological background produced by CgMs in the specification for the evaluation (CgMs 2013) and information gathered from the Historic Environment Assessment (HEA) (MoLa 2011). For a full background, refer to the HEA (*ibid*).

2.1 Prehistoric

2.1.1 Between the years 1935 and 1955, discoveries of international importance were discovered at 1.3km to the east/north east at Swanscombe. These consisted of three fragments of skull from a transitional hominid dating from the lower Palaeolithic (700 000 BC – 250 000 BC).

2.1.2 Flint deposits are common in the Northfleet and Dartford area. There was a collection of fine hand axes recovered from 'The Globe Pit,' c.330m to the east of the site.

2.1.3 Three Neolithic axes have been found in the Thames close to Greenhithe (KE 762, TQ 5875). Excavations at Waterstone Park to the south-west also uncovered a possible Early Neolithic crouched inhumation, buried with a polished stone axe (Haslam in prep).

2.1.4 Another archaeological evaluation, this time 180m to the west of the site was carried out in Pre-Construct Archaeology 2000. A series of features were identified, along with 41 struck flints. None of the items were truly diagnostic, although one was considered technologically consistent with late Neolithic/Early Bronze Age industries. A single piece of Neolithic pottery was also recovered. Neolithic pottery and flints are also recorded on the HER c. 380m to the south-east.

2.1.5 Excavations by PCA at Waterstone Park c.230m to the south-west of the site uncovered a ring ditch, representing the remains of a round barrow, which contained a possible grave (Haslam in prep). Another previous archaeological evaluation by Wessex Archaeology which took place just to the east of the site, along St Clements Way, identified a small number of burnt prehistoric flints.

2.2 Late Iron Age/ Early Roman

2.2.1 An archaeological evaluation in 2004 gives us some evidence for the continued use of the site from the Iron Age into the Roman period. Several ditches, pits and post holes (possibly forming a small structure) were identified 160m west of the site. These were found to contain Late Iron Age and Early Roman pottery. Two later phases of archaeological excavation at Waterstone Park to the south and west of the site identified a large curvilinear feature, which was interpreted as a corral and extensive evidence of structured deposition in pits (Haslam in prep).

2.3 Roman

2.3.1 The focus of activity during the Roman period on site is the Roman cemetery which was identified across the central/southern part of the site in 1904. This

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included the discovery of 15 vessels and five inhumations. Roman settlement evidence, including a rectangular timber building and associated quarry pits and ovens were recorded at Stone Castle Quarry, now the site of the Bluewater shopping centre to the south (Detsicas 1966).

2.4 Post Roman

2.4.1 The site lay within the manoral estate of Stone in the Late Saxon and medieval periods, the main part of the settlement growing up *c*.500m to the east of the site. Stone Castle, located *c*.50m to the west of the site was built during the reign of King John (AD1199-1216). The building still stands having been heavily modified in the 19th century.

2.4.2 The western half of the site was formerly occupied by the Castle Chalk Pit, part of the nearby Portland Cement Works, which was in use from the late 19th century until it fell into disuse by the 1930s. It contained a mineral railway which accessed the quarry through an extant tunnel at the northern end (beneath London Road) and then branched into two separate lines, set at different levels of the quarry and both containing sidings. The lines exited the quarry at the southern end through two separate tunnels underneath a lane, providing access to the adjacent Stone Castle Quarry. The Historic Landscape Assessment (ASE 2013a) clarified that the impact of quarrying at the site has been substantial, and concluded that archaeological remains were unlikely to survive in this part of the site

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3.0 ORIGINAL RESEARCH AIMS

3.1 The following research aims were originally laid out in the specification (CgMs 2014). They are site specific, and were created with the results of the evaluation and other nearby excavations in mind, and seek to place the site in the historical landscape.

- The archaeological investigation will seek to understand the context of the findings in relationship to the wider settlement pattern, landscape, economy and environment. Later prehistoric remains have been identified on the higher ground to the west of the site around Stone Castle and it may be possible to establish a relationship between the two areas;

- The interpretation of locally distinctive or regionally/nationally significant archaeological features, including funerary monuments, evidence of settlement and activity including industrial processes;

- How the site's topography has influenced past activity and settlement;

- A better understanding of field systems, in particular their relationship to settlement and their uses beyond agriculture, including potential ritual deposition;

- To contribute to the existing knowledge relating to the material culture, form and evolution of prehistoric activity and settlement in the region;

- To contribute to existing knowledge relating to the material culture, form and evolution of any later activity and settlement in the region;

- To advance our knowledge of the archaeology of the region through the application of appropriate scientific dating techniques.

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4.0 ARCHAEOLOGICAL RESULTS

4.1 Introduction

4.1.1 The archaeological features exposed in the excavation area included a scattering of pits, possible hearths, linear features and a potential trackway.

4.1.2 The archaeology is discussed under provisional date-phased headings determined primarily through assessment of the dateable artefacts, predominantly the pottery, and secondarily through the spatial layout and morphology of the archaeology encountered. There were few diagnostic finds recovered during the excavation meaning most context groups can only be broadly dated. On the basis of this, only two separate phases of activity have been defined, the earliest of which is only represented by a single archaeological feature (Table 2).

Period 1	Middle Neolithic	3500-2800 BC
Period 2	Later Prehistoric	1500 BC – 100 BC

Table 2: Archaeological periods represented on the site

4.1.3 The archaeological sequence is discussed by groups (GR1, GR2 etc.) where possible. In this way, linear features, such as ditches which may have numerous individual slots and context numbers, are discussed as single entities, and other contemporary cut features such as pits and postholes are grouped together based on functional/morphological similarities.

4.2 Natural Geology and Overburden

4.2.1 Head deposits of clay, silty sand and gravel, as well as occasional outcroppings of the Seaford and Newhaven chalk formations were recorded across site. The level of the natural geology slopes from 6.02m AOD in the north-east of the excavated area, to 9.06m to the south-west of the site.

4.2.2 The natural geology was overlain by a deposit of reddish brown sandy clay. This possibly represents a colluvial layer, and grew in thickness toward the west of the site. This was overlain by the subsoil. This was in turn overlain by disturbed subsoil, which contained modern detritus.

4.3 **Period 1: Middle Neolithic** (Figure 3)

4.3.1 The Middle Neolithic is represented by a solitary feature, located toward the north-west of the site. This pit [004] was circular in plan. It measured 1m by 0.99m, and was 0.26m deep. It contained a moderately firm greyish brown sandy clay fill. Three abraded pieces of Peterborough ware pottery, possibly from the same vessel, were recovered.

4.4 **Period 2: Later Prehistoric** (Figure 4)

4.4.1 The rest of the features found on site have been broadly assigned to the later prehistoric period although very little dating evidence has been recovered. The remains include a possible field or enclosure and an associated trackway, as well as pits and post-holes.

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Possible Enclosure

4.4.2 An east-north-east west-south-west aligned ditch (GR2) ran from the limit of excavation in the south west of the strip, map and sample area. The ditch was roughly 0.9m wide, and quite shallow at only around 0.15m deep. It appeared to have been truncated away in places but continued, towards the east, where it terminated. A large sherd of pottery was recovered from the surface of this ditch during the evaluation phase, probably dating to the Middle/Late Bronze Age. Several fragments of horse teeth and mandibles were also recovered. Another ditch (GR3) lay directly to the south, and ran on a parallel alignment with a terminus located at a similar point. It was of the same width, though is slightly deeper at around 0.2m. No dating evidence was recovered but is likely that the two were associated, perhaps forming a trackway.

4.4.3 The remains of ditch (GR4) survive on the western edge of the site, running on a north-north-east south-south-west alignment. There is a gap in the middle of this ditch, which could possibly represent an entrance into an enclosure, though it could also indicate truncation. This may also be the case with the apparent terminus at the north-western extent. A slight curve at this point may suggest a direct relationship with another ditch (GR5), which runs on the same alignment at the possible trackway formed by GR2 and GR3. There is no definite western terminus to GR5, which had possibly been truncated away. The profiles of ditches GR4 and GR5 are similar and it is possible that the two formed one continuous enclosure ditch. The southern edge to the enclosure was likely formed by trackway ditch GR2

4.4.4 Ditch GR6 is slightly was recorded on a similar north-north-east south-south-west alignment to the other ditches. Only c.6m was visible. It got gradually deeper toward the west, where it appeared to have been truncated. The ditch may have formed an internal subdivision within the enclosure could possibly have formed part of a smaller enclosure, the rest of which did not survive. Several very fragmentary pieces of probable later Bronze Age pottery were recovered from the fill of this ditch.

Pits/post-holes

4.4.5 Two possible post-holes [055] and [057] were recorded near to ditch GR2. They were similar in size, both being c 0.5m in diameter and 0.14m deep. Although they ran roughly perpendicular with ditch GR4 and could be associated with the entrance, they run on a different alignment to the trackway formed by GR2 and GR3. An environmental sample was taken from the fill of [55]. Both of the postholes contained flints, flakes and a tested nodule, which were most likely being used as packing material to support the posts. This showed a tiny amount (<1g) of coal dust, most likely intrusive.

4.4.6 A collection of 5 sub-circular features, [009], [022], [028], [030] and [054] make up GR8, located to the south of (GR5). They were of similar size – c 0.4m-0.6m in diameter and c. 0.15 in depth – and contained similar fills. Pit [54] is quite large in diameter (c.0.5m). No clear structural pattern could be ascertained perhaps suggesting that these represent small pits.

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4.4.7 Five pits, of varying sizes, [011], [019], [024], [040] and [050] comprise GR9, which were dispersed in the north and north-east of the SMS area. Though the pits vary in size (the largest being 1.9m in diameter and the smallest being 0.5m in diameter), they all contained similar dark fills. Although these were originally recorded as containing burnt material, very little charcoal was recovered from the flots of environmental samples from these features. One of the pits, [040], did however, show evidence of burning *in situ*. Although no firm dating evidence was recovered a flint flake from pit [040] is considered technologically fairly typical of the later prehistoric period. Environmental samples from three of the pits contained small amounts of coal granules (<1g), which are most likely intrusive.

4.4.8 A collection of five pits, [076], [078], [080], [4/001] and [4/003] form GR10, a roughly north-south alignment of features located along the eastern edge of the strip, map and sample area. They are all of a similar depth of between 0.28m – 0.33m. They are mainly circular, with the exception of [78], which is more oval. The function of these pits is unclear, and no finds were recovered from any of the fills.

4.4.9 Pit [062] has a different profile to other pits recorded towards the eastern side of the strip, map and sample area. It is circular, 0.9m in diameter, with steeply sloping sides and a maximum depth of 0.63m. Again no finds were recovered.

4.4.10 To the south of [062] are three pits of similar profile and dimensions, [069], [084] and [086], forming GR12. An environmental sample <8> was taken of the fill of pit [69], which produced a tiny sherd of pottery dating broadly to the later prehistoric period. An environmental sample was taken from the fill of [69]. It contained some intrusive coal dust (<1g) and a small flake of medieval pottery which are both likely intrusive.

4.4.11 Two features [082] and [4/011] were recorded on the eastern side of the strip, map and sample area, forming GR13. They are both more likely to represent natural depressions in the geology, rather than cut features.

4.4.12 Slightly further to the west, a single, large, irregular pit [034] measured 1.87m by 0.95m, and had a depth of 0.49m. The fill contained flecks of charcoal and chalk, as well as one fragment of irregular flint waste. There were signs of bioturbation along the southern edge of the feature.

4.4.13 Pit [046] forms lay toward the east of the site. It was c.0.98m in diameter and was only 0.10m deep.

4.4.14 Pit [016] forms lay to the north of the site, at the eastern end of (GR5), which it is cut by. It is a large pit, measuring 1.74m by 2.03m and 0.41m in depth. The reddish brown fill is sterile, and contains no dating evidence.

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5.0 FINDS

5.1 Summary

5.1.1 A small assemblage of finds was recovered from the site. Finds were all washed and dried or air dried as appropriate. They were subsequently quantified by count and weight and bagged by material and context. Finds were all packed and stored according to IFA guidelines (IfA 2008). None of the finds require further conservation. An overview is shown in Table 3, below.

Context	Pot	Wt (g)	Bone	Wt (g)	Flint	Wt (g)	Slag	Wt (g)
33	1	8						
35					1	38		
43					1	8		
45	3	6						
52			23	330			1	8
81								
85					1	4		
U/S	2	6			1	30		
Total	**6**	**20**	**23**	**330**	**4**	**80**	**1**	**8**

Table 3: Quantification of hand-collected bulk finds

5.2 **The Flintwork** by Karine Le Hégarat

5.2.1 In total, 24 pieces of struck flint weighing 698g were recovered through hand collection and from sample residues during the archaeological work at the site (Table 4). A further 8 fragments (542g) of burnt unworked flint were hand collected from ditch [3/006] during the evaluation, and 1498g of burnt stone were retrieved from environmental samples. The pieces of struck flint were thinly spread over the site. The material came from two ditches, four pits, two postholes, a burnt pit and from unstratified deposits. The assemblage is largely composed of unmodified pieces of flint débitage, and no chronologically distinctive types were present. Nonetheless, based on technological grounds, most probably belong to the Bronze Age or Iron Age, although some may be earlier.

5.2.2 Flakes dominate the small assemblage, which also comprised a shattered piece, a chip, two fragmentary cores and a tested nodule. The absence of bladelets, blades and blade-like flakes suggests an industry orientated towards the production of flakes (Ford 1987). A large proportion of the flakes were crudely made. They usually displayed plain butts and pronounced bulbs of percussion that are mostly characteristic of flake-orientated industries dating from the later prehistoric period. Both core fragments displayed incipient cones of percussion, indicating mishits while removing flakes. The flintwork (tested nodule and flakes) from postholes [055] and [057] may

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actually represent packing material. The burnt stones retrieved from the residues comprised a mixture of flint heavily calcined to a greyish colour and small pebbles slightly heated to a reddish colour.

5.2.3 The small flint assemblage from St Clements Valley suggests only low-level activity in the area during the late Prehistoric period.

	Feature / deposit										
Artefact type	**U/S**	**Ditch 2/005**	**Ditch 3/006**	**Pit 19**	**Pit 24**	**Posthole 55**	**Posthole 57**	**Fire pit 12**	**Pit 34**	**Pit 40**	**Total**
Flake	1	1	3	2	1	3	4	1		1	17
Irregular waste									1		1
Chip			3								3
Unclassifiable/fragmentary core		1	1								2
Tested nodule							1				1
Total	1	2	7	2	1	3	5	1	1	1	24

Table 4: The flint assemblage from St Clements Valley by archaeological feature

5.3 The Prehistoric Pottery by Anna Doherty

5.3.1 Evaluation and excavation work at the site has produced a hand-collected assemblage of 10 sherds weighing 92 grams as well as a single sherd recovered from an environmental sample. The pottery was examined using a x20 binocular microscope.

5.3.2 Three sherds of Middle Neolithic date, weighing 6 grams, were recovered from fill [045] of pit [044]. Two cross-fitting sherds feature tightly spaced impressions on the external surface below a sharp carination in the vessel wall. The impressions are quite abraded but were probably made with short whipped cord 'maggots' or with bird bone. A third example does not cross-fit but appears to be of the same vessel, its exterior surface is damaged but it features linear tooled impressions on the interior surface. The fabric of the vessel has quite a poorly prepared laminar clay matrix which features few visible inclusions apart from rare calcined flint of 0.2-2mm. Both the fabric and decorative style of the sherds is diagnostic of the Middle Neolithic Peterborough Ware tradition. In the absence any rim sherds or larger parts of the vessel profile, it is difficult to assign the vessel firmly to one of the three sub styles of this tradition. However, widespread decoration over large areas below the shoulder is more typical of the slightly later Mortlake and Fengate styles. The type site for the earliest Ebbsfleet style of Peterborough Ware lies c. 2km to west of the current site (Burchell & Piggott 1939) but small groups of Mortlake/Fengate Peterborough Ware have been found in the Darent Valley and other parts of north-west Kent (e.g. Smith 1973; 1984).

5.3.3 Sherds of a different flint-tempered fabric were found in unstratified contexts and in fill [033], of ditch [032] (3 sherds, weighing 14g). This fabric features moderate to common coarse flint of 0.5-3mm in a silty clay matrix. Although this ware cannot be dated with certainty in the absence of any diagnostic feature sherds, it occurs in association with relatively thick-walled sherds,

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indicating that a Middle/Late Bronze Age date is most likely. A similar probable Middle/Late Bronze Age sherd was recovered during the evaluation from the surface of [2/006] the fill of ditch [2/005].

5.3.5 A third fabric type was only represented by a very small sherd (<2g) from environmental sample <8>, taken from context [70], a fill of pit/post-hole [069]. This fabric had much sandier background matrix (fine quartz of c. silt-sized to 0.1mm) with rare fine flint of 0.1-0.5mm. Tiny flecks of pottery in a similarly fine flint-tempered ware were recovered from fill [3/007] of ditch [3/006] during the evaluation. Again it is impossible to assign a precise date to small undiagnostic sherds. As a rule, finer and sandier flint-tempered fabrics are more typical of the period post-dating *c.*800BC although they may occur in earlier assemblages. Work on a large later Iron Age assemblage from an adjacent site shows that sandy flint-tempered wares survived as a minor fabric type into the Middle/Late Iron Age transition in the local area, before being largely replaced by grog-tempered wares in the late 1st century BC/early 1st century AD (Doherty in prep).

5.4 Medieval and Post-Medieval Pottery by Luke Barber

5.4.1 The site produced a single tiny chip from a London Ware jug (<1g) from context [70] (residue <8>). The vessel is decorated with an external white slip under a green glaze and is probably of late 12th to 13th Century date.

5.5 Geological Material by Luke Barber

5.5.1 Although no hand-collected stone was recovered from the site the residues from contexts [013], [026], [027], [042], [048], [056] and [070] each produced small amounts of coal granules, though never more than 1g in any one deposit. Although probably of post-medieval date, the size of this material is such that it could easily be intrusive.

5.6 The Metallurgical Remains by Luke Barber

5.6.1 A single piece of 'slag' was hand collected from context [52] (9g). However, this is in fact a natural sandy ferruginous concretion with finer grey ferruginous seams. Nine of the environmental residues produced 'magnetic fines' in small quantities (10g being the largest assemblage from context [27]). Essentially these consist of well-rounded/polished pieces of ferruginous siltstone but contexts [013] and [048] each produced a single hammerscale flake. Although indicating iron smithing in the general area, the quantities are negligible and the material could easily be intrusive.

5.7 Animal Bone by Gemma Ayton

5.7.1 A small assemblage of animal bone, which includes 23 fragments weighing 330g, was hand-collected from context [081]. A further 8g of bone was retrieved from five bulk samples including <3>, <4>, <5>, <8> and <9>. The hand-collected assemblage is dominated by horse teeth and poorly preserved fragments of horse mandibles. The bone from the samples is very small, poorly preserved and largely unidentifiable though a single, caprine, upper molar was recovered from sample <5>.

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6.0 ENVIRONMENTAL SAMPLES by Karine Le Hégarat and Dr Lucy Allott

6.1 Introduction

6.1.1 As part of the archaeological work at the site, a total of eleven 10 to 40L bulk soil samples were collected for the recovery of palaeo-environmental indicators such as charcoal, charred macroplant remains, fauna and mollusca as well as artefact remains. Two samples were taken during the evaluation, and the remaining nine were extracted during the excavation. The sampled deposits originated from a wide range of features including postholes, pits, possible fire pits and ditches, all broadly assigned to the later prehistoric period. This report characterises the composition of the samples and discusses evidence for agriculture, fuel use as well as evidence for the past vegetation.

6.2 Methodology

6.2.1 The samples were processed in their entirety in a flotation tank, and the residues and flots were retained on 500µm and 250µm meshes and air dried. The residues were passed through graded sieves (8, 4 and 2mm) and each fraction sorted for environmental and artefact remains (Appendix 2). The flots were scanned under a stereozoom microscope at x7-45 magnifications and their content recorded (Appendix 3). Preliminary identifications of macrobotanical remains have been made through comparison with reference atlases (Cappers *et al.* 2006, Jacomet 2006 and NIAB 2004) and nomenclature used follows Stace (1997).

6.3 Results

Postholes:
Sample <4>, single fill (056) of posthole [055]; sample <5>, single fill (058) of posthole [057]

6.3.1 Samples <4 and 5> produced small flots (10 and 4ml in volume respectively) which were dominated by uncharred vegetation including numerous fine roots and occasional uncharred seeds such as blackberry/raspberry (*Rubus fruticosus* agg*./idaeus*), common fumitory (*Fumaria officinalis*) and goosefoot (*Chenopodium* sp.). Charred macroplant remains were uncommon and overall poorly preserved. The small assemblage comprised two possible grains of barley (cf. *Hordeum* sp.), a grain a wheat (*Triticum* sp.), five grains which could not be identified (Cerealia) and a single charred grass (Poaceae) seed. The flots and residues produced a small assemblage of wood charcoal fragments. A small quantity of burnt and unburnt bone fragments and land snail shells were also recorded. In addition to fragments of burnt unworked flint and pieces of struck flint, the residues produced a few small pieces of coal, a small amount of magnetised material as well as some poorly preserved, distorted, vesicular and slightly vitrified charred matter, the origin of which is not immediately apparent.

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Possible hearths/fire pits:
Sample <6>, fill (048) of possible fire pit [050]; sample <7>, fill (013) of possible fire pit [011]

6.3.2 Both flots were again dominated by uncharred vegetation. Uncharred rootlets predominated, but a limited amount of uncharred seeds were also noticed including blackberry/raspberry, goosefoot as well as sun spurge (*Euphorbia helioscopia*). Infrequent charred macroplant remains were recorded in sample <7> including a potential grain of barley, three unidentified grains (Cerealia) and a single grass seed. Charred wood fragments were again uncommon, but they were slightly more common in sample <7>. No bones were evident in these samples, and occasional LSS were observed only in the flot from sample <6>. Fuel remnants in the form of small pieces of coal were again present in the residues together with some flints (burnt as well as unburnt), magnetised material and occasional unidentified charred matter.

Pits:
Sample <1X>, second fill (021) of pit [019]; sample <2X>, second fill (026) and sample <03>, uppermost fill (027) of pit [024]; sample <8>, single fill (070) of pit [69]; sample <9>, primary fill (042) of pit [040];

6.3.3 Five samples were taken from four pit features, two of which - pits [019] and pit [024] - were described in the field has having a burnt fill. All five flots were small, measuring between six and 50ml. They contained high concentrations of rootlets (between 80 and 97% of each flot). Uncharred weed seeds were again recorded including. In addition to seeds of blackberry/raspberry, common fumitory, goosefoot and sun spurge, seeds of knotgrass / dock (*Polygonum* / *Rumex* sp.), nettle (*Urtica* sp.), nightshade (*Solanum* sp.) and black bindweed (*Fallopia convolvulus*) were also present. Charred macroplant remains were present in low numbers in four samples. Overall, the remains were in poor condition, mostly displaying abraded surfaces. The assemblage comprised a possible grain of barley, an unidentified grain, two grass seeds of fescue / rye-grass (cf. *Festuca* sp. / *Lolium* sp.) as well as few hazel (*Corylus avellana*) fragmented of nutshells. Charcoal was again poorly represented in these samples. Other biological remains comprised two fly puparia and small amounts of bone fragments and LSS. Artefact remains were the same as the remains recorded in the previous samples. In addition, sample <8> produced two small pieces of pottery including a glazed fragment.

Ditches:
Sample <1>, fill (2/006) of ditch [2/005]; sample <2>, basal fill (3/009) of ditch [3/006]

6.3.4 Samples <1> and <2> produced relatively large flots, both dominated by uncharred vegetation including roots and infrequent uncharred seeds such as elder (*Sambucus nigra*), blackberry / raspberry, goosefoot, sun spurge and seeds from the pink (Caryophyllaceae) family. Charred wood fragments were infrequent, and charred macroplant were recorded in sample <2> only. The very small assemblage consisted of a single hazel nutshell fragment, two grains of wheat and two grains too poorly preserved to be identified. The same sample produced two fly puparia. A small amount of burnt and unburnt pieces of flint were present in the residues.

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6.4 Discussion

6.4.1 Sampling confirmed the presence of charcoal, charred macroplant remains, unburnt and burnt bones, fly puparia and land snail shells whilst also assisting in the recovery of artefacts. A large quantity of roots was also recorded together with a wide range of uncharred weed seeds. Evidence for root disturbance was noted during excavation work, and all the deposits were recorded as dry. The uncharred weed seeds are likely to be comparatively modern and intrusive considering the nature of the deposits and frequency of rootlets in the flots.

6.4.2 Charred macroplant remains assemblages were very limited and are mainly poorly preserved. Although they do confirm the presence and probable consumption of cereal crops and wild food items these remains may or may not be associated with the late prehistoric landuse activities. Evidence is mainly based on the infrequent charred grains of wheat and possible barley. In addition, occasional charred hazel nutshell fragments could provide evidence for food gathered from the wild. Unfortunately these assemblages are too small and cannot be securely associated with primary activities at the site. The assemblages are likely to contain amalgams of anthopogenic remains from several sources and these remains may have accumulated gradually, particularly if the features remained open within the landscape. The addition of abundant uncharred, modern and intrusive botanicals further complicates their interpretation and it is therefore not possible to relate these remains to their original uses. Due to the infrequency of charred plant remains, their poor preservation and the presence of modern intrusive elements they cannot therefore be used to provide meaningful interpretations regarding the diet of the population and the scale of arable activities, plant or fuel use at the site.

6.5 Radiocarbon dating potential

6.5.1 An aim, identified during the fieldwork phase of the project was to attempt, if possible, to implement a scientific dating programme. The purpose of this was to help date archaeological features from which little or no other datable material was recovered. Unfortunately, environmental remains that were hand collected and recovered from the bulk samples were found to hold no potential to provide radiocarbon dates that would assist in refining the broad date range of late prehistoric activities. This is because of several interlinked reasons which are detailed below.

6.5.2 The most important reason is that there is no unequivocal evidence for any of the environmental remains being securely associated with the use of the features excavated. Secondly, where present, the remains were infrequent and, thirdly, these remains were found together with uncharred botanical material. These uncharred remains reveal the potential for significant levels of intrusion (whether by modern vegetation or small archaeological remains from later phases of land use). Small archaeobotanical material is particularly subject to movement within soils where modern root disturbance is also common.

6.5.3 Two features which were recorded as possible hearth/fire pits provide a good example of the complicated nature of these deposits. During excavation they

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were recorded as containing probable insitu burning which was represented by blackening of the deposits. However, the small charcoal and charred botanical assemblages present in the samples lend little support to the evidence for primary fuel using activities. It appears that although the features may have been used for charring related activities most of the remaining fuel has been broken down and leached from the soils leaving behind stained blackened deposits and small pieces of charcoal only. Given the abundance of uncharred vegetation (roots and seeds) in these samples the integrity of the small amount of charred grains and twigs also present is compromised (i.e. they could easily have been introduced from later events) and therefore unsuitable for reliable dating.

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7 DISCUSSION AND CONCLUSIONS

7.1 Introduction

7.1.1 Archaeological excavations on site found evidence of activity dating to the Middle Neolithic and later prehistoric period. However, relatively low quantities of material culture and environmental remains probably suggest that this was not the focus of intensive settlement activity in either period.

7.1.2 Within the strip, map and sample area, the recent use of the land as allotments, has most likely had a negative impact on the preservation of archaeology on the site. Many of the features appeared to have been significantly truncated although archaeological remains have been shown to survive in the area.

7.2 Period 1 - Middle Neolithic

7.2.1 A single probable Middle Neolithic pit, [044], was assigned to this period on the basis of a few abraded sherds of Peterborough Ware. Although the pit was shallow and bowl-shaped, a fairly typical form during this period, there is no clear evidence that it conforms to the pattern of meaningful pit deposition described by Thomas (1999, 64-74). In these types of deposits we would expect partially-complete pottery vessels alongside other selectively deposited cultural material. Instead these sherds seem more likely to have been accidentally incorporated into backfill and it is feasible that they are residual. Conversely, many of the pits broadly assigned to the later prehistoric period were undated and it is possible that they are contemporary with [044]. Although there are no Early/Middle Neolithic monuments in the immediate vicinity, the presence Neolithic flintwork and pottery suggests that the broader Darent/Ebbsfleet region was a focus for activity in this period (see 2.1.3).

7.3 Period 2 – Later Prehistoric

7.3.1 The fairly consistent alignment of most of the linear features suggests that they are part of a single contemporary enclosure with a possible entrance on the western side and bounded by a trackway to the south. Although no diagnostic pottery was recovered, a few bodysherds in fabrics consistent with a broad Middle/Late Bronze Age date were recovered.

7.3.2 It is less certain whether all of the discrete features within this enclosure are directly contemporary as most were completely undated and those which did produce finds could only be assigned very broadly to the later prehistoric period. Several produced very small fragments of post-medieval coal or other industrial waste, which is thought to be intrusive.

7.3.3 Although it was suggested that two of the features were post-holes, based on their size and the presence of possible packing material, there was no clear structural evidence. Most of the features appear to be pits but they vary in size, depth and profile and there was little artefactual or environmental evidence about their function. Some may represent quarrying features but others appear small and shallow. At least one of the features appears to have some tentative evidence of situ burning and may represent a small

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hearth/cooking pit. Overall the later prehistoric remains seem typical of rural agricultural activity away from more densely settled areas.

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8.0 UPDATED PROJECT DESIGN

8.1 Revised Research Agenda

8.1.1 This section combines those original research aims that the site archive has the potential to address with any new research aims identified in the assessment process by stratigraphic, finds and environmental specialists to produce a set of revised research aims that will form the basis of any future research agenda. Revised research aims (RRA's) are posed as questions below.

RRA1 The archaeological investigation will seek to understand the context of the findings in relationship to the wider settlement pattern, landscape, economy and environment. Later prehistoric remains have been identified on the higher ground to the west of the site around Stone Castle and it may be possible to establish a relationship between the two areas.

8.1.2 Although the dating evidence from the current site is slight, it appears more typical of the later 2nd to earlier 1st millennium BC. As such it may be significantly earlier than the broadly Middle/Late Iron Age/early Roman settlement evidence from larger excavations at Stone Castle Quarry and Waterstone Park (Detsicas 1966; Haslam in prep) so there is no clear evidence of a relationship between the two areas.

RRA2 The archaeological investigation will seek to gain a better understanding of field systems, in particular their relationship to settlement and their uses beyond agriculture, including potential ritual deposition

8.1.3 The strip, map and sample exercise has broadly confirmed that the field system appears to be agricultural in nature, and the lack of finds and environmental material suggests that it may have lain away from settlement areas. Although a number pits were recorded, which may suggest other types of activity, there was little evidence about their function, aside from one which appeared to have been used as a small hearth cooking pit. There were no obvious signs of ritual deposition in any of the features encountered on site.

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Appendix 1: Context Register

CONTEXT DESCRIPTION	COMMENTS	PARENT_CON	GROUP	PERIOD	SPOTDATE	SECTION	SAMPLE
Topsoil							
Made Ground							
Subsoil							
Natural							
Cut of Ditch		5	GR5	Late Prehistoric		C1	
Fill of Ditch		5	GR5	Late Prehistoric		C1	
Cut of Ditch		7	GR5	Late Prehistoric		C2	
Fill of Ditch		7	GR5	Late Prehistoric		C2	
Cut of Post Hole		9	GR8	Late Prehistoric		C3	
Fill of Post Hole		9	GR8	Late Prehistoric		C3	
Cut of Pit		11	GR9	Late Prehistoric		C5	
Fill of Pit		11	GR9	Late Prehistoric		C5	
Fill of Pit		11	GR9	Late Prehistoric		C5	7
Cut of Ditch		14	GR5	Late Prehistoric		C4	
Fill of Ditch		14	GR5	Late Prehistoric		C4	
Cut of Pit		16	GR16	Late Prehistoric		C4	
Fill of Pit		16	GR16	Late Prehistoric		C4	
Fill of Pit		16	GR16	Late Prehistoric		C4	
Cut of Pit		19	GR9	Late Prehistoric		C6	
Fill of Pit		19	GR9	Late Prehistoric		C6	
Fill of Pit		19	GR9	Late Prehistoric		C6	1X

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CONTEXT DESCRIPTION	COMMENTS	PARENT_CON	GROUP	PERIOD	SPOTDATE	SECTION	SAMPLE
Cut of Post Hole		22	GR8	Late Prehistoric		C7	
Fill of Post Hole		22	GR8	Late Prehistoric		C7	
Cut of Pit		24	GR9	Late Prehistoric		C8	
Fill of Pit		24	GR9	Late Prehistoric		C8	
Fill of Pit		24	GR9	Late Prehistoric		C8	2X
Fill of Pit		24	GR9	Late Prehistoric		C8	3
Cut of Pit		28	GR8	Late Prehistoric		C9	
Fill of Pit		28	GR8	Late Prehistoric		C9	
Cut of Post Hole		30	GR8	Late Prehistoric		C10	
Fill of Post Hole		30	GR8	Late Prehistoric		C10	
Cut of Ditch		32	GR6	Late Prehistoric		C11	
Fill of Ditch		32	GR6	Late Prehistoric		C11	
Cut of Pit		34	GR14	Late Prehistoric		C12	
Fill of Pit		34	GR14	Late Prehistoric		C12	
Cut of Gully		36	GR4	Late Prehistoric		C13	
Fill of Gully		36	GR4	Late Prehistoric		C13	
Cut of Ditch Terminus		38	GR4	Late Prehistoric		C14	
Fill of Ditch Terminus		38	GR4	Late Prehistoric		C14	
Cut of Pit		40	GR9	Late Prehistoric		C15	
Fill of Pit		40	GR9	Late Prehistoric		C15	
Fill of Pit		40	GR9	Late Prehistoric		C15	9
Fill of Pit		40	GR9	Late Prehistoric		C15	
Cut of Pit		44	GR1	Late Prehistoric		C16	

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CONTEXT DESCRIPTION	COMMENTS	PARENT_CON	GROUP	PERIOD	SPOTDATE	SECTION	SAMPLE
Fill of Pit		44	GR1	Middle Neolithic	37th Century BC	C16	
Cut of Pit		46	GR15	Late Prehistoric		C17	
Fill of Pit		46	GR15	Late Prehistoric		C17	
Fill of Pit		50	GR9	Late Prehistoric		C18	6
Fill of Pit		50	GR9	Late Prehistoric		C18	
Cut of Pit		50	GR9	Late Prehistoric		C18	
Cut of Ditch		51	GR2	Late Prehistoric		C20	
Fill of Ditch		51	GR2	Late Prehistoric		C20	
Fill of Post Hole		54	GR8	Late Prehistoric		C19	
Cut of Post Hole		54	GR8	Late Prehistoric		C19	
Cut of Post Hole		55	GR7	Late Prehistoric		C21	
Fill of Post Hole		55	GR7	Late Prehistoric		C21	4
Cut of Post Hole		57	GR7	Late Prehistoric		C22	
Fill of Post Hole		57	GR7	Late Prehistoric		C22	5
Fill of Ditch		60	GR5	Late Prehistoric		C23	
Cut of Ditch		60	GR5	Late Prehistoric		C23	
Fill of Pit		62	GR11	Late Prehistoric		C24	
Cut of Pit		62	GR11	Late Prehistoric		C24	
Fill of Ditch		64	GR3	Late Prehistoric		C25	
Cut of Ditch		64	GR3	Late Prehistoric		C25	
Fill of Ditch		66	GR3	Late Prehistoric		C26	
Cut of Ditch		66	GR3	Late Prehistoric		C26	

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CONTEXT DESCRIPTION	COMMENTS	PARENT_CON	GROUP	PERIOD	SPOTDATE	SECTION	SAMPLE
Fill of Ditch		68	GR3	Late Prehistoric		C27	
Cut of Ditch		68	GR3	Late Prehistoric		C27	
Cut of Pit		69	GR12	Late Prehistoric		C35	
Fill of Pit	Intrusive Pottery	69	GR12	Late Prehistoric	12th - 13th Century	C35	8
Cut of Ditch		72	GR2	Late Prehistoric		C28	
Fill of Ditch		72	GR2	Late Prehistoric		C28	
Cut of Ditch		74	GR6	Late Prehistoric		C29	
Fill of Ditch		74	GR6	Late Prehistoric		C29	
Fill of Pit		76	GR10	Late Prehistoric		C30	
Cut of Pit		76	GR10	Late Prehistoric		C30	
Fill of Pit		78	GR10	Late Prehistoric		C31	
Cut of Pit		78	GR10	Late Prehistoric		C31	
Fill of Post Hole		80	GR10	Late Prehistoric		C32	
Cut of Post Hole		80	GR10	Late Prehistoric		C32	
Fill of Pit		82	GR13	Late Prehistoric		C33	
Cut of Pit		82	GR13	Late Prehistoric		C33	
Fill of Pit		84	GR12	Late Prehistoric		C34	
Cut of Pit		84	GR12	Late Prehistoric		C34	
Fill of Pit		86	GR12	Late Prehistoric		C36	
Cut of Pit		86	GR12	Late Prehistoric		C36	
Fill of Ditch Terminus		88	GR2	Late Prehistoric			
Cut of Ditch Terminus		88	GR2	Late Prehistoric			
Colluvium							

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CONTEXT DESCRIPTION	COMMENTS	PARENT_CON	GROUP	PERIOD	SPOTDATE	SECTION	SAMPLE
Cut of Ditch	Eval	2/005	GR2	Late Prehistoric		A3	
Fill of Ditch	Eval	2/005	GR2	Late Prehistoric		A3	1
Cut of Ditch	Eval	3/006	GR6	Late Prehistoric		A4	
Fill of Ditch	Eval	3/006	GR6	Late Prehistoric		A4	
Cut of Pit	Eval	4/001	GR10	Late Prehistoric		A1	
Fill of Pit	Eval	4/001	GR10	Late Prehistoric		A1	
Cut of Pit	Eval	4/003	GR10	Late Prehistoric		A1	
Fill of Pit	Eval	4/003	GR10	Late Prehistoric		A1	
Cut of Pit	Eval	4/011	GR13	Late Prehistoric		A5	
Fill of Pit	Eval	4/011	GR13	Late Prehistoric		A5	

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Appendix 2: Environmental Data – Residues

Sample Number	Context	Context / deposit type	Sample Volume litres	Sub-Sample Volume litres	Charcoal >4mm	Weight (g)	Charcoal <4mm	Weight (g)	Charred botanicals (other than charcoal)	Weight (g)	Bone and Teeth	Weight (g)	Burnt bone 2-4g	Weight (g)	Land Snail shells	Weight (g)	Other (eg ind, pot, cbm)
1	2/006	D	25	25			*	<2							**	2	Flint */148g
2	3/009	D	40	40	*	<2	*	<2	* *Corylus avellana* (1)	<2							FCF */8g - Flint */20g
1X	21	P	20	20	*	<2	**	<2									Flint */13g - Burnt flint */28g - Charred matter * /<2g - Magnetised material ***/<2g
2X	26	P	10	10	*	<2	*	<2	** *Corylus avellana*	<2							Coal */<2g- Burnt flint **/142g - Charred matter * /<2g - Magnetised material ***/4g
3	27	P	40	40	*	<2	**	<2	* Cerealia (1)	<2	*	<2			*	<2	Coal */<2g - Flint */<2g - Burnt flint ***/500g - Charred matter * /<2g - Magnetised material ***/10g
4	56	SP	10	10			*	<2	* Cerealia, cf. *Hordeum* sp. (1)	<2	*	<2			*	<2	Coal */<2g - Flint */47g - Burnt flint **/325g - Charred matter * /<2g - Magnetised material ***/<2g
5	58	SP	10	10	*	<2	*	<2			*	<2	*	<2	*	<2	Flint */341g - Burnt flint **/248g - Charred matter ** /<2g - Magnetised material ***/<2g

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Sample Number	Context	Context / deposit type	Sample Volume litres	Sub-Sample Volume litres	Charcoal >4mm	Weight (g)	Charcoal <4mm	Weight (g)	Charred botanicals (other than charcoal)	Weight (g)	Bone and Teeth	Weight (g)	Burnt bone 2-4g	Weight (g)	Land Snail shells	Weight (g)	Other (eg ind, pot, cbm)
6	48	HE	10	10			*	<2									Coal */<2g - Burnt flint **/20g - Charred matter ** /<2g - Magnetised material **/<2g
7	13	HE	20	20	*	<2	**	<2									Coal */<2g - Flint */3g - Burnt flint **/22g - Charred matter * /<2g - Magnetised material **/2g
8	70	P	30	30	*	<2	**	<2			*	<2			*	<2	Coal */<2g - Burnt flint */153g - Charred matter * /<2g - Magnetised material **/<2g, Pottery */<2g
9	42	P	20	20	*	<2	**	<2			*	<2					Coal */<2g - Burnt flint **/52g - Charred matter * /<2g - Magnetised material **/<2g

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Appendix 3: Environmental Data – Flots

Sample Number	Context	Weight g	Flot volume ml	Volume scanned	Uncharred %	Sediment %	Seeds uncharred (modern)	Charcoal >4mm	Charcoal <4mm	Charcoal <2mm	Crop seeds charred	Identifications	Preservation	Weed seeds charred	Identifications	Preservation	Insects, Fly Pupae etc min	Land Snail Shells	Industrial debris hammerscale	Potential	Further work	notes
1	2/006	16	125	125	94	2	* *Chenopodium* sp., *Rubus fruticosus* agg. / *idaeus*, *Sambucus nigra*		*	*								**		CH D MA D	No	Flot dominated by uncharred roots (roody roots and fine rootlets); charcoal uncommon and mostly represented by small-sized fragments
2	3/009	8	90	90	88	2	* *Chenopodium* sp., *Rubus fruticosus* agg. / *idaeus*, *Euphorbia helioscopia*, Caryophyllaceae	*	*	*	*	* *Triticum* sp. (2), Cerealia (2)	+ to ++				FP X 2	**		CH D MA D	No	Uncharred vegetation abundant; grains infrequent and poorly preserved; charcoal uncommon

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Sample Number	Context	Weight g	Flot volume ml	Volume scanned	Uncharred %	Sediment %	Seeds uncharred (modern)	Charcoal >4mm	Charcoal <4mm	Charcoal <2mm	Crop seeds charred	Identifications	Preservation	Weed seeds charred	Identifications	Preservation	Insects, Fly Pupae etc min	Land Snail Shells	Industrial debris hammerscale	Potential	Further work	notes
1X	21	4	20	20	95	2	* *Chenopodium* sp., *Rubus fruticosus* agg. / *idaeus*, *Euphorbia helioscopia, Polygonum / Rumex* sp., *Follopia convolvulus*		*	*	*			*	cf. *Festuca* sp. / *Lolium* sp. (1)	+		*		CH D MA D	No	Uncharred vegetation abundant: fine roots and woody roots
2X	26	2	6	6	97	2	* *Fumaria officinalis*			**								*		CH D MA D	No	charcoal flecks only
3	27	2	25	25	90	2	* *Euphorbia helioscopia*		*	*								**		CH D MA D	No	Uncharred vegetation common: rootlets and modern seeds
4	56	2	10	10	86	2	* *Chenopodium* sp., *Rubus*		*	**	*	*Triticum* sp. (1), Cerealia (2)	+					*** 10%		CH D MA D	No	charcoal slightly vitrified; charred macro poorly preserved

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Sample Number	Context	Weight g	Flot volume ml	Volume scanned	Uncharred %	Sediment %	Seeds uncharred (modern)	Charcoal >4mm	Charcoal <4mm	Charcoal <2mm	Crop seeds charred	Identifications	Preservation	Weed seeds charred	Identifications	Preservation	Insects, Fly Pupae etc min	Land Snail Shells	Industrial debris hammerscale	Potential	Further work	notes
							fruticosus agg. / *idaeus*															
5	58	<2	4	4	92	2	* *Fumaria officinalis*			**	*	Cerealia (1)	+	*	Poaceae (1)	++		**	*	CH D MA D	No	industrial debris: uncommon <4mm; unchared vegetation: common rootlets, charred macro: infrequent rootlets, same for the charcoal
6	48	<2	8	8	94	2	* *Chenopodium* sp., *Euphorbia helioscopia*		*	*								*		CH D MA D	No	
7	13	8	70	70	90	2	* *Rubus fruticosus* agg. / *idaeus*, *Euphorbia helioscopia*	**	**	**	*	cf. *Hordeum* sp. (1), Cerealia (1)	+	*	Poaceae (1)	+				CH D MA D	No	charcoal: ass. Includes twigs >20mm, but uncommon

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Sample Number	Context	Weight g	Flot volume ml	Volume scanned	Uncharred %	Sediment %	Seeds uncharred (modern)	Charcoal >4mm	Charcoal <4mm	Charcoal <2mm	Crop seeds charred	Identifications	Preservation	Weed seeds charred	Identifications	Preservation	Insects, Fly Pupae etc min	Land Snail Shells	Industrial debris hammerscale	Potential	Further work	notes
8	70	2	50	50	80	2	** *Chenopodium* sp., *Rubus fruticosus* agg. / *idaeus*, *Fumaria officinalis*, *Polygonum* / *Rumex* sp.	*	**	**	*	cf. *Hordeum* sp. (1), Cerealia (1)	+ to ++	*	cf. *Festuca* sp. / *Lolium* sp. (1)	+	FP X 2	*** 15%		CH D MA D	No	charred macro poorly preserved; charcoal: mostly small-sized pieces
9	42	2	25	25	88	2	* *Solanum* sp., *Urtica* sp., *Chenopodium* sp.		*	*								***		CH D MA D	No	rootlets and woody roots abundant; charcoal uncommon

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Appendix 4: HER Summary Form

Site Code	SCV1 3					
Identification Name and Address	St Clements Valley, London Road, Greenhithe, Kent					
County, District &/or Borough	Dartford, Kent					
OS Grid Refs.	558405 174560					
Geology	Head Deposits					
Arch. South-East Project Number	2014129					
Type of Fieldwork	Eval.	Excav. ✓	Watching Brief	Standing Structure	Survey	Other
Type of Site	Green Field ✓	Shallow Urban	Deep Urban	Other		
Dates of Fieldwork	Eval. Nov 2013	Excav. March 2014	WB.	Other		
Sponsor/Client	CgMs					
Project Manager	Paul Mason					
Project Supervisor	Gary Webster					
Period Summary	Palaeo.	Meso.	Neo.✓	BA✓	IA✓	RB
	AS	MED	PM	Other Modern		

100 Word Summary

An archaeological strip, map and sample exercise was carried out by Archaeology South-East at St Clements Valley, London Road, Greenhithe, Kent. The fieldwork was commissioned by CgMs Consulting Ltd in advance of a residential development on the site.

The earliest evidence recorded was a pit containing a small amount of Middle Neolithic pottery. Although most of the features are poorly dated, the remainder of the archaeology can probably be broadly assigned to the later prehistoric period, and most likely to the later 2nd/earlier 1st millennium BC. The main element is an enclosure bounded to the south by a trackway. A large number of pits/post-holes were recorded within the enclosure although these were of quite variable size and profile and, in most cases, there was little clear evidence about their function. The lack of finds or environmental evidence from the site as a whole probably suggests that the function of the site was largely agricultural.

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Appendix 5: OASIS Form

OASIS ID: archaeol6-177433

Project details

Project name	An archaeological strip, map and sample exercise was carried out by Archaeology South-East at St Clements Valley, London Road, Greenhithe, Kent. The fieldwork was commissioned by CgMs Consulting Ltd in advance of a residential development on the site. The earliest evidence recorded was a pit containing a small amount of Middle Neolithic pottery. Although most of the features are poorly dated, the remainder of the archaeology can probably be broadly assigned to the later prehistoric period, and most likely to the later 2nd/earlier 1st millennium BC. The main element is an enclosure bounded to the south by a trackway. A large number of pits/post-holes were recorded within the enclosure although these were of quite variable size and profile and, in most cases, there was little clear evidence about their function. The lack of finds or environmental evidence from the site as a whole probably suggests that the function of the site was largely agricultural.
Short description of the project	
Project dates	Start: 03-03-2014 End: 13-03-2014
Previous/future work	Yes / No
Any associated project reference codes	SCV 13 - Sitecode
Type of project	Recording project
Site status	None
Current Land use	Other 13 - Waste ground
Investigation type	"Full excavation"

Project location

Country	England
Site location	KENT DARTFORD SWANSCOMBE AND GREENHITHE St Clements, London Road, Greenhithe, Kent
Postcode	DA9 9JF
Study area	3500.00 Square metres
Site coordinates	TQ 58405 74560 51.4473195325 0.279802020342 51 26 50 N 000 16 47 E Point

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Height OD / Depth	Min: 6.10m Max: 9.10m

Project creators

Name of Organisation	Archaeology South East
Project brief originator	CgMs Consulting
Project director/manager	Paul Mason
Project supervisor	Gary Webster
Type of sponsor/funding body	Bellway Homes Ltd

Project archives

Physical Archive recipient	Dartford Museum
Digital Archive recipient	Dartford Museum
Paper Archive recipient	Dartford Museum

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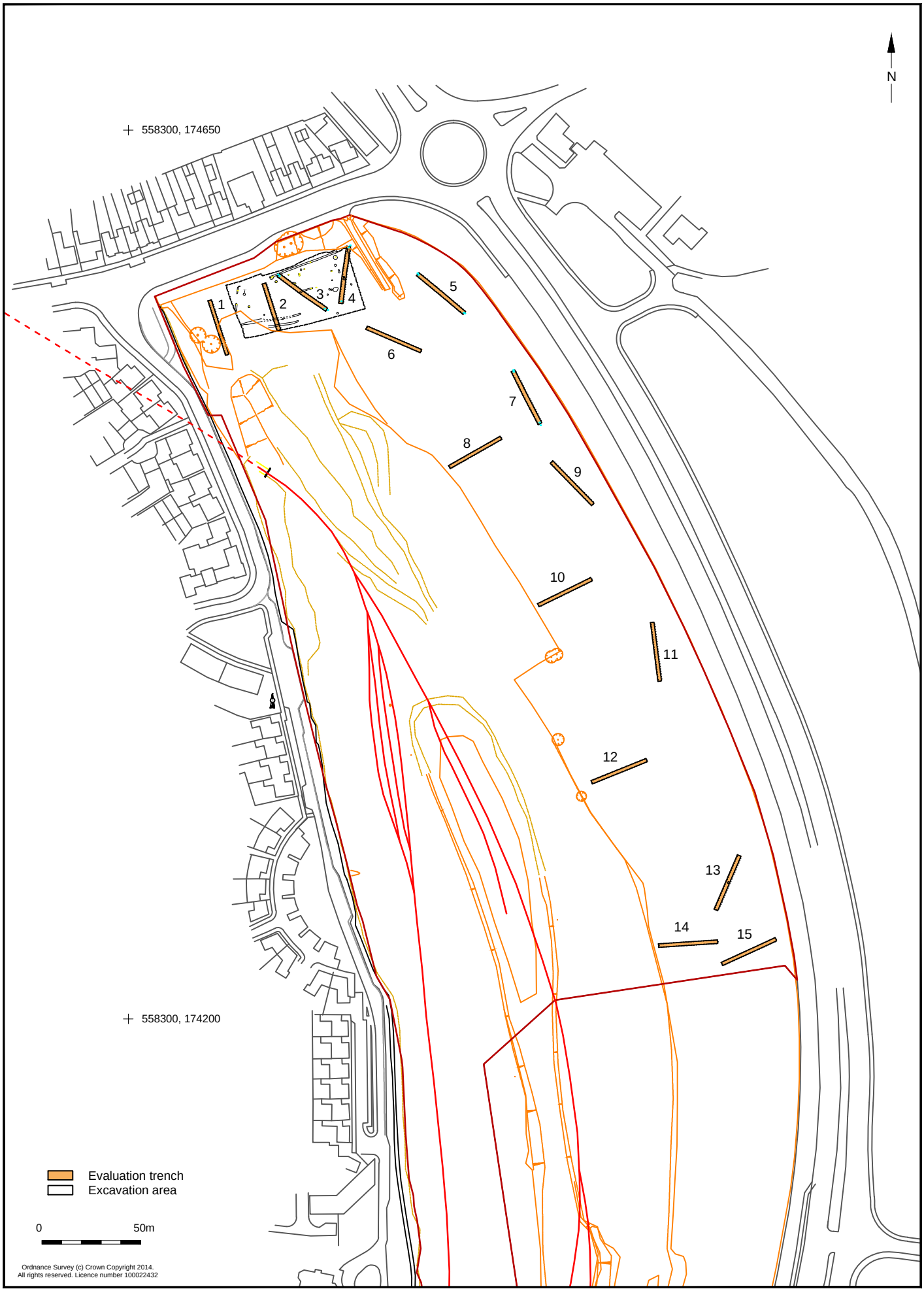
Project Ref: 6552	April 2014	Site location	
Report Ref: 2014129	Drawn by: JLR		



© **Archaeology South-East**		St. Clements Valley, Greenhithe	Fig. 2
Project Ref: 6552	April 2014	Site plan	
Report Ref: 2014129	Drawn by: JLR		

558350, 174585

558415, 174585

N

GR 1

Section 1

044

0 5m

Section 1

W E

7.98mOD

045

044

0 0.5m

044 looking north

© Archaeology South-East		St. Clements Valley, Greenhithe	Fig. 3
Project Ref: 6552	April 2014	Period 1 plan	
Report Ref: 2014129	Drawn by: RHC		

558350, 174585

558415, 174585

N

Section 2

007

GR 5

060

040

GR 9

076

Section 3

019

022

GR 9

005

050

078

GR 10

011

009

028

GR 8

4/001

4/003

014

016

GR 16

024

GR 9

GR 14

034

GR 11

054

GR 13

4/011

080

030

GR 6

032

062

084

082

Section 4

3/006

086

036

GR 4

038

GR 15

046

GR 12

069

GR 2

055

GR 7

088

072

057

064

051

2/005

GR 3

066

068

0 5m

Section 2

N S

6.66mOD

008

007

0 0.5m

Section 3

N S

6.95mOD

021

020

019

Section 4

E W

7.02mOD

061

062

007 looking east

019 looking east

062 looking south

© **Archaeology South-East**		St. Clements Valley, Greenhithe	Fig. 4
Project Ref: 6552	April 2014	Period 2 plan, sections and photographs	
Report Ref: 2014129	Drawn by: RHC		

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