Channel Tunnel Rail Link London and Continental Railways Oxford Wessex Archaeology Joint Venture

The early prehistoric pottery from White Horse Stone, Boxley, Kent (WHS98)

by Emily Edwards

CTRL Specialist Report Series 2006

©London and Continental Railways

All rights including translation, reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without the prior written permission of London and Continental Railways.

TABLE OF CONTENTS

1	INTRODUCTION
2	FABRICS5
3	FORMS/TYPES6
4	CHRONOLOGY AND PHASING7
5	GENERAL DISCUSSION8
6	CATALOGUE OF ILLUSTRATED VESSELS8
7	BIBLIOGRAPHY10
•	BIBLIOGRAPHY10 T OF TABLES
LIS	
LIS'	Γ OF TABLES
LIS' Tabl	Γ OF TABLES e 1: Chronological breakdown of the assemblage
LIS' Tabl Tabl	F OF TABLES e 1: Chronological breakdown of the assemblage

LIST OF FIGURES

Figure 1: White Horse Stone - Early prehistoric pottery, P1-21

1 INTRODUCTION

This assemblage was particularly notable for its Clacton style Grooved Ware, Mortlake Bowl and Decorated Bowl. A total of 671 sherds (2698 g) of early prehistoric pottery was recovered and a minimum of 22 vessels were identified (21 illustrated) on the basis of rim and other distinctive sherds. The assemblage was dominated by shell tempered Grooved Ware (71%), of which all the identifiable forms were in Clacton Style.

Table 1: Chronological breakdown of the assemblage

Date of Pottery	% of sherd count
EN	15
MN	3
LN (GW/C)	71 (59)
LNEBA/EBA	11

The most important groups were the material associated with the houses (contexts 4899, 4919, 5283, 4866, 4861, 4824), the Grooved Ware features (contexts 898, 904, 913, 958, 964, 966, 7024, 5256, 4965, 4943, 4874, 4830) and the Peterborough Ware pits (features 714 and 711 near the Pilgrim's Way house). The early Neolithic sherds from both houses were small, worn and abraded but included both Carinated (P1-2) and Decorated Bowl (P4-5). The most significant element of the Peterborough Ware group is an almost complete profile of a Mortlake bowl with decorated base (P6). The remainder comprised Beaker, Food Vessel or Collared Urn, sherds of early Bronze Age date, sherds of either early or middle Neolithic date, sherds of indeterminate or Neolithic date and one sherd of the mid to late Bronze Age. Some 21 sherds (104 g) were clearly residual (see below).

Table 2: Pottery quantification by feature for Pilgrims Way and White Horse Stone

Site code	Fill of	Context	Sherd count	Sherd weight (g)	Ware	Count of Vessels	Illustrated vessels
ARC PIL98		204	1	1	EBA		
ARC PIL98		923	3	3	GW?	1	P5
ARC PIL98		897	2	62	GW/C	1	P4
ARC PIL98	462	464	2	1	EN/MN		
ARC PIL98	636	632	2	8	BKR		
ARC PIL98	711	709	1	29	PW/MW	1	P1
ARC PIL98	714	712	11	225	PW/MW	1	P1
ARC PIL98	716	715	5	6	PW?		
ARC PIL98	740	742	1	4	MLBA		
ARC PIL98	769	770	2	8	PW		
ARC PIL98	804	805	3	2	EN		
ARC PIL98	808	809	1	2	LN		
ARC PIL98	898	899	29	101	GW/C	5	P6-10
ARC PIL98	904	906	12	27	GW & GW/C		
ARC PIL98	904	906	1	1	IND		_

Site code	Fill of	Context	Sherd count	Sherd weight (g)	Ware	Count of Vessels	Illustrated vessels
ARC PIL98	904	907	4	3	GW		
ARC PIL98	909	910	1	1	IND		
ARC PIL98	913	928	1	5	GW		
ARC PIL98	929	930	1	1	IND		
ARC PIL98	958	959	17	126	GW and GW/C	1	Р3
ARC PIL98	964	965	12	32	GW/C		
ARC PIL98	966	967	2	8	GW/C		
ARC PIL98	968	969	1	3	NEO		
Total							
ARCWHS		4007	1	3	BKR		
ARCWHS		4007	1	<1	IND		
ARCWHS		5255	5	2	NEO		
ARCWHS	4803	4802	1	4	EN		
ARCWHS	4803	4802	1	<1	GW		
	4824	4825	2	6	EN		
	4830	4831	1	2	GW/C		
ARCWHS	4848	4849	1	2	IND		
ARCWHS	4861	4862	1	2	EN		
ARCWHS	4866	4885	20	7	EN?		
	4874	4876	49	178	GW/C		
	4879	4882	2	2	EN		
	4899	4900	1	<1	BKR		
	4905	4906	2	14	СВ		
	4907	4908	1	13	CB?		
	4919	4920	1	3	CB?		
	4943	4945	10	52	GW(PW)	3	P11-13
ARCWHS	4946	4947	1	<1	INDET		
	4965	4967	1	7	EN/MN		
	4965	4967	256	1052	GW/C	3	P18-20
	4965	4968	7	7	EN or PW		
	4965	4969	2	10	EN/MN		
	4965	4969	1	10	GW		
	4994	4996	2	6	GW		
	4994	4997	11	14	GW		
	4994	4998	32	196	GW & GW/C	1	P21
	5072	5073	1	12	GW/C		
	5125	5127		2	IND		
	5128	5130	33	57	FV/CU	1	P17
	5152	5153	1	2	EN		
	5256	5257	1	<u> </u>	EN/MN		
	5256	5257	20	55	GW and GW/C		
	5256	5257	5	6	INDET		
	5256	5258		35	GW/C	1	P16
	5283	5284		20	CB? and EN		
	5287	5289		33	GW/C		
	5380	5381	6	25	EN		
	5393	5395	4	17	EN		
	5415	5417	22	115	DB, CB and EN	2	P14 & P15

Site code	Fill of	Context	Sherd count	Sherd weight (g)	Ware	Count of Vessels	Illustrated vessels
ARCWHS	5418	5420	3	4	EN		
ARCWHS	5425	5431	1	<1	BKR		
ARCWHS	5478	5479	15	30	EN		
ARCWHS	5507	5510	10	13	EN OR LBA		
ARCWHS	7024	7026	6	19	GW/C		
Grand Total			671	2698			

Table 3: Summary quantification by ceramic style: White Horse Stone

Number vessels	Sherd count	Weight (g)	Average weight (g)	Ware
0	91	205	2.3	Early Neolithic
0	12	29	2.4	EN/MN
1	11	39	2.4	Carinated Bowl
1	1	33	33	Decorated Bowl
0	57	168	2.5	Grooved Ware
6	335	1496	4.5	Grooved Ware/Clacton
0	5	2	0.4	Neolithic
0	1	<1	<1	Beaker
1	33	57	1.7	Food Vessel/Collared Urn
0	10	10	1	INDET
9	556	2039		Total

Table 4: Summary quantification by ceramic style: Pilgrims Way

Number	Sherd	Weight (g)	Average	Ware
vessels	count		weight (g)	
0	3	2	0.7	Early Neolithic
0	2	1	0.5	EN/MN
2	7	14	2.0	Peterborough Ware
6	12	254	21.2	PW/Mortlake Ware
2	9	13	1.4	Grooved Ware
9	74	356	4.8	Grooved Ware/Clacton
0	2	8	4	Beaker
0	1	1	1	Early Bronze Age
0	1	4	4	M/LBA
19	115	659	5.7	Total

2 FABRICS

Four types of clay were noted, one contained yellow sand (15% of the assemblage), one was flint tempered and sand free (14% of the assemblage), the third contained both yellow sand and thick walled shell (9% of the assemblage) and the fourth (61% of the assemblage) was tempered with shell only. Flint was added to all but G1 and the shell fabrics. The flint fabrics were early or middle Neolithic in date and the shelly fabrics were used almost exclusively for the Clacton style Grooved Ware. Beaker sherds were grog-, flint- and sand-tempered. All this material was fired in a short, open fire at a low temperature.

The underlying geology at both White Horse Stone and Pilgrims Way is Cretaceous Middle Chalk, while Quaternary Pleistocene and Holocene deposits fill the dry valleys. This is overlain by Devensian Gravels and Late Pleistocene (*c* 14,000-10,000 bp) and Holocene

(10,000 bp to present day) sediments and soils (the latter consisting of chalky colluvial sediments, with flint clasts interbedded with silt horizons).

The flint and sand temper will derive, therefore, from local sources. The sand, either fine or coarse, is quartzitic rather than glauconitic and may indicate a gravel source. Alternatively, the lack of glauconitic sand may be an indication of the facies of the Upper Gault from which the clay was derived. The nearest sources of clay are the Upper Gault, the clays in the gravels and the Clay-with-flints. The Upper Gault comprises, generally, calcareous grey mudstone. There are also large bands of highly glauconitic clays containing phosphatic nodules. The shell temper may derive from the mudstone although this does not explain the presence of sand in some of the shell fabrics. The other alternative is that the marine molluscs retrieved from features on the site are the source of temper, in which case there are only two types of clay used to manufacture the early pottery; the sandy clay may derive from the gravels and the sand-free clay from certain facies of the Gault.

Table 5: Fabric descriptions

Fabric	Ware	Description
F4	EN	30% poorly sorted angular flint, under 1 mm, occasionally up to 2 mm. Mica 15%. Fine, burnished, well wedged clay
AF1	EN (DB)	Rounded sand grains, 20%, 0.1-0.5 mm. Angular flint up to 1 mm
F1	MN	10-20% angular flint up to 1-2 mm
F1	EN, EN/MN (one MLBA)	1% angular flint up to 2 mm. 3% fine yellow sand. 2% mica
F2	EN, PW, one BKR	10% angular flint, up to 4 mm. 1% sand
F3	EN and PW	15% angular flint up to 4/5 mm
FA2	PW	10% angular flint up to 4 mm. 20% sand
S1	GW/C	Shell thick and badly aligned, 20% fossilised marine shell usually up to 1-2 mm, but fragments sometimes 2-3 mm thick or more. 10% coarse, rounded sand
S2	GW/C and EN	Soft cardboard like fabric. 20% fossilised marine shell up to 2 mm, walls 2-3mm thick (sometimes very thick). Clear sharp edges to shells.
SA2	GW/C	20% fossilised marine shell, 5% leached, 5% sand
SG1	GW	5% leached shell. Grog 5%, up to 0.5 mm, sub rounded to rectangular. 2% sand.
S3	GW	Soft cardboard like fabric. 20% fossilised marine shell up to 3-4 mm, walls 2-3 mm thick (sometimes very thick). Clear sharp edges to shells.
A1	BKR	10 % fine sand. 1% rounded ferruginous pellets
AF1	BKR	10-20% coarse sand and 2% angular flint up to 1 mm
FG1	BKR	2% angular flint up to 2 mm and 5% possible grog
G1	FV/CU	5% angular grog up to 1 mm. 2% sand. Compact clay matrix

Abbreviations: EN; early Neolithic, PB, Plain Bowl; DB, Decorated Bowl; PW, Peterborough Ware; GW, Grooved Ware; GW/C, Clacton style Grooved Ware; BKR, Beaker; FV, Food Vessel; BU, Biconical Urn; MLBA; mid to late Bronze Age, LBA; Late Bronze Age.

3 FORMS/TYPES

Both Carinated (4100-3600 cal BC) and finely burnished fragments of Decorated Bowl (3700-3300 cal BC) were identified within this assemblage. Carinated Bowl was recovered from a natural feature within the WHS house (4899, small rim sherd, P1), part of a round

structure (4907, a shoulder sherd, P2) and a posthole to the south of the WHS house (4919), a tree throw to the south of the WHS house (5283). A tiny fragment of rolled rim from either a late Carinated Bowl or a Plain Bowl vessel (3700-3300 cal BC) was recovered from posthole 804 from the Pilgrims Way house (P3). Feature 5415, within area 8088, also contained two sherds of Decorated Bowl (P4-5). More undiagnostic early Neolithic sherds were recovered from postholes within the house at White Horse Stone (4866, 4861, 4824), the middle Bronze Age ditch (4803), pit 4879 (possible neck sherd), tree throws in or near to the house (5283, 5393 and 5380), and features 5152, 5415 and 5478. It is considered unusual for minimally decorated Decorated Bowl of this type to be found outside of mortuary enclosures or flat graves (Barclay 2002).

Few vessels were reconstructable, with the exception of the Mortlake bowl (P6), which was carinated with a concave neck and slight 'T'-shaped rim (features 714 and 711 near the Pilgrim's Way house). The decorated base was rounded with a flattened bottom, in which the coils were clearly observable.

The typologically late Clacton style Grooved Ware vessels (Garwood 1999, 158, fig. 15.6) were straight sided tub forms with horizontal bands and curvilinear decoration. Much of the pottery was smoothed on both faces and charred residue was noted on sherds from P18.

4 CHRONOLOGY AND PHASING

Residual sherds were recovered from features 4803 (ditch, EN and GW), 4965 (Grooved Ware pits within the White Horse Stone House, EN), 5256 (Grooved Ware pits, EN), 636 (Beaker from the medieval Hollow Way), colluvium, buried soils and the natural features (tree throw hole 5393 and layer 4899) associated with the house at White Horse Stone.

The majority of early Neolithic material was recovered from White Horse Stone, particularly from the postholes of the house (4899, 4905, 4826, 4861, 5152, 4965). All pottery associated with both houses was small and abraded, much having been recovered during soil sample processing. These sherds may be sweepings that became lodged in postholes. Fragments of Carinated Bowl (P1 and P2) were recovered from contexts 4900 and 4906, within the house. A fragment of rolled rim from either a late Carinated Bowl or a Plain Bowl (P3) vessel was recovered from posthole 804 from the house at Pilgrims Way.

Most middle Neolithic fragments were identified by fabric and firing or by rim form, and were mostly residual. The exceptions to this were recovered from pits 711 and 714 and features 716, 769 and 805. The previously mentioned Peterborough Ware and the Grooved Ware pits were not stratigraphically related to either house, although all the White Horse Stone Grooved Ware pits and the Pilgrims Way Mortlake pits were near to or within the houses. The Collared Urn/Food Vessel (P21) was recovered from tree throw 5128 and was also not stratigraphically related to other features.

5 GENERAL DISCUSSION

The presence of Carinated Bowl, Decorated Bowl, Mortlake Ware, Clacton Ware, Beaker and Collared Urn/Food Vessel is a significant indication of continual but possibly sporadic use of the site. There may have been long gaps between each phase of activity but there are indications, including the presence of charred residue on one Grooved Ware vessel (P18), that these were phases of domestic activity.

Most earlier Neolithic material (Clarke 1982, 26) from Kent has been found in the eastern part of the county. Carinated Bowl has been found at Minnis Bay, Mill Road and Preston (Clarke 1982, 27, fig. 9). Plain Bowl has been recovered from Wingham, in east Kent (Simpson 1961, 62-67, fig. 3) and Chestnuts Megalithic tomb (Alexander 1961, 37, fig. 11). The Decorated Bowl fragment is a rare example which has many more parallels in Essex than in Kent.

Grooved Ware finds in Kent have been restricted to sites near to the coast (Cleal and Longworth 1999, 189-90; Longworth 1971, 278-9) and have also been recovered in small quantities. Of 14 site assemblages, nine consisted of six sherds or less, two represented sherds of only one vessel, the two larger sites are Upper Deal (11 sherds) and Deal (22 sherds). Durrington Walls and Clacton styles have both been identified and it appears to be the case that assemblages sometimes contain characteristics of both styles. The White Horse Stone/Pilgrims Way group is regionally very important as 17 fragmented vessels (475 sherds, 2033 g) have been identified.

The presence of Collared Urn/Food Vessel on such a site is of significance as such pottery is only rarely associated with domestic contexts. Collared Urns, in particular, have been interpreted as having been created purely for funerary use; indeed all the ten published examples from Kent are from funerary contexts. Food Vessels are also rare in the South of England and only two have been found in Kent (Champion 1982).

6 CATALOGUE OF ILLUSTRATED VESSELS

Figure 1

- P1. Posthole 4899. Context 4900. One simple squared rim from an early Neolithic Carinated Bowl (1 g). Fabric: F2. Th: 5 mm. Form: Simple squared rim. Firing: external; yellow-brown, core; black, internal; black.
- P2. Feature 4905. Context 4906. One shoulder of an early Neolithic Carinated Bowl (14 g). Fabric: F2. Firing: external; yellow-brown, core; black, internal; yellow-brown. Surface Treatment: external; smoothed, interior; smoothed. Th: 4 mm. Form: carinated shoulder.
- P3. Feature 804. Context 805. One rolled rim from an early Neolithic Plain Bowl (2 g). Fabric: F1. Firing; external; brown, core; brown, internal; brown.
- P4. Posthole 5415. Context 5417. One sherd of Decorated Bowl (33 g). Fabric: F4. Firing: external; BL, core; BL, internal; BL. ST: external; smoothed and burnished, internal; smoothed and burnished. Th: 5 mm. Dec: external; rows of dots (impressed object).

- P5. Posthole 5415. Context 5417. Three sherds of a Shouldered Bowl, including shoulder and rim (5 g). Form: Shouldered Bowl. Fabric: F3. Firing: external; yellow-brown, core; black, internal; yellow-brown. Surface Treatment: external; smoothed, internal; smoothed. Th: mm. Decoration: external; plain.
- P6. Pits 711 and 714. Context 709 & 712. 12 sherds (231 g) including upper body, rim and base. Form: Carinated Mortlake Bowl, Fabric: F2. Firing: external; red-brown to brown, core; black, internal; red-brown to black. Thickness: 8 mm. Decoration: external; Possibly twisted cord, herringbone following on from internal rim over the bevel to external shoulder (plain cavetto zone), then relaxes into rows of vertical lines. The base is decorated by concentric circles which follow the coil joins. Rim Diameter: 230? mm.
- P7. Pit 4943. Context 4945. One sherd of either Clacton style Grooved Ware or Mortlake style Peterborough Ware (22 g). Fabric: S2. Firing: external; Brown, core; black, internal; black. Surface Treatment: external; smoothed, internal; smoothed. Thickness: 12 mm. Decoration: external; rows of triangular shaped impressions, created using finger nail and finger tip.
- P8. Pit 4943. Context 4945. One sherd of either Clacton style Grooved Ware or Mortlake style Peterborough Ware (23 g). Fabric: S2. Firing: external; red-brown, core; black, internal; black. Surface Treatment: external; smoothed, internal; smoothed. Thickness: 12 mm. Decoration: external; a single row of finger nail impressions.
- P9. Pit 4943. Context 4945. One Clacton style rim sherd (2 g). Form: Simple upright rim, Fabric: S2. Firing: external; BR, core; BR, internal; BR. ST: external; Smoothed, internal; Smoothed. Thickness: 6 mm. Dec: external; plasticated curvilinear motif.
- P10. Pit 5256. Context 5258. One rim and upper body sherd of a Clacton style Grooved Ware vessel (35 g). Form: Tub. Fabric: SA2. Firing: external; brown, core; black, internal; black. Surface Treatment: external; smoothed, internal; smoothed. Thickness: 7 mm. Decoration: external; horizontal cordons, slightly wavy.
- P11. Pit 4965. Context 4967. One sherd of Clacton style Grooved Ware (44 g). Form: Tub. Fabric: S2. Firing: external; yellow-brown, core; black, internal; black. Surface treatment: external; smoothed, internal; smoothed. Thickness: 8mm. Decoration: external; Rows of teardrop shaped impressions enclosed by horizontal bands of grooves.
- P12. Pit 4965. Context 4967. One sherd of Clacton style Grooved Ware (44 g). Form: Tub. Fabric: S2. Firing: external; yellow-brown, core; black, internal; black. Surface Treatment: external; smoothed, internal; smoothed. Thickness: 8 mm. Decoration: external; rows of teardrop shaped impressions, larger and fatter than on P17, enclosed by horizontal bands of grooves.
- P13. Pit 4965. Context 4967. Two of eight base sherds of a Clacton style Grooved Ware (86 g). Form: Tub, Fabric: S2. Firing: external; Red-brown, core; black, internal; black. Surface Treatment: external; smoothed, internal; smoothed. Thickness: 5 mm. Decoration: external; none.
- P14. Pit 4965. Context 4967. Five sherds of Clacton style Grooved Ware including rim and body (164 g). Form: Tub, Fabric: S2. Firing: exterior; brown-black, core; black, interior; yellow-brown-black. Surface treatment: exterior; smoothed, interior; smoothed. Thickness: 9 mm. Dec: exterior; horizontal bands of grooves, rows of clean impressions with rounded, pointed ends, made with a sharp object, and curvilinear cordons.
- P15. Pit 4994. Context 4998. One sherd of Clacton style Grooved Ware (23 g). Fabric: S2. Firing: exterior; yellow-brown, core; black, interior; black. Thickness: 11 mm. Dec: exterior; Large finger dimples.
- P16. Pit 898. Context 899. One decorated sherd of Clacton style Grooved Ware (75 g). Form: Straight sided tub, Fabric: S1. Firing: external; brown, core; black, internal; black. Surface treatment: external; smoothed, internal; smoothed. Thickness: 7 mm. Decoration: external; diagonal grooves and vertical finger nail impressions.
- P17. Pit 898. Context 899. One base sherd of Clacton style Grooved Ware (14 g). Form: A simple base with no foot, Fabric: S1. Firing: external; yellow-brown, core; black, internal; black. Surface-treatment: external; smoothed, internal; smoothed. Thickness: 5 mm. Decoration: external; Rows of fingernail impressions.

P18. Pit 958. Context 959. 14 sherds of Clacton style Grooved Ware (120 g) including a base. Form: Simple base with no foot. Fabric: S1. Firing: external; red-brown, core; black, internal; black. Surface Treatment: external; smoothed, internal; smoothed. Thickness: 10 mm. Decoration: external; Diagonal grooves and dots.

P19. Layer 923. Three sherds of a miniature late Neolithic or late Neolithic early Bronze Age vessel, including base (3 g) and rim. Form: simple rounded, incurved rim and a simple squared base with no foot. Fabric: SA2. Firing: external; red-brown, core; red-brown, internal; red-brown. Surface treatment: external; smoothed, internal; smoothed. Thickness: 5 mm.

P20. Layer 897. Two sherds of Clacton style Grooved Ware (62 g) including a rim. Form: Simple, upright rim. Fabric: S1. Firing: external; red-brown, core; black, internal; black. Surface-treatment: external; smoothed, internal; smoothed. Thickness: 10 mm. Decoration: external; Horizontal grooves and paired fingernails.

P21. Tree-throw hole 5128. Context 5130. Two collar sherds from either a Collared Urn or a Food Vessel (5 g). Fabric: G1. Firing: external; red-brown, core; red-brown, internal; red-brown. Surface Treatment: external; smoothed, internal; smoothed. Thickness: 5 mm. Decoration: external; short, diagonal lines, possibly twisted cord.

7 BIBLIOGRAPHY

Barclay, A, 2002 Ceramic lives, in *Prehistoric Britain: The Ceramic Basis* (eds A Woodward and J D Hill), Prehistoric Ceramic Research Group Occ Pub **3**, Oxford, 85-95

Bradley, R, 1992 The excavation of an oval Barrow beside the Abingdon enclosure, Oxfordshire, *Proc Prehist Soc* **58**, 127-42

Champion, T, 1982 The Bronze Age in Kent, in *Archaeology in Kent to AD 1500* (ed P Leach), CBA Res Rep No 48, 31-39

Garwood, P, 1999 Grooved Ware in Southern Britain: chronology and interpretation, in *Grooved Ware in Britain and Ireland* (eds R Cleal and A MacSween), Neolithic Studies Group Seminar Papers **3**, Oxford, 145-176

Longworth, I, 1971 The Neolithic Pottery, in Wainwright, G J, and Longworth, I H, *Durrington Walls: Excavations 1966-1968*, 268-306

Longworth I, and Cleal, R, 1999 Grooved Ware gazetteer, in *Grooved Ware in Britain and Ireland* (eds R Cleal and A MacSween), Neolithic Studies Group Seminar Papers **3**, Oxford, 177-206