# CHANNEL TUNNEL RAIL LINK Union Railways (South) Ltd

**Project Area 420** 

# CTRL PROJECT AREA 420 ARCHAEOLOGICAL WATCHING BRIEFS ARC 420 99

WATCHING BRIEF INTERIM REPORT FINAL

Contract: S/400/SP/0009/P482

Oxford Archaeological Unit October 2000

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Contract: S/400/SP/0009/P482

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# CTRL PROJECT AREA 420 ARCHAEOLOGICAL WATCHING BRIEFS ARC 420 99

#### **CONTENTS**

1	INTRODUCTION	2
1.1	Project Background	2
1.2	Topography, geology and land-use	2
1.3	Background	2
1.4	Methods of archaeological monitoring and recording	5
2	SUMMARY OF RESULTS	7
2.1	Presentation of results	7
2.2	Summary of results	8
2.3	Sites preserved in situ.	13
2.4	Periods represented.	14
2.5	Artefactual remains.	
2.6	Palaeoenvironmental and economic evidence	
3	FIELDWORK EVENT AIMS	
4	SUMMARY OF POTENTIAL AND RECOMMENDATIONS	17
4.1	Watching Brief General	17
4.2	Significant Discoveries Individual	
4.3	Significant Discoveries Supplementary	
4.4	Negative evidence	19
Ŧ		
	f Appendices	•
	ENDIX 1: ARCHIVE INDICES	
	ENDIX 2: SUMMARY REPORTS	
APPE	ENDIX 3: SMR SHEETS	33

#### 1 INTRODUCTION

#### 1.1 Project Background

- 1.1.1 The Oxford Archaeological Unit was commissioned by Union Railways (South) Limited (URS) to monitor all earthworking operations with a potential archaeological impact within CTRL Project Area 420. This work formed part of an extensive programme of archaeological investigation carried out during the construction of the CTRL.
- 1.1.2 Project Area 420 consists of all permanent and temporary land-take associated with construction of the CTRL, from West of Boarley Farm, Boxley (URS Grid 55400E/40000N, NGR TQ 75300E / 60100N) to East of Lenham Heath (URL Grid 71800E / 29400N, NGR TQ 91800E / 49200N). This includes the trace (at grade, within cuttings and on embankments), bridges and associated works. (mitigation earthworks, construction sites, transformer stations etc.).
- 1.1.3 Areas previously subject to strip, map and sample excavation were excluded from the works, as were areas of known large-scale modern disturbance (as detailed in the WSI).

#### 1.2 Topography, Geology and Landuse

- 1.2.1 In Project Area 420 the CTRL route runs broadly parallel to the North Downs escarpment, following a natural line of communication occupied by the existing London-Folkestone Railway, the M20 and the A20.
- 1.2.2 From the Pilgrims Way, at the foot of the Downs escarpment, the CTRL crosses the Boxley Valley. Fields of pasture dotted with trees and hedges typify this historic landscape. The route passes to the north of Maidstone across large arable fields and extensive woodland and runs alongside the M20 from Detling to Lenham. The route crosses the A20 at Harrietsham where the landscape has a variable pattern of open agricultural land and small country lanes and settlements. East of Harrietsham and the village of Sandway, the Great Stour River lies to the south of the M20 within the degraded landscape of Chilston Park. Towards the end of the Project Area near Lenham Heath, the landscape is gently undulating and primarily agricultural, with a patchwork of fields and woodlands.
- 1.2.3 The solid geology at the western end of the contract, at the foot of the North Downs escarpment, is Middle Chalk that has been scoured and weathered during the last glaciation. At Boxley the chalk is overlain by head deposits of Gault Clay and claywith-flints. At Snarkhurst Wood the CTRL route passes onto the Folkestone Sand Beds on which it continues to the end of the Project Area at Lenham Heath.

#### 1.3 Background

Archaeological background

1.3.1 A desktop assessment has been conducted for the CTRL route, the results of which can be found in *Union Railways Limited, Channel Tunnel Rail Link: Assessment of Historic and Cultural Effects. Final Report.* (4 volumes. Prepared for URL by OAU, 1994).

#### Surface Collection Survey

1.3.2 An extensive surface collection survey was carried out along sections of the CTRL Route prior to any construction work. The survey results can be found in *Union Railways Limited, Channel Tunnel Rail Link: Assessment of Historic and Cultural Effects. Supplementary Fieldwork Report,* Part 2, (Prepared for URL by OAU, 1994).

Geophysical survey

1.3.3 Geophysical Surveys using a variety of techniques were carried at a number of sites within Project Area 420. The results can be found in a series of volumes produced for URL by Bartlett-Clark Consultancy and Geophysical Surveys of Bradford in 1995 and 1996.

#### **Evaluations**

1.3.3 A large number of evaluations have been carried out along the CTRL route within Project Area 420. The trenches were located either to evaluate areas of archaeological potential suggested by the desk-top assessment and surface collection survey, or to provide coverage of otherwise unknown stretches of the route. A list of evaluations carried out in Project Area 420, with a brief summary of results, year of fieldwork report and the archaeological contractor responsible, is provided below. Individual site reports are available for all evaluations listed:

Site	Site code	Chainage	Comments
Boarley Farm	ARCBFM97	58+200 to 59+400	Iron Age and Early Roman occupation, MoLAS, 1997
Boarley Lane	ARCBOL98	59+250	Bronze Age finds and medieval quarry, OAU, 1999
West of Boxley Road	ARCBXR97	60+250 to 60+500	Late Iron Age and Early Roman occupation, medieval ditch, OAU, 1997
East of Boxley Road	ARCEBR99	60+500 to 61+250	Undated ditches, OAU, 1999
West of Sittingbourne Road	ARCWEA99	61+800 to 62+100	Medieval ditched enclosure and post-medieval activity, OAU, 1999
East of Hockers Lane	ARCEHL99	62+750	Iron Age activity, OAU, 1999
Thurnham Roman Villa and Land South of Corbier Hall	ARCTHM96	63+450 to 63+900	Roman Villa, OAU, 1996
Crismill Lane	ARCCSM98	65+850 to 66+250	Undated ditch, OAU, 1999
Land South of Snarkhurst Wood	ARCSNK95	66+300 to 67+150	Late Iron Age, early Roman occupation, OAU, 1995
Eyhorne Street	ARCSEE99	67+950 to 68+250	Late Bronze Age Features, WA, 1999
Holm Hill	ARCHOL98	69+500 to 70+750	Late Bronze Age and Romano British Activity, WA, 1999
Harrietsham Mesolithic	ARCHRT97	71+000 to 71+700	No <i>in situ</i> prehistoric deposits identified, WA, 1999
Harrietsham, East Street	ARCHES98	72+100 to 72+400	Undated ditches and gullies, WA, 1999
Sandway Road	ARCSWR98	73+350 to	Neolithic Tree throw, Bronze

		73+650	Age activity, WA, 1999
Chilston Park	ARCCHPK97	74+650 to	Late Iron Age pottery (not in
		74+850	situ). Post-medieval
			boundary, OAU, 1997
West of Chapel Mill	ARCWCM98	75+700 to	Undated features and
		76+050	medieval ditch, OAU, 1999
Chapel Mill	ARCCML97	76+300 to	Bronze Age activity, OAU,
		76+500	1997
Lenham Heath	ARCLHT97	77+150 to	Scattered post-medieval
		77+900	features. WA 1999

#### Detailed Archaeological Works

1.3.4 Following the results from the evaluations detailed archaeological work was carried out at the locations listed below in chainage order from west to east. Interim reports are available for the sites listed (URS 1999a-h).

Site	Site code	Chainage	Results
West of Boarley Farm, Boxley <sup>1</sup>	ARCBFW98	58+250 to 58+500	Iron age animal burials, pits and postholes, URS (OAU) 1999a
East of Boarley Farm, Boxley	ARCBFE98	59+350	Roman ditch. Colluvial erosion features, URS (OAU) 1999b
Honeyhills Wood, Thurnham <sup>2</sup>	ARCHHW98	63+350 to 63+450	Undated earthworks in ancient woodland adjacent to Roman villa, URS (OAU) 1999c
Thurnham Roman Villa, Thurnham <sup>2</sup>	ARCTHM98	63+450 to 63+950	Bronze Age metalwork, late Iron Age enclosed settlement, Roman Villa, URS (OAU) 1999c
South of Snarkhurst Wood, Hollingbourne	ARCSNK98	66+450 to 66+800	Late Neolithic/ early Bronze Age flint scatter, Iron Age and early Roman occupation URS (OAU) 1999e
Holm Hill, Harrietsham	ARCHOL99	69+450	Dispersed late Bronze Age and Romano-British activity URS (WA) 1999f
Sandway Road, Lenham	ARCSWR99	73+400 to 73+650	Mesolithic flint scatters, Neolithic pits and tree throws, Bronze Age ditch and Romano British ditch URS (WA) 1999g
Chapel Mill, Lenham	ARCCML98	76+300 to 76+500	Bronze Age pit and two late Iron Age cremations URS URS (OAU) 1999h

<sup>&</sup>lt;sup>1</sup>This site is described in a combined interim report with the adjacent sites at White Horse Stone and Pilgrims Way (See Project Area 350/410).

<sup>&</sup>lt;sup>2</sup>These sites are described in a combined interim report.

#### 1.4 Methods of archaeological monitoring and recording:

Monitoring

- 1.4.1 All groundworks in areas with potential to contain archaeological remains were monitored by an archaeologist, in accordance with the WSI. Works included the removal of topsoil, subsoil, made ground and superficial geological deposits such as alluvium and colluvium. The translocation of ancient woodland soil was also monitored. When appropriate, a watching brief was maintained on demolition and site clearance works.
- 1.4.2 In areas subject to **Targeted Watching Brief**, stripping was carried out by the Main Contractor using a 360° excavator fitted with a toothless bucket, under the direct control of an archaeologist.
- 1.4.3 In the event of the discovery of significant archaeological remains, the notification procedure was implemented, as defined in the WSI. Following discussions between the Project Manager, Main Contractor, Archaeological Contractor and Statutory Consultees, exposed archaeological features and deposits were subject to an appropriate level of archaeological excavation and recording. In some cases, areas were designated for preservation *in situ*, where possible within the construction arrangements.
- 1.4.4 Project 420 originally contained no targeted watching brief areas (see WSI). Three areas were subsequently designated as Targeted Watching Brief in the course of fieldwork:
  - Thurnham Roman Villa (63+400 to 63+900)
  - Eyhorne Street (68+100 to 68+500)
  - Sandway Road (73+500 to 73+700)

#### Recording

- 1.4.5 On a daily basis the watching brief record consisted of, as a minimum:
  - Site code (including chainage) of areas observed
  - Date
  - Personnel present
  - A description of works observed
  - Type and extent of any activity including:
    - Depths
    - Measure of confidence that any archaeological remains would be observed and reasons.
    - All areas and horizons unaffected by construction activity
    - The specific site code of any archaeological or Quaternary remains (including the chainage reference)
    - Reasons why any particular area of the works was not observed
    - Summary location and description of any modern features

#### Unexpected Significant Discoveries

- 1.4.6 Unexpected archaeological and Quarternary remains were recorded to the standards specified by the Archaeological Watching Brief WSI Appendix B1 (3.3.6.8). All recording was conducted in accordance with the WSI and the *OAU Field Manual* (ed. D Wilkinson 1992), except where superseded by the specific requirements of the WSI.
- 1.4.7 The general site code applied to Project Area 420 was ARC 420/99. Where investigation of features was undertaken a specific site code was used, derived from the project chainage to within 100m. For example ARC 410/99 53+500. Where sites extend over more than 100m of the route the site code consists of a chainage range. Chainage distances in metres are measured from west to east, starting at London St.Pancras.
- 1.4.8 Feature intersections were excavated to establish relative chronologies and a sample of significant features was excavated to recover artefacts and environmental evidence. The excavation strategy in each case was determined following on-site discussions between representatives of the Project Manager (RLE), the Archaeological Contractor (OAU) and the Statutory Consultees (English Heritage, Kent County Council).
- 1.4.9 Temporary site grids were employed to record feature complexes or find scatters. An EDM or GPS was used to record the location of the grid points in relation to the CTRL project grid. The majority of individual finds and isolated features were related to the CTRL project grid by offsetting from chainage markers, which were set out by the construction team at 20 m intervals using an EDM or GPS. General observations were recorded directly onto 1:1250 scale route plans. All heights were recorded from URS permanent ground markers related to Ordnance Datum Newlyn.

#### Human Remains

1.4.10 All human remains were recorded in accordance with the CTRL Act 1996 and project procedure for reporting the discovery of human remains and the *OAU Field Manual* (ed. D Wilkinson 1992). When necessary the advice of an osteoarchaeologist was obtained.

#### Metal Detecting

1.4.11 When an area of archaeological remains was considered likely to contain significant metal artefacts, a metal detector was used and the location of all finds was recorded in plan.

#### Environmental sampling

- 1.4.12 The environmental sampling strategy was undertaken in accordance with the WSI, Appendix B1 (3.3.6.15).
- 1.4.13 Site specific environmental sampling strategies were formulated for Significant Discoveries Individual (SDI see 2.1.1 below).

#### 2 SUMMARY OF RESULTS

#### 2.1 Presentation of results

- 2.1.1 All sections of the route have been divided into three categories, defined as follows:
- Watching Brief General (WBG) Areas containing finds and features of relatively low significance with no clear relationship to previously discovered sites.
- **Significant Discoveries Individual (SDI)** Unexpected discoveries that may be recommended for individual assessment, due to their relative importance as individual sites.
- **Significant Discoveries Supplementary (SDS)** Data that adds significantly to known sites defined through previous archaeological mitigation works.

Sections of the route in Project Area 420 have been categorised as follows:

Site	Start chainage	End chainage	Category
Boarley Farm	58+200	59+500	SDS
Boxley Valley	59+500	61+900	WBG
West of Sittingbourne Road	61+900	62+000	SDI
Sittingbourne Road	62+000	62+200	WBG
Hockers Lane	62+200	63+000	SDI
Honeyhills Wood	63+000	63+400	WBG
Thurnham Roman Villa	63+400	63+900	SDS
Thurnham Lane to West of	63+900	66+350	WBG
Crismill Lane			
South of Snarkhurst Wood	66+300	67+100	SDS
Musket Lane	67+100	68+100	WBG
Eyhorne Street	68+100	68+500	SDI
Holme Hill and Harrietsham	68+500	73+500	WBG
Sandway Road	73+500	73+700	SDS
Chilston Park, Chapel Mill	73+700	78+150	WBG
and Lenham Heath			

- 2.1.2 The report figures contain summary information only, detailing archaeological features and deposits but omitting information on conditions of monitoring. This data has been incorporated into RLE's CAD system and will be up-dated as the earthworks proceed. Isolated features and deposits are labelled individually with chainage reference and context number. SDS and SDI discoveries are illustrated with a full site plan, where appropriate. Sections of the route with no archaeological deposits recorded during the watching brief are omitted.
- 2.1.3 The summary results are described in chainage order from west to east (Section 2.2). Each entry includes the fieldwork event code, fieldwork event name, category (WBG, SDS, SDI) and figure reference, and includes a summary of the archaeological discoveries.
- 2.1.4 The summary briefly describes feature type, period and the artefactual and palaeo-environmental data recovered.

# 2.2 Summary of watching brief results

2.2.1 **Event Code:** ARC 420 / 58+200 to 59+500

**Event name:** Boarley Farm

Category: SDS Figures: 2,11

**Summary:** 

Drawing ref.	Description
7	A small pit containing Iron Age pottery and burnt bone was investigated. It is interpreted as a hearth or small rubbish pit. One 40 litre environmental sample was recovered.
10	A feature interpreted as a quarry pit of probable post-medieval date was investigated. No dateable artefacts were recovered.
14	A post-medieval quarry pit containing well-preserved animal bone.
60	A small shallow pit filled with ragstone. No finds recovered.
64	A deposit of buried soil. Full extent unknown. Bronze Age flint and pottery recovered.
Boarley Lane	An area 22m x 50m was excavated following the discovery of a large medieval rubbish pit containing a concentration of pottery and a copper kitchen utensil (probably a spoon).
	The excavation also investigated a number of pits, postholes and field boundaries dating to the post-medieval period. The postholes did not form any structures but may have been parts of fence lines or perhaps tether posts for animals. A stone spread was excavated probably used to form a hard surface at the opening in the field boundary.
	The field boundaries might represent the former line of Boarley Lane, but there was no evidence of a track surface on the south-east side of the boundaries.
	A modern burial of a pig was discovered but not investigated due to the possible biological hazard.
	The medieval and later features discovered are concentrated in the vicinity of Boarley Farm, with which they are probably associated. The farm is located 100 m to the north of the CTRL trace.

2.2.2 **Event Code:** ARC 420 / 59+500 - 61+900

**Event name:** Boxley Valley

Category: WBG (Boxley Valley)

Figure:

Drawing ref.	Description
5	A post-medieval spread of rubbish containing bone, pot, shell, CBM and metal fragments. Probably associated with Boarley Farm.
6	A possible road surface orientated north-south and seen in the side of a bank at the edge of the field. Not fully revealed during construction works and mostly preserved beneath a hedge and bank that is not due to be disturbed by construction works. It is possible that this road linked Boxley Abbey with the Pilgrims Way and was a precursor to the present Boarley Lane.

2.2.3 **Event Code:** ARC 420 / 61+900 - 62+000

**Event name:** West of Sittingbourne Road **Category:** SDI

4,12

Figure: Summary:

Drawing ref. Description West of An early medieval enclosure with an internal diameter of c. 30m was Sittingbourne located during an evaluation (OAU 99). Although designated for Road preservation in situ, some further work was carried out during the watching brief when part of the site was machine stripped in contravention of the preservation instruction. The initial stripping in the south-west quadrant of the medieval enclosure was not carried out under archaeological supervision, resulting in severe truncation to the recorded features. Subsequent stripping over the remainder of the site, carried out under archaeological supervision, did not reach the archaeological horizon which meant that a complete plan of the enclosure was not obtained. The stripping in the south-west quadrant exposed the remains of two ditch terminals (5 and 27), which probably formed an entrance to the enclosure. A single posthole (15) was recorded next to one of the terminals. Two pits were also recorded; one pit (9) was nearly 1m deep and was possibly used for tanning. The other pit (19) was recorded in section only and contained domestic rubbish.

2.2.4 **Event Code:** ARC 420 / 62+000 - 62+200

**Event name:** Sittingbourne Road

Category: WBG Figure: 4

**Summary:** 

Drawing ref	Description
	No archaeological features or deposits identified

2.2.5 **Event Code:** ARC 420 / 62+200 - 63+000

**Event name:** Hockers Lane

Category: SDI Figure: 5,13

Drawing ref.	Description
71	During the topsoil stripping for an access road from the main trace to Sittingbourne Road, a NE-SW Romano-British Trackway (71), with a parallel ditch 74, was revealed. The trackway was not seen during the monitoring of stripping in Horish Wood. It can therefore be assumed that the trackway stops or turns before reaching the wood or has been truncated within the wood.
	The Trackway may be associated with the late Iron Age/ early Romano-British enclosure excavated 400m to the south-east.
Hockers Lane	An area 70m x 50m was stripped under archaeological control to allow investigation of an area of late Iron Age/ early Romano-British occupation discovered during routine monitoring to the east of Hockers

Lane. The excavation of this site identified three phases of late Iron Age/ early Romano-British enclosure ditches with internal divisions. No clearly defined buildings were identified but a number of internal features, including a possible beam slot and post-holes, probably relate to structures not fully defined during this excavation.

Part of the site extends beyond the northern boundary of the CTRL trace and was buried beneath a spoil heap during the preliminary earthwork phase in Autumn 1999. Although it is intended to preserve these deposits *in situ*, the spoil heap was removed in April 2000 during ongoing landscaping works. Because the stripping was carried out to a level above the archaeological horizon, it was not possible to obtain a plan of the features. The operation was carried out with a toothless bucket under archaeological supervision and plant was not permitted to track on the stripped surface. During further construction operations most of this area will be protected by replacing the topsoil and excluding plant from tracking on the site. However, a small area which will be affected by construction of a temporary compound is to be protected with a geotextile membrane and stone rubble layer.

The Thurnham Villa excavation is situated 600m to the west.

2.2.6 **Event Code:** ARC 420 / 63+000 - 63+400

**Event name:** Honeyhills Wood

Category: WBG Figure: 5 Summary:

Drawing ref.	Description
	No archaeological features or deposits identified

2.2.7 **Event Code:** ARC 420 / 63+400 - 63+900 Thurnham Roman Villa

Category: SDS Figure: 6,14

Drawing ref.	Description
Thurnham Roman Villa	A bank and hedge line between the Thurnham villa excavation (OAU 99) and the M20 was not previously excavated because it followed the line of a public footpath. During the watching brief an area 80m long and 7m wide was stripped under archaeological direction and the features and structures recorded.
	The excavation consisted of recording the continuation of structures; features and deposits previously investigated during the Thurnham Villa excavation. Little was added to the villa structure but a small cross wall and chalk deposits associated with the possible temple structure were investigated and may help in producing a concordance between the 1998 (CTRL) and 1958 (M20) excavations.

2.2.8 **Event Code:** ARC 420 / 66+900 - 66+300

**Event name:** Thurnham Lane to West of Crismill Lane

Category: WBG Figure: 6

**Summary:** 

Drawing ref.	Description		
	No archaeological features or deposits identified		

2.2.9 **Event Code:** ARC 420 / 66+300 - 67+100 **Event name:** South of Snarkhurst Wood

Category: SDS Figure: 7

**Summary:** 

Drawing ref.	Description			
South of Snarkhurst Wood	During the removal of topsoil storage heaps and the stripping of the topsoil beneath, a number of archaeological features were revealed to the south of the Snarkhurst Wood excavation. The discoveries made included the continuation of three known late Iron Age ditches (19, 27 and 29) and the identification of two undated ditches (31, 33). Three pits (17, 21 and 23) and one sub-rectanguler feature (25) were also recorded.  These features will be considered in the South of Snarkhurst Wood			
	assessment report.			

2.2.10 **Event Code:** ARC 420 / 67+100 - 68+100

**Event name:** Musket Lane

Category: WBG Figure: 7,8

**Summary:** 

Drawing ref.	Description		
	No archaeological features or deposits identified		

2.2.11 **Event Code:** ARC 420 / 68+100 - 68+500

**Event name:** Eyhorne Street

Category: SDI Figure: 8,15

Drawing ref.	Description
Eyhorne Street	A 440m length of the CTRL at Eyhorne Street was designated as a targeted watching brief area and excavated in three stages as areas were threatened by construction works.
	A series of poorly defined intercutting pits were tentatively dated to the Mesolithic period on the basis of a few pieces of flint. However, these finds are likely to be residual and the features are perhaps more likely to be contemporary with the Neolithic features described below.
	A pit containing sherds of late Neolithic Grooved Ware pottery was excavated. The fill also contained small traces of burnt bone but not in

sufficient quantity to be interpreted as a cremation with any certainty.

An 8m wide shallow hollow was excavated, which may also date to the later Neolithic period. A house hollow is one possible interpretation.

Three gullies, possibly dating to the late Neolithic period, were also investigated. Two were curving but their irregular plan did not suggest a structural function. Finds from these features were sparse and could be residual.

Two distinct areas contained concentrations of stake holes, cut into what was interpreted as a buried soil. No dating was recovered from any of these features, but the suggested date for the buried soil is Bronze Age.

A number of irregular features were excavated and interpreted as tree throws holes, although some contained flint finds possibly dating to the Bronze Age.

Five middle to late Iron Age pits were excavated on the higher ground to the west of the later Neolithic archaeology. One of the pits contained concentrations of pottery and animal bone. Large pottery groups were recovered from three further pits while a fifth was heavily truncated and contained few finds.

A post-medieval field boundary ditch was excavated on the higher ground to the east.

2.2.12 **Event Code:** ARC 420 / 68+500 - 73+500 **Event name:** Holme Hill and Harrietsham

Category: WBG Figure: 8,9

**Summary:** 

Drawing ref.	Description			
	No archaeological features or deposits identified			

2.2.13 **Event Code:** ARC 420 / 73+500 - 73+700

**Event name:** Sandway Road

Category: SDS Figure: 9,16

Drawing ref.	Description		
Sandway Road	The targeted watching brief area at Sandway Road was excavated in four segments. Areas A, C and D were investigated before excavation of the railway cutting, Area B was investigated before excavation of the bridge structures for the realignment of Sandway Road. Area A contained no significant archaeology. Area B revealed an undated gully and two undated irregular features that were pits or perhaps root disturbance. Area C revealed three gullies, possibly dating to the Bronze Age and perhaps part of the field system discovered in the excavation to the north (WA 1999). A number of tree throw holes were also investigated. Area D did not reveal any features of archaeological interest but a number of tree throw holes were recorded. Similiar features were found on all of the excavations in this area.		

2.2.14 **Event Code:** ARC 420 / 73+700 - 78+150

**Event name:** Chilston Park, Chapel Mill and Lenham Heath

Category: WBG Figures: 9,10,10A

**Summary:** 

Drawing ref.	Description
4, 6, 8, 10, 12, 14	ARC 420 74+700 - Four small pits (4, 6, 8, 10) were found, forming a line 5m long and containing a small quantity of iron-working slag. Two shallow pits (12, 14), with evidence of <i>in situ</i> burning were recorded in the same area, one of which produced a small fragment of post-medieval pottery. The four small pits could be interpreted as post-holes and might be evidence of a small structure, perhaps a fence line. No other evidence of metal-working activity was discovered in this area.
76+600 - 16	ARC 420 / 76+600 - A square feature measuring 1m x 1m was filled with burnt stone and ash but with no evidence of burning <i>in situ</i> . No dating evidence was recovered (figure 11A).
74+900 - 16	ARC 420 74+900 - A concentration of flint dated to the early Neolithic period was recovered from the ploughsoil in this area. 33 flints consisting of microliths, blades, scrapers, cores and waste flakes were recovered from a 20m x 20m area (figure 11).
21	ARC 420 77+700 - A possible post-medieval brick-kiln was identified during topsoil stripping. Burnt deposits containing clinker and fragments of ceramic building material were present in the ploughsoil, As most of the feature was obscured by a coverage of ploughsoil, a small area was re-stripped with a toothless bucket to confirm its presence and general extent. Following re-stripping, traces of small gullies and post-holes were recorded. As the feature lay in an area to be built up with fill, further excavation work was limited to the recovery of dating evidence. The fill sealing the feature forms part of the permanent earthworks of the CTRL.

#### 2.3 Sites preserved in situ

Boarley Farm (ARC 420 / 59+300)

2.3.1 Evaluation trenching to the east of Boarley Farm (ARC BFM 97) identified an area of late Iron Age activity, mainly comprising postholes. This area was designated for archaeological preservation. As the significant deposits were sealed beneath a subsoil layer up to 0.5m thick, the topsoil stripping was carried out but the underlying subsoil layers were left intact.

West of Sittingbourne Road (ARC 420 / 61+900)

An early medieval enclosure with an internal diameter of *c*. 30m was located during an evaluation (OAU 99). Although designated for preservation *in situ*, some further work was carried during the watching brief, when part of the site was machine stripped in contravention of the preservation instruction. The initial stripping in the south-west quadrant of the medieval enclosure was consequently not carried out under archaeological supervision, resulting in severe truncation to the recorded features. Subsequent stripping over the remainder of the site, carried out under archaeological supervision, did not reach the archaeological horizon which meant that a complete plan of the enclosure was not obtained. The preserved portion of the site will be subject to reinstatement and will lie outside the permanent railway fence line.

Hockers Lane (ARC 420 / 62+200)

2.3.3 Part of a late Iron Age occupation site identified during the watching brief extends beyond the northern boundary of the CTRL trace and was buried beneath a spoil heap during the preliminary earthwork phase in Autumn 1999. Although it is intended to preserve these deposits *in situ*, the spoil heap was removed in April 2000 during ongoing landscaping works. The stripping was carried out under archaeological supervision to a level above the archaeological horizon using a toothless bucket. Plant was not permitted to track on the stripped surface. During further construction operations most of this area will be protected by replacing the topsoil and excluding plant from tracking on the site. However, a small area which will be affected by construction of a temporary compound is to be protected with a geotextile membrane and stone rubble layer.

Thurnham Roman Villa (ARC 420 / 63+400)

2.3.4 An area immediately to the north of the Thurnham Roman Villa excavation (ARC THM 99), adjacent to Honeyhills Wood, was preserved beneath an access road. The topsoil was left in place and protected with a geotextile membrane before the road was laid.

Chapel Mill, Lenham (ARC 420 / 76+400)

2.3.5 Two areas on the north and south sides of the CTRL at Lenham Heath were designated for preservation *in situ* following an evaluation (ARC CML 97). The trace of the route between the preservation areas was subject to strip, map and sample excavation in 1998 (ARCCML98) but produced results of limited significance. The preservation instruction nevertheless remained in place and the topsoil covering the two areas was therefore left unstripped, buried beneath topsoil stockpiles.

Sandway Road to Lenham Heath Road (ARC 420 / 77+700)

2.3.6 A possible post-medieval brick-kiln was identified during topsoil stripping, as a result of burnt deposits containing clinker and fragments of ceramic building material being visible in the ploughsoil. As most of the feature was obscured by a coverage of ploughsoil, a small area was restripped with a toothless bucket to confirm its presence and general extent. However, as the feature lay in an area to be built up with fill, further excavation work was limited to the recovery of dating evidence. The fill overlying the feature forms part of the permanent earthworks of the CTRL.

#### 2.4 Periods represented

Early agriculturalists (c.4500 BC - 2000 BC)

- 2.4.1 A scatter of unstratified early Neolithic flintwork was found at chainage 74+900 (Chilston Park, Chapel Mill and Lenham Heath WBG area).
- Features and finds of late Neolithic date were made at Eyhorne Street (68+100 to 68+500).

Farming communities (c.2000 BC - 100 BC)

- 2.4.3 A possible buried soil horizon, containing Bronze Age pottery and worked flint,was recorded at chainage 59+100 (Boarley Farm SDS).
- 2.4.4 The Eyhorne Street SDI (68+100- 68+500) produced some possibly Bronze Age worked flint.

2.4.5 Three gullies found at the Sandway Road SDS (73+500 to 73+700) may form part of the boundary system identified in the adjacent excavation area.

Towns and their rural landscapes: Sub-period i (c.100 BC - 410 AD)

- 2.4.6 The Boarley Farm SDS (58+200 to 59+500) produced a single Iron Age pit.
- 2.4.7 The Hockers Lane SDI (62+200 to 63+000) includes a late Iron Age or early Roman trackway and a group of enclosure gullies.
- 2.4.8 The watching brief at Thurnham Roman Villa SDS (63+400 to 63+900) revealed further Romano-British structural features.
- 2.4.9 Several additional pits and continuations of previously recorded ditches were recorded at South of Snarkhurst Wood SDS (66+000).

Towns and their rural landscapes: Sub-period iii (c.1100 AD - 1700 AD)

- 2.4.10 A small excavation at Boarley Lane (59+200), within the Boarley Farm SDS, produced peripheral later medieval features, presumably associated with an early phase of Boarley Farm.
- 2.4.11 Investigations at the West of Sittingbourne Road SDI (62+000) produced additional medieval features forming part of the early medieval enclosure discovered during evaluation work in the area.

The recent landscape (c.1700 AD - 1945 AD)

2.4.12 Post-medieval features included two post-medieval chalk quarry pits within the Boarley Farm SDS (58+200 to 59+500), a spread of building debris in the vicinity of the former Boxley Cottage (60+500), a post-medieval boundary in the Eyhorne Street SDI (68+400) and a group of four pits (74+400) and a possible brick kiln (77+700) near Lenham Heath (WBG).

#### 2.5 Artefactual remains

2.5.1 The following total artefact quantities were recovered from Project Area 420 (see individual archive indices for figures divided by Fieldwork Event):

Find type	Box count	Fragment count	
Flint	5 size 3 721		
	1 size 1		
Pottery	5 size 1	3452	
	1 size 2		
	1 size 3		
Fired clay	2 size 4	388	
CBM	1 size 1	175	
	2 size 2		
Stone	See Misc.	65	
Metal	4 size 4	64	
	1 size 8		
Glass	See Misc. 5		
Slag	See misc.	32	
Animal bone	1 size 1 1580		
	1 size 2		

Shell	See Misc. 391		
Misc.	1 size 1		
	4 size 2		
	1 size 3		
	2 size 4		
Total	4 size 1		
	8 size 2		
	7 size 3		
	8 size 4		

Fragment counts by find type include items stored in 'miscellaneous' boxes.

For key to box sizes see Appendix 1.

#### 2.6 Palaeo-environmental and economic evidence

- 2.6.1 A total of 72 environmental samples were recovered from a range of features and deposits, the majority from Iron Age and Neolithic features at Eyhorne Street SDI (36 samples) and Hockers Lane SDI (29 samples). Seven samples were recovered from Sandway Road SDS. Samples sizes range from 10 40 litres. See individual archive indices for breakdowns by Fieldwork Event. All samples have now been processed.
- 2.6.2 Initial scanning indicates two particularly grain-rich Iron Age deposits from Eyhorne Street SDI and one late Neolithic context has produced charred fruit remains. The samples from Hockers Lane SDI appear to have to have less potential, with charred remains noted in two contexts during processing. Sandway Road SDS also appears to have limited potential.

#### 3 FIELDWORK EVENT AIMS

- 3.1 The general fieldwork aims were:
  - to record any significant archaeological structures, features or deposits (including retrieval of environmental and economic indicators preserved therein) and retrieve isolated artefacts disturbed during construction, within the framework of the CTRL Research Strategy, with particular reference to the Landscape Zone Priorities, as stated in the watching brief WSI.
  - to record the extent and nature of construction where these may affect archaeological and Quaternary remains.
  - to record any significant Quaternary deposit (including retrieval of environmental indicators preserved therein) and retrieve samples from deposits disturbed during construction, within the framework of the CTRL Research Strategy.
- 3.2 The above aims were carried out within the limitations of the watching brief conditions. Where possible the fieldwork was orientated towards addressing the aims of CTRL Research Strategy, as detailed in the WSI.

#### 4 SUMMARY OF POTENTIAL AND RECOMMENDATIONS

#### 4.1 Watching Brief General

General

4.1.1 The sections of the route classified as WBG included scattered individual features, the majority of which are of post-medieval or modern date and are consistent with a normal level of agricultural activity. It is recommended that no further work be carried out on these deposits. Two possible exceptions are discussed in more detail below.

Chilston Park, Chapel Mill and Lenham Heath: early Neolithic worked flint scatter at Lenham Heath Road (74+900)

- 4.1.2 The scatter of early Neolithic worked flint at Lenham Heath Road (74+900) indicates some early prehistoric activity in the vicinity. The limited extent of the scatter and the apparently consistent date of the assemblage may indicate the presence of a ploughed out Neolithic activity site. If this is the case, the watching brief adds a previously unknown site to the distribution of early Neolithic sites in the region and is therefore of relevance to interpretation of the Wealden Greensand landscape zone in the 'Early Agriculturalist' period (4000 2000 BC) of the CTRL Research Strategy.
- 4.1.3 Although small and unstratified the assemblage is of varied composition and may be of interest from a technological point of view, if it proves to be of consistent date. The material should therefore be subject to assessment to establish whether it is of intrinsic interest. Any further excavation work in this area should take the presence of the finds into account.
- Chilston Park, Chapel Mill and Lenham Heath: Post-medieval brick kiln (77+700)

  4.1.4 The possible post-medieval brick kiln is of little intrinsic interest and was not extensively investigated as most of the feature will be preserved *in* situ (see 2.3 above). The site nevertheless adds a previously unknown kiln to the distribution of such features in Kent and is of potential relevance to interpretation of the Wealden Greensand landscape zone in the 'Recent Landscape' period (1700-1945) of the CTRL Research Strategy. As the feature lay in an area to be built up with fill, excavation work was limited to establishing its modern date (see 2.3 above).
- 4.1.5 If the up-dated research design includes specific consideration of the brick industry, some consideration of the archaeological finds may be required. Documentary research would also be required at the analysis stage to place the site in its historical context. However, given the very limited exposure and investigation of the feature, no formal assessment is recommended.

#### 4.2 Significant Discoveries Individual

Eyhorne Street (ARC 420 68+300)

- 4.2.1 The scatter of late Neolithic and Iron Age features discovered at Eyhorne Street do not appear to represent a settlement focus during either of the periods represented, although a shallow Neolithic feature has been tentatively identified as a possible structure. The features and finds, although sparse and difficult to interpret, certainly suggest the presence of Neolithic and Iron Age activity in the immediate vicinity.
- 4.2.2 The Neolithic finds are of intrinsic interest because of the scarcity of material of this date in Kent, and they are recommended to be subject to assessment.

4.2.3 The Iron Age pits have produced significant quantities of pottery which are recommended to be subject to assessment. Although the character of activity in both the Neolithic and Iron Age is far from clear, more detailed examination of the artefacts, environmental evidence and topographical context may shed light on marginal settlement activity in the Wealden Greensand Landscape Zone in the periods Early Agriculturalists (4500 BC - 2000 BC) and Farming Communities (2000 BC - 100 BC).

#### Hockers Lane (ARC 420 62+800)

- 4.2.4 The relationship between the Hockers Lane site and the Thurnham Villa site, located 600 m to the east, will be important for interpretation of the North Downs and Wealden Greensand landscape zones in the period 'Towns and their rural landscape' (100 BC 1700 AD), sub-period i (100 BC 410 AD). The discovery of the Roman trackway and late Iron Age enclosures at Hockers Lane will further our understanding of changes in land use and organisation during the late Iron Age/early Romano-British transition. The site has considerable potential for examining the wider landscape of Thurnham Roman Villa, in particular by shedding light on the relationship between the villa and lesser settlements in its immediate vicinity.
- 4.2.5 It is recommended that the site should be assessed and analysed alongside the Thurnham Iron Age settlement and Roman Villa, to allow explicit comparison between the structural and artefactual evidence from the two sites.

#### West of Sittingbourne Road (ARC 420 61+950)

- 4.2.6 The excavation of further features at West of Sittingbourne Road will help significantly with the interpretation of this enigmatic medieval enclosure. The site has previously been investigated by evaluation trenching (URS 1999). Additional information recovered during the watching brief includes a possible entrance, the identification of possible structural features and finds rich internal features including at least one pit. The preserved portion of the site will be subject to reinstatement and will lie outside the permanent railway fence line.
- 4.2.7 The site is of relevance to interpretation of the North Downs and Wealden Greensand landscape zones in the period 'Towns and their rural landscapes' (100 BC 1700 AD), sub-period iii (1100 AD 1700 AD).
- 4.2.8 The evaluation and watching brief data have the potential to establish the function of this unusual, isolated early medieval ditched enclosure. The previously suggested interpretations (URS 1999), including a stock enclosure or pillow mound, emphasise the marginal location of the site in an area dominated by ancient woodland. The discovery of a possible tanning pit provides an alternative interpretation which could shed light on medieval rural craft production in the region.
- 4.2.9 The samples recovered during the evaluation have produced a rich and diverse assemblage of plant and animal remains. It is recommended that this material is assessed to establish its potential for elucidating the function of the enclosure.
- 4.2.10 At present the early medieval date suggested for the enclosure is based on the absence of glazed wares from the pottery assemblage and the small range of forms and fabrics present. Assessment of the pottery recovered during the watching brief is needed to confirm this conclusion.

#### 4.3 Significant Discoveries Supplementary

West of Boarley Farm (ARC 420 58+300)

- 4.3.1 The Iron Age pit and buried soil discovered in the vicinity of Boarley Farm are similiar in character to those investigated at the nearby West of Boarley Farm and Pilgrim's Way sites. Scatters of later prehistoric pits and post-holes, sometimes including burials but rarely recognisable structures, appear to be common on the chalk at the foot of the Downs escarpment and may reflect intensive agricultural use of this land in the later Bronze Age and Iron Age periods.
- 4.3.2 Buried soil horizons are also a well-known feature of dry valley colluvial sequences. Extensive and well-preserved buried soil horizons been subject to detailed investigation at the White Horse Stone, Pilgrim's Way, West of Boarley Farm and East of Boarley Farm sites. Work on this limited exposure was therefore not considered a priority and it was not sampled in detail.
- 4.3.3 The small excavation at Boarley Farm identified a group of medieval features in the vicinity of the modern farm. This provides archaeological support for the assumption that the settlement has medieval origins. It is recommended that the remains should be assessed alongside other peripheral medieval features identified at the Pilgrim's Way site, which include a 12<sup>th</sup>-13<sup>th</sup> century crop-dryer.
- 4.3.4 It is recommended that the finds and records are assessed and analysed alongside those of the relevant detailed mitigation works. The research aims will be as stated in the White Horse Stone, Pilgrim's Way and West of Boarley Farm WSIs and Interim Report (URS 1999).

Thurnham Roman Villa (ARC 420 63+500)

4.3.5 Excavation work during the watching brief at Thurnham Roman Villa adds to the plan of the Villa and will help to achieve a concordance between the 1958 excavation plans and those of the CTRL detailed mitigation works. It is recommended that the finds and records should be assessed and analysed alongside those of the detailed mitigation works. The research aims will be as stated in the Thurnham Roman Villa WSI and Interim Report (URS 1999).

South of Snarkhurst Wood (ARC 420 66+300)

4.3.6 The work at South of Snarkhurst Wood extended the plans of several known ditches previously investigated during archaeological mitigation works immediately to the north. Four additional late Iron Age pits were also discovered. It is recommended that the finds and records should be assessed and analysed alongside those of the detailed mitigation works. The research aims will be as stated in the South of Snarkhurst Wood WSI and Interim Report (URS 1999).

Sandway Road (ARC 420 73+500)

4.3.7 The excavation of several additional gullies at Sandway Road may assist significantly with the interpretation of the adjacent mitigation works. It is recommended that the finds and records should be assessed and analysed alongside those of the detailed mitigation works. The research aims will be as stated in the Sandway Road WSI and Interim Report (URS 1999).

#### 4.4 Negative evidence

4.4.1 The very intensive nature of the watching brief, in which almost every machine working on deposits with archaeological potential was monitored by an archaeologist, means that an unusual level of confidence can be placed on the negative evidence.

- 4.4.2 However, a number of factors must be considered when interpreting the watching brief data:
  - Sites of some periods and types are more visible than others under watching brief conditions, particular those that are artefact rich. Nevertheless, ephemeral sites with few artefacts, such as the Eyhorne Street later Neolithic site, were successfully detected.
  - In some areas colluvial or alluvial sub-soils have been left undisturbed during construction works. Unrecorded archaeological deposits could potentially be preserved beneath such deposits. In other areas topsoil stripping was not carried out to a sufficient depth to expose archaeological features.
  - The confidence of the watching brief supervisor that any archaeology was present varied greatly according to:
    - The working methods and type of earthmoving machinery. This may lead to a bias between the project areas, since the principal plant contractors in each area favour different working methods and equipment. As a general rule, subject to variability in ground conditions, visibility was at its best when stripped with excavators using a toothless ditching bucket and worst when stripping with a toothed bucket or using bulldozers. The initial stripping of haul roads was generally carried out using a toothless bucket with no dumptrucks in use, resulting in very good visibility. These strips often provided the earliest indication of the presence of significant archaeology.
    - Weather. Wet or very dry weather both impede visibility.
    - Ground conditions. The character of the soils is a particularly important factor, with very good visibility on the chalk and poor visibility on the Wealden Greensand, for example. Visibility was generally very poor during the translocation of woodland soils.
- 4.4.3 The watching brief records include detailed information on these factors and an estimate of the supervisors confidence in the results. Assessment of this information has the potential to address methodological issues which may lead to improvements in the targeting and recording of archaeological watching briefs

### **APPENDIX 1: ARCHIVE INDICES**

(One per fieldwork event, except WGB areas, which are summarised on a single sheet)

#### ARC 420/61+900-62+000/99 WEST OF SITTINGBOURNE RD SDI

ITEM	NUMBER OF ITEMS OR BOXES OR OTHER	NUMBER OF FRAGMENTS/ LITRES	CONDITION (No. of items) (W=washed; UW=unwashed; M=marked; P=processed; UP=unprocessed; D=digitised; I=indexed)
Contexts records	26		I
A1 plans	1		I
A4 plans	1		I
A1 sections			I
A4 sections	7		I
Small finds			I
Films (monochrome) S=slide; PR=print	*23		I
Films (Colour) S=slide; PR=print	*43		I
Pottery (boxes)	1 size 2	424	W,M
Fired clay (boxes)			
CBM (boxes)	See Misc.	2	W,M
Stone (boxes)	See Misc.	43	W,M
Animal Bone (boxes)	See Misc.	44	W,M
Misc.	1 size 3		

<sup>\*</sup> These numbers include films used throughout the 350, 410, 420 and 430 contracts.

#### Key to box sizes

Size $1 = Bulk box$	391mm x 238mm x 210mm	0.02 m <sup>3</sup>
Size $2 = \text{Half box}$	391mm x 238mm x 100mm	$0.01 \text{ m}^3$
Size $3 = Quarter box$	386mm x 108mm x 100mm	$0.004 \text{ m}^3$
Size $4 = Eighth box$	213 mm x 102 mm x 80 mm	$0.002 \text{ m}^3$

#### ARC 420/62+200-63+000/99 HOCKERS LANE SDI

ITEM	NUMBER OF	NUMBER OF	CONDITION (No. of items) (W=washed;
	ITEMS OR	FRAGMENTS/	UW=unwashed; M=marked; P=processed;
	BOXES OR	LITRES	UP=unprocessed; D=digitised; I=indexed)
	OTHER		
Contexts records	283		I
A1 plans	1		I
A4 plans	6		I
A1 sections			Ι
A4 sections	78		I
Small finds	3		I
Films (monochrome)	*23		I
S=slide; PR=print			
Films (Colour) S=slide;	*43		I
PR=print			
Flint (boxes)	1 size 3	120	W,M
Pottery (boxes)	1 size 1	875	W,M
Fired clay (boxes)	See Misc.	48	W,M
CBM (boxes)	See Misc.	19	W,M
Stone (boxes)	See Misc.	18	W,M
Metalwork (boxes)	1 size 4	3	P
Glass (boxes)	.See Misc.	1	W,M
Slag (boxes)	.See Misc.	6	P
Animal Bone (boxes)	1 size 1	1351	W,M
Misc.	1 size 2		
Soil Samples (No.)	29		P
Soil Samples (bags/tubs)	95	950 Ltrs	P

<sup>\*</sup> These numbers include films used throughout the 350, 410, 420 and 430 contracts.

#### Key to box sizes

Cardboard	boxes
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Size $1 = Bulk box$	391mm x 238mm x 210mm	$0.02 \text{ m}^3$
Size $2 = \text{Half box}$	391mm x 238mm x 100mm	$0.01 \text{ m}^3$
Size $3 = Quarter box$	386mm x 108mm x 100mm	$0.004 \text{ m}^3$
Size $4 = Eighth box$	213 mm x 102 mm x 80 mm	$0.002 \text{ m}^3$

#### ARC 420/68+100-68+500/99 SDI EYHORNE STREET SDI

ITEM	NUMBER OF ITEMS OR BOXES OR OTHER	NUMBER OF FRAGMENTS/ LITRES	CONDITION (No. of items) (W=washed; UW=unwashed; M=marked; P=processed; UP=unprocessed; D=digitised; I=indexed)
Contexts records	239		I
A1 plans	8		I
A4 plans	1		I
A1 sections			I
A4 sections	89		I
Small finds			I
Films (monochrome) S=slide; PR=print	*23		I
Films (Colour) S=slide;	*43		I
PR=print			
Flint (boxes)	2 size 3	339	W,M
Pottery (boxes)	1 size 1	621	W,M
Fired clay (boxes)	2 size 4	130	W,M
CBM (boxes)	See Misc.	6	W,M
Misc (boxes)	1 size 3		
Metalwork (boxes)	See Misc.	8	P
Slag (boxes)	.See Misc.	8	P
Animal Bone (boxes)	1 size 2	210	W,M
Soil Samples (No.)	36		P
Soil Samples (bags/tubs)	82	820 Ltrs	P

<sup>\*</sup> These numbers include films used throughout the 350, 410, 420 and 430 contracts.

#### Key to box sizes

Size $1 = Bulk box$	391mm x 238mm x 210mm	$0.02 \text{ m}^3$
Size $2 = \text{Half box}$	391mm x 238mm x 100mm	$0.01 \text{ m}^3$
Size $3 = Quarter box$	386mm x 108mm x 100mm	$0.004 \text{ m}^3$
Size $4 = Eighth box$	213 mm x 102 mm x 80 mm	$0.002 \text{ m}^3$

#### ARC 420/58+200-59+500/99 BOARLEY FARM SDS

ITEM	NUMBER OF ITEMS OR BOXES OR OTHER	NUMBER OF FRAGMENTS/ LITRES	CONDITION (No. of items) (W=washed; UW=unwashed; M=marked; P=processed; UP=unprocessed; D=digitised; I=indexed)
Contexts records			I
A1 plans			I
A4 plans			I
A1 sections			I
A4 sections			I
Small finds			I
Films (monochrome)			I
S=slide; PR=print			
Films (Colour) S=slide;			I
PR=print			
Flint (boxes)	See Misc.	9	W,M
Pottery (boxes)	3 size 1	1423	W,M
CBM (boxes)	1 size 2	35	W,M
Stone (boxes)	See Misc.	11	W,M
Metalwork (boxes)	1 size 8	44	P
Shell (boxes)	See Misc.	45	P
Slag (boxes)	See Misc.	4	P
Animal Bone (boxes)	See Misc.	343	W,M
Misc.	1 size 2		

<sup>\*</sup> These numbers include films used throughout the 350, 410, 420 and 430 contracts.

#### Key to box sizes

		_
Cord	hoord	boxes
Caru	ooaru	DOXES

Cardboard boxes		
Size $1 = Bulk box$	391mm x 238mm x 210mm	$0.02 \text{ m}^3$
Size $2 = \text{Half box}$	391mm x 238mm x 100mm	$0.01 \text{ m}^3$
Size $3 = Quarter box$	386mm x 108mm x 100mm	$0.004 \text{ m}^3$
Size $4 = Eighth box$	213 mm x 102 mm x 80 mm	$0.002 \text{ m}^3$

Plastic boxes

Size 8 = Medium 260mm x 184mm x 108mm 0.005 m<sup>3</sup>

#### ARC 420/63+400-63+900/99 THURNHAM ROMAN VILLA SDS

ITEM	NUMBER OF ITEMS OR BOXES OR OTHER	NUMBER OF FRAGMENTS/ LITRES	CONDITION (No. of items) (W=washed; UW=unwashed; M=marked; P=processed; UP=unprocessed; D=digitised; I=indexed)
Contexts records	52		I
A1 plans	1		I
A4 plans			I
A1 sections			I
A4 sections	6		I
Small finds	1		I
Films (monochrome) S=slide; PR=print	*23		I
Films (Colour) S=slide; PR=print	*43		I
Flint (boxes)	See Misc.	7	W,M
Pottery (boxes)	See Misc.	6	W,M
CBM (boxes)	1 size 1	25	W,M
Stone (boxes)	.See Misc.	2	W,M
Metalwork (boxes)	1 size 4	2	P
Animal Bone (boxes)	.See Misc.	10	W,M
Misc.	1 size 4 1 size 2		

<sup>\*</sup> These numbers include films used throughout the 350, 410, 420 and 430 contracts.

#### Key to box sizes

Size $1 = Bulk box$	391mm x 238mm x 210mm	$0.02 \text{ m}^3$
Size $2 = \text{Half box}$	391mm x 238mm x 100mm	$0.01 \text{ m}^3$
Size $3 = Quarter box$	386mm x 108mm x 100mm	$0.004 \text{ m}^3$
Size $4 = Eighth box$	213 mm x 102 mm x 80 mm	$0.002 \text{ m}^3$

# ARC 420 66+300-67+100/99 SOUTH OF SNARKHURST WOOD SDS

ITEM	NUMBER OF ITEMS OR BOXES OR OTHER	NUMBER OF FRAGMENTS/ LITRES	CONDITION (No. of items) (W=washed; UW=unwashed; M=marked; P=processed; UP=unprocessed; D=digitised; I=indexed)
Contexts records	40		I
A1 plans	3		Ι
A4 plans	1		I
A1 sections			I
A4 sections	7		I
Small finds			I
Films (monochrome) S=slide; PR=print	*23		I
Films (Colour) S=slide; PR=print	*43		I
Flint (boxes)	See Misc.	9	W,M
Burnt flint	See Misc.	9	P
Pottery (boxes)	1 size 2	423	W,M
Fired clay (boxes)	See Misc.	208	W,M
CBM (boxes)	See Misc.	42	W,M
Metalwork (boxes)	1 size 4	5	P
Glass (boxes)	.See Misc.	3	W,M
Stone (boxes)	See Misc.	1	W,M
Animal Bone (boxes)	See Misc.	9	W,M
Misc.	1 size 1		

<sup>\*</sup> These numbers include films used throughout the 350, 410, 420 and 430 contracts.

#### Key to box sizes

Size $1 = Bulk box$	391mm x 238mm x 210mm	0.02 m <sup>3</sup>
Size $2 = \text{Half box}$	391mm x 238mm x 100mm	$0.01 \text{ m}^3$
Size $3 = Quarter box$	386mm x 108mm x 100mm	$0.004 \text{ m}^3$
Size $4 = Eighth box$	213 mm x 102 mm x 80 mm	$0.002 \text{ m}^3$

#### ARC 420/73+500-73+700/99 SDS SANDWAY ROAD

ITEM	NUMBER OF ITEMS OR BOXES OR OTHER	NUMBER OF FRAGMENTS/ LITRES	CONDITION (No. of items) (W=washed; UW=unwashed; M=marked; P=processed; UP=unprocessed; D=digitised; I=indexed)
Contexts records	75		I
A1 plans	4		I
A4 plans	2		I
A1 sections			I
A4 sections	22		I
Small finds			I
Films (monochrome) S=slide; PR=print	*23		I
Films (Colour) S=slide; PR=print	*43		I
Flint (boxes)	1 size 3	97	W,M
Burnt flint (boxes)	See flint	80	W,M
Pottery (boxes)	See Misc.	32	W,M
CBM (boxes)	See Misc.	5	W,M
Misc (boxes)	1 size 4		W,M
Slag (boxes)	See misc.	1	W,M
Misc.	1 size 4		
Soil Samples (No.)	7		P
Soil Samples (bags/tubs)	28	280 Ltrs	P

<sup>\*</sup> These numbers include films used throughout the 350, 410, 420 and 430 contracts.

#### Key to box sizes

Cardooard boxes		
Size $1 = Bulk box$	391mm x 238mm x 210mm	$0.02 \text{ m}^3$
Size $2 = \text{Half box}$	391mm x 238mm x 100mm	$0.01 \text{ m}^3$
Size $3 = Quarter box$	386mm x 108mm x 100mm	$0.004 \text{ m}^3$
Size $4 = Eighth box$	213 mm x 102 mm x 80 mm	$0.002 \text{ m}^3$

#### **ALL WBG AREAS IN PROJECT AREA 420:**

ARC 420/59+500-61+900/99 BOXLEY VALLEY WBG

ARC 420/62+000-62+200/99 SITTINGBOURNE ROAD WBG

ARC 420/63+000-63+400/99 HONEYHILLS WOOD WBG

ARC 420/63+900-66+350/99 THURNHAM TO WEST OF CRISMILL LANE WBG

ARC 420/67+100-68+100/99 MUSKET LANE WBG

ARC 420/68+500-73+500/99 HOLME HILL AND HARRIETSHAM WBG

ARC 420/73+700-78+000/99 CHILSTON PARK, CHAPEL MILL, LENHAM HEATH

ITEM	NUMBER OF	NUMBER OF	CONDITION (No. of items) (W=washed;
	ITEMS OR	FRAGMENTS/	UW=unwashed; M=marked; P=processed;
	BOXES OR	LITRES	UP=unprocessed; D=digitised; I=indexed)
	OTHER		
Contexts records	62		
A4 plans	57		
A4 sections	8		
Films (monochrome)	*23		
S=slide; PR=print			
Films (Colour) S=slide;	*43		
PR=print			
Flint (boxes)	2 size 3	140	W,M
Pottery (boxes)	1 size 3	72	W,M
Fired clay (boxes)	See Misc.	2	W,M
CBM (boxes)	1 size 2	43	W,M
Stone (boxes)	See Misc.	33	W,M
Metalwork (boxes)	1 size 4	2	
Glass (boxes)	See Misc.	1	W,M
Slag (boxes)	.See Misc.	13	W,M
Shell (boxes)	See Misc.	3	W,M
Misc.	1 size 2		

<sup>\*</sup> These numbers include films used throughout the 350, 410, 420 and 430 contracts.

#### Key to box sizes

Cardboard boxes		
Size $1 = Bulk box$	391mm x 238mm x 210mm	$0.02 \text{ m}^3$
Size $2 = \text{Half box}$	391mm x 238mm x 100mm	$0.01 \text{ m}^3$
Size $3 = Quarter box$	386mm x 108mm x 100mm	$0.004 \text{ m}^3$
Size $4 = Eighth box$	213 mm x 102 mm x 80 mm	$0.002 \text{ m}^3$

# **APPENDIX 2: SUMMARY REPORTS**

(Summary report for Project Area 420 and summary for each SDI)

#### **SUMMARY REPORT**

# Channel tunnel Rail Link Project Area 420 (Project chainage 58+200 to 78+150) (TO 7540 6000 to TO 9190 4920)

Watching brief work in Project Area 420 of the Channel Tunnel Rail Link uncovered a wide range of finds, features and deposits, ranging in date from the Mesolithic to the post-medieval periods.

Additional significant features relating to previous excavations on the route of the CTRL were made at Boarley Farm (Boxley), Thurnham Roman Villa (Thurnham), South of Snarkhurst Wood (Hollingbourne) and Sandway Road (Lenham). Summary reports have previously been completed for the main excavation areas.

Previously unexcavated significant discoveries were made at West of Sittingbourne Road (a medieval enclosure previously subject to evaluation trenching), Hockers Lane, Detling (late Iron Age enclosures and possible structures) and Eyhorne Street, Harrietsham (later Neolithic and Iron Age activity). Individual summary reports have been completed for the latter three sites

Other potentially significant finds include an unstratified scatter of early Neolithic flintwork (33 pieces) at TQ 8925 5080 and a possible post-medieval brick kiln at TQ 9165 4935.

The remaining discoveries include a low density of undated or post-medieval features representing agricultural boundaries, quarry pits and other features of little significance.

#### **SUMMARY REPORTS**

#### West of Sittingbourne Road (TQ 7830 5770)

An early medieval enclosure with an internal diameter of c. 30m was located during an evaluation (OAU 99). Although largely preserved in situ, some further work was carried during the watching brief, when part of the site was machine stripped. Stripping in the southwest quadrant exposed two ditch terminals (5 and 27), which may have formed an entrance to the enclosure. A single posthole (15) was recorded next to one of the terminals. Two pits were also recorded; one pit (9) was nearly 1m deep and was possibly used for tanning. The other pit (19) was recorded in section only and was probably a rubbish pit. Most of the site will be preserved in situ following reinstatement of the topsoil.

#### Hockers Lane (TQ 7930 5740)

An area 70m x 50m was stripped under archaeological control to allow investigation of an area of late Iron Age/ early Romano-British occupation discovered during routine monitoring to the east of Hockers Lane. The excavation of this site identified three phases of late Iron Age/ early Romano-British enclosure ditches with internal divisions. No clearly defined buildings were identified but a number of internal features, including a possible beam slot and post-holes, probably relate to structures not fully defined during this investigation. At the time of the investigation in Autumn 1999, a large part of the enclosure extended beneath a spoil heap to the north. This was removed in April 2000, but because the stripping did not reach the archaeological horizon, no further features were recorded. This area will be preserved outside the permanent railway fenceline.

#### Eyhorne Street (TQ 8440 5430)

A 440m length of the CTRL at Eyhorne Street was designated as a targeted watching brief area and investigated in three stages as areas were threatened by construction works.

A series of poorly defined intercutting pits were tentatively dated to the Mesolithic period on the basis of a few pieces of flint. However, these finds are likely to be residual and the features are perhaps more likely to be contemporary with the Neolithic features described below. A pit containing sherds of late Neolithic Grooved Ware pottery was excavated. The fill also contained small traces of burnt bone but not in sufficient quantity to be interpreted as a cremation with any certainty.

An 8m wide shallow hollow was excavated, which may also date to the later Neolithic period. A house hollow is one possible interpretation. Three gullies, possibly dating to the late Neolithic period, were also investigated. Two were curving but their irregular plan did not suggest a structural function. Finds from these features were sparse and could be residual.

Two distinct areas contained concentrations of stake holes, cut into what was interpreted as a buried soil. No dating was recovered from any of these features, but the suggested date for the buried soil is Bronze Age.

A number of irregular features were excavated and interpreted as tree throws holes, although some contained flint finds possibly dating to the Bronze Age.

Five middle to late Iron Age pits were excavated on the higher ground to the west of the later Neolithic archaeology. One of the pits contained concentrations of pottery and animal bone. Large pottery groups were recovered from three further pits while a fifth was heavily truncated and contained few finds.

# **APPENDIX 3: SITES AND MONUMENTS RECORD SHEETS**

(One summarising Project Area 420 and one for each SDI)

Site Name: CTRL Watching Brief: Project Area 420			
<b>Summary:</b> Channel Tunnel Rail Link Wa 78+150.	tching Brief, Project Area 420: Project chainage 58+200 to		
District: Mid-Kent CC	Parish: Boxley, Detling, Thurnham, Hollingbourne, Harrietsham, Lenham		
Period(s):			
1. Early prehistoric	4. Medieval		
2. Later prehistoric	5. Post-medieval		
3. Late Iron Age/ Romano-British			
NGR Easting: TQ 7454 (start)	NGR Northing: 6000 (start)		
TQ 9190 (end)	4920 (end)		
Type of Recording: Evaluation	Watching Brief Field Walking		
(Delete) Excavation	Geophysical Survey Measured Survey		
Date of Recording: (From)	(To)		
Unit Undertaking Recording: Oxford Archa	neological Unit		

Summary of Fieldwork Results:

Watching brief work in Project Area 420 of the Channel Tunnel Rail Link uncovered a wide range of finds, features and deposits, ranging in date from the Mesolithic to the post-medieval periods.

Additional significant features relating to previous excavations on the route of the CTRL were made at Boarley Farm (Boxley), Thurnham Roman Villa (Thurnham), South of Snarkhurst Wood (Hollingbourne) and Sandway Road, (Lenham). SMR sheets have previously been completed for the main excavation areas.

Previously unexcavated significant discoveries were made at West of Sittingbourne Road (a medieval enclosure previously subject to evaluation trenching), Hockers Lane, Detling (late Iron Age enclosures and possible structures) and Eyhorne Street, Harrietsham (later Neolithic and Iron Age activity). Individual SMR entries have been completed for the latter three sites.

Other finds include an unstratified scatter of early Neolithic flintwork (33 pieces) at TQ 8925 5080and a post-medieval brick kiln at TQ 9165 4935.

Location of Archive / Finds: OAU

Bibliography:

Site Name: West of Sittingbourne Road

Summary: Channel Tunnel Rail Link Watching Brief, Project Area 420: Fieldwork Event code: ARC 420/

61+900 to 62+000

District: Mid-Kent CC Parish: Boxley

Period(s):

1. Medieval

NGR Easting: TQ 7830 NGR Northing: 5770

Type of Recording: Evaluation Watching Brief Field Walking

(Delete) Exeavation Geophysical Survey Measured Survey

Date of Recording: (From) (To)

Unit Undertaking Recording: Oxford Archaeological Unit

Summary of Fieldwork Results:

An early medieval enclosure with an internal diameter of *c*. 30m was located during an evaluation (OAU 99). Some further work was carried out on its southern extent during the watching brief. This work further investigated two ditches (5 and 27) and their termini, which possibly formed an entrance to the enclosure. A single posthole (15) was recorded next to one of the terminals. Two pits were also recorded; one pit (9) was nearly 1m deep and was possibly used for tanning. The other pit (19) was recorded in the section of the CTRL cutting and was probably a rubbish pit. The other pit (19) was recorded in section only and was probably a rubbish pit. Most of the site will be preserved *in situ* following reinstatement of the topsoil.

Location of Archive / Finds: OAU

Bibliography:

Site Name: Hockers Lane Summary: Channel Tunnel Rail Link Watching Brief, Project Area 420: Fieldwork Event code: ARC 420/ 63+200 to 63+000 District: Mid-Kent CC Parish: Detling Period(s): 4. Medieval 1. Early prehistoric 2. Later prehistoric Post-medieval 3. Late Iron Age/Romano-British NGR Easting: TQ 7930 **NGR Northing:** 5740 Type of Recording: **Evaluation** Watching Brief Field Walking (Delete) Excavation Geophysical Survey Measured Survey Date of Recording: (From) (To) Unit Undertaking Recording: Oxford Archaeological Unit

#### Summary of Fieldwork Results:

An area 70m x 50m was stripped under archaeological control to allow investigation of an area of late Iron Age/ early Romano-British occupation discovered during routine monitoring to the east of Hockers Lane. The excavation of this site identified three phases of late Iron Age/ early Romano-British enclosure ditches with internal divisions. No clearly defined buildings were identified but a number of internal features, including a possible beam slot and post-holes, probably relate to structures not fully defined during this excavation. At the time of the investigation in Autumn 1999, a large part of the enclosure extended beneath a spoil heap to the north. This was removed in April 2000, but because the stripping did not reach the archaeological horizon, no further features were recorded. This area will be preserved outside the permanent railway fenceline.

Location of Archive / Finds: OAU

Bibliography:

Site Name: Eyhorne Street Summary: Channel Tunnel Rail Link Watching Brief, Project Area 420: Fieldwork Event code: ARC 420/ 68+100 to 68+500 District: Mid-Kent CC Parish: Hollingbourne Period(s): 3 Post-medieval 1. Early prehistoric 2. Later prehistoric NGR Easting: TQ 8440 NGR Northing: 5430 Type of Recording: **Evaluation** Watching Brief Field Walking (Delete) Excavation Geophysical Survey Measured Survey Date of Recording: (From) (To)

Unit Undertaking Recording: Oxford Archaeological Unit

#### Summary of Fieldwork Results:

A 440m length of the CTRL at Eyhorne Street was designated as a targeted watching brief area and excavated in three stages as areas were threatened by construction works.

A series of poorly defined intercutting pits were tentatively dated to the Mesolithic period on the basis of a few pieces of flint. However, these finds are likely to be residual and the features are perhaps more likely to be contemporary with the Neolithic features described below. A pit containing sherds of late Neolithic Grooved Ware pottery was excavated. The fill also contained small traces of burnt bone but not in sufficient quantity to be interpreted as a cremation with any certainty.

An 8m wide shallow hollow was excavated, which may also date to the later Neolithic period. A house hollow is one possible interpretation. Three gullies, possibly dating to the late Neolithic period, were also investigated. Two were curving but their irregular plan did not suggest a structural function. Finds from these features were sparse and could be residual.

Two distinct areas contained concentrations of stake holes, cut into what was interpreted as a buried soil. No dating was recovered from any of these features, but the suggested date for the buried soil is Bronze Age.

A number of irregular features were excavated and interpreted as tree throws holes, although some contained flint finds possibly dating to the Bronze Age.

Five middle to late Iron Age pits were excavated on the higher ground to the west of the later Neolithic archaeology. One of the pits contained concentrations of pottery and animal bone. Large pottery groups were recovered from three further pits while a fifth was heavily truncated and contained few finds.

A post-medieval field boundary ditch was excavated on the higher ground to the east.

Location of Archive / Finds: OAU

Bibliography: