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**EXCAVATIONS
ON THE
EASTERN APPROACH
OF THE
MEDWAY TUNNEL
An Assessment**

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AN ASSESSMENT

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1) Introduction

1.1. The Report

This report aims to present the stratigraphic, artifactual and environmental data recovered from the excavation in order to assess the archaeological potential of both the excavated site and the immediate area. It also aims to assess the viability of integrating that data with the palaeo-environmental data, described below (see 'The Palaeo-environmental Background').

1.2. General Background

The Archaeological excavation on the eastern approach of the Medway Tunnel at present under construction commenced 20th September 1993 and was completed 3rd November 1993. The project was funded by K.C.C. Highways Department and carried out by Canterbury Archaeological Trust and the Geoarchaeological Service Facility of University College, London. This followed a ten week watching brief during which initial observation, sampling and recording took place.

The excavation was situated on the east bank of the tunnel casting basin in an area previously identified by bore hole testing and stratigraphic analysis as overlying an ancient cliff top buried beneath alluvial sediments. (Barham 1993).

The watching brief revealed substantial evidence of human activity on the cliff top both beneath and within the alluvial sediments in the form of struck and worked flints and potsherds. These were contained within a number of apparently anthropically derived deposits. The archaeological excavation was undertaken in order to establish the nature and significance of those deposits and also to establish their chronological relationships with the alluvial sediments of the tidal flood plain of the Lower Medway to the west.

1.3. The Palaeo-environmental Background

During the preliminary watching brief a number of continuous peat deposits was identified within the alluvial sediments exposed by the casting basin excavation. The presence of carbon within these peats allowed a chronology to be proposed for the periods of recession within the alluviation process based on radiocarbon datings. (Pine. Forthcoming). However the peat layers and consequently the dateable elements within the alluvial sequence were found to abut the buried cliff face and to have no direct stratigraphic relationship with the sediment and anthropically derived deposit sequence on the cliff top.

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1.4. The Site

The site lies approximately 330m east of the Lower Medway which is now contained by a river wall constructed in 1868. Cartographic and other documentary evidence indicates that before that time the excavated area had been part of a salt marsh on the eastern margins of the Medway tidal flood plain. This marsh was filled in and levelled after 1868 in advance of the extension northward of Chatham Naval Dockyard. The area excavated was approximately 56 sq.m.

1.5. Archaeological Summary

The excavation revealed three ^{ind} distinct and chronologically well separated periods of anthropic activity on the site.

The first appeared to be of early to mid-Neolithic date. This provided sufficient evidence to indicate a rare early occupation site which was also a focus for flint working.

The second period, of Late Iron Age and Romano-British date, was a result of the resettlement of the site which had been long abandoned because of protracted flooding. This period of occupation and its attendant activity continued in varying forms until the late second or early third century.

This period was divided into two separate phases; 'the Late Iron Age/'Belgic' Settlement' and 'the Romano-British Occupation'.

The third period comprised the use of the site as a dumping ground for debris from Chatham Dockyard. This dumped material was apparently discarded onto partially reclaimed marshland adjoining the Dockyard in the eighteenth and nineteenth centuries.

The deposit sequences representing the three phases described above were separated by substantial alluvial deposits indicating periods when the site was waterlogged. The absence of peats underlying the Late Iron Age/Romano British deposit sequence suggested a sudden change from wet to dry conditions. Similarly alluvial clay deposits occurring directly over anthropically derived material associated with in situ occupation on the cliff top indicated a sudden change from dry to wet.

This implies that alluviation in this area of the Lower Medway tidal flood plain occurred at a fluctuating rather than a constant rate from the mid-Neolithic period onwards.

2. The Stratigraphic Data

2.1. The Factual Data

2.1.1. The Material

2.1.1.1. A total of 112 context units was recorded using conventional C.A.T. context recording sheets. All context units were arranged within a Harris matrix according to their stratigraphic position and phased accordingly.

2.1.1.2. Ten sections were drawn at a scale of 1:10 recording the deposit sequence from the present ground surface down to natural gravel.

2.1.1.3. A series of 4 multi-context plans (scale 1:20) was compiled on which all detected features were recorded.

2.1.1.4. A record of the heights above sea level of all detected features and layers was maintained throughout the excavation.

2.1.1.5. A detailed photographic record using colour slide and black and white film was kept during the excavation. These have been fully catalogued.

2.1.1.6. Environmental samples of all key context units were taken and the sampling positions recorded. This was carried out by the Geoarchaeological Service Facility. C.A.T. also took two carbon samples from key deposits. These are currently held in storage.

2.1.1.7. All cultural material discovered on the site was retrieved and labelled according to context. This included 620 gms of unstratified potsherds, 24,154 gms. of stratified potsherds, 3,555 gms of daub and 1,095 gms of Roman tile. In addition all struck and worked flints in non-residual contexts (343 in total) were individually labelled and their positions recorded three-dimensionally.

2.1.2. The Stratigraphic Archive

Phase I. The First Occupation

During the initial watching brief and subsequent archaeological excavation a substantial quantity of struck and worked flints, a small number of flint cores and a moderate quantity of potsherds were recovered from an apparently colluvially formed sediment of sandy silt. These were provisionally identified as early to mid-Neolithic (4200BC - 2900BC) in date.

The potsherd and flint bearing sediment was approximately 5cm thick and lay at OD-0.98m. A prospection trench revealed that it was the highest of a series of sandy silt sediments overlying Pleistocene gravels. These in turn overlay Cretaceous chalk.

Almost immediately to the west the sandy silts, Pleistocene gravels and chalk terminated abruptly. Evidence from bore hole testing (Barham 1993) suggested they had been cut away to form a cliff by the action of fast flowing melt waters at the end of the Ice Age. From this it appeared that the struck flint and potsherd-bearing sediment was situated on a cliff top overlooking the tidal flood plain of what is now the Lower Medway. The degree of alluvial accumulation that had occurred in the flood plain at that time is not yet known. of AS

As the prospection trench revealed no earlier evidence of anthropic activity the struck flint and potsherd-bearing sediment probably represented primary occupation on the cliff top. However if earlier occupation had taken place colluviation may have removed all trace of it.

Several features associated with the primary anthropic activity suggested sustained occupation of the site. These included two localized charcoal spreads in close proximity. The worked and struck flint and potsherd assemblages were concentrated in the vicinity of these spreads which almost certainly marked the sites of fires.

Other features identified were: a number of shallow depressions of uncertain significance, a large post-hole like feature and a deep pit (not fully excavated because of safety regulations). Several worked flints were recovered from the sloping sides of this pit suggesting it was contemporary with the primary cliff top occupation activity but its significance remained uncertain. The fact that it appeared to cut down through the Pleistocene gravels into the underlying chalk suggested a possible use as a shaft giving access to a flint seam within the chalk. The large quantity of struck flint flakes in its immediate vicinity was consistent with this view. However, natural land slippage, subsidence or solifluction was thought an equally likely cause for this feature. bitten into
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Although the struck and worked flint assemblage recovered from the primary occupation layer requires expert analysis it was clear that purposely reworked flints formed only a lesser part (25%) of the whole, the vast majority of the remainder being struck flakes. This provided strong evidence for systematic flint working on the site. Presumably most finished implements would have been used elsewhere. 6d. 5

The potsherds recovered from the primary occupation layer were of several types. A high proportion (92%) deriving from the same vessels lay close to each other suggesting they had remained where they were originally discarded.

The struck flint and potsherd-bearing sediment was sealed by approximately 28cms of alluvial clay. The unabraded condition of the majority of the flints and potsherds was again consistent with them remaining where they fell and being covered shortly afterwards by alluvial sediment.

This sediment is significant in a number of ways. While its occurrence marked an apparently abrupt termination of anthropic activity on the cliff top it also preserved in situ much evidence of that activity. From this it is safe to assume that the archaeological excavation only exposed a small part of a well-preserved prehistoric land surface.

The occurrence of the clay sediment also marks the first inundation of the cliff top. For a protracted period after that time it is probable that the cliff top was regularly if not permanently submerged until the Late Iron Age.

Phase 2. The Late Iron Age/'Belgic' Settlement

A clearly discernible pattern of post-holes and other cut features immediately post-dated the primary alluvial sediment on the cliff top. Four post-holes of roughly similar size along with a curved gully described a 5m long semi-circle in plan strongly suggesting this was the site of a circular hut. Approximately a quarter of the base area of the proposed hut fell within the excavated area suggesting a circumference of about 20 metres.

Associated with those features was a series of thin potsherd and charcoal rich deposits probably representing tread accretions and compressed domestic detritus. Strong ceramic evidence supplied a late first century BC/early first century AD date for these features and their associated deposits.

A number of post-holes pre-dated those identified as part of the circular hut. However, similarities in their alignments relative to the curved gully suggested that the structure had been repaired rather than completely re-built.

A well-preserved flint and scorched clay hearth situated some 4m north-east of the proposed hut also made up part of this occupation phase. Both the hearth and the adjacent structure appeared to have been built directly on the recently dried out surface of the alluvial sediment as no peat was present. This was consistent with the area having been deliberately drained in advance of settlement.

A substantial deposit sequence containing large amounts of ash-like material, charcoal, and daub overlay the features and deposits discussed above. From this it seems reasonable to assume that the proposed hut burnt down.

Phase 3. The Romano-British Occupation

The Late Iron Age settlement apparently established on reclaimed land continued in various forms into the Roman period. Consequently an increase in the proportion of Romanized and Roman wares compared to native ceramic types occurred as the occupation activity continued.

The deposit sequence sealing the features associated with the Late Iron Age settlement was cut by a ditch extending north-south across the site. This ditch continued in use long enough to require re-cutting, but appeared eventually to have been backfilled and levelled prior to a later phase of construction. A primary residue of silt and finely-sorted gravels suggested it was a drainage ditch. Ceramic evidence suggested that these events occurred just before or very early in the Roman period. The ditch appeared to have been backfilled before the turn of the first century.

The subsequent phase of construction was more complex. The backfilled ditch and adjacent land surface appeared to have been consolidated using gravel and flint. Over this a thick clay and loam layer probably acted as bedding for a substantial flint cobbled surface extending beyond the southern limit of the excavation. This was adjacent to a ditch-like feature, which described a right-angle in plan. The north-east/south-west aligned arm of this feature terminated within the excavated area while the south-west/north-east aligned arm extended beyond its eastern limit.

Three factors argued that this was not a drainage ditch: it terminated within the excavated area, it described a sharp angle in plan (not conducive to the free flow of water) and it extended away from the tidal flood plain. A rough hearth was situated approximately one metre north-west of the ditch end. Although both occupied the same stratigraphic level exact contemporaneity cannot be assumed.

The features described above suggest that a small part of a Romano-British riverside settlement was exposed by the excavation. Although the exact status of the ditch cannot be identified its right-angle turn and its termination are consistent with an enclosure ditch. This would imply that the main body of the enclosure lay to the north-east of the excavated area.

The ditch appeared to have silted up naturally following the abandonment of the site. Both the ditch fill and

adjacent cobbled surface to the south lay beneath a substantial dump deposit containing no features. Whether a deliberate attempt had been made to raise the level of the land surface or whether the site had become a dumping ground was uncertain.

Ceramic analysis suggested that the site was abandoned in the late second/early third century. The Late Iron Age/Romano-British occupation was therefore of approximately two hundred years duration. After that time a thick alluvial sediment showed that the area was again regularly or permanently submerged. As before, this environmental change appeared to be sudden as no deposits consistent with gradual transition were evident.

Phase 4. The Eighteenth and Nineteenth Century Activity.

In the upper part of the alluvial clay that sealed the Romano-British deposits increasing organic content gave evidence of a gradually drying environment although the area still remained essentially waterlogged. Probably in the mid-eighteenth century conditions were sufficiently dry for a peat layer to begin to accumulate. Cartographic and other documentary evidence suggest that the drying process was either caused or accelerated by dyke and ditch cutting in the immediate area.

Material in the form of potsherds, bone fragments, wood and leather off-cuts, scrap iron and musket flints overlay the 'incipient' peat described above indicating that this marshy track of land adjoining the old dockyard was used extensively as a dumping ground prior to the northward extension of the dockyard in 1868.

This interpretation was supported by the large quantities of wood chips and sawdust observed at the same stratigraphic level in many other areas exposed by the tunnel casting basin.

After 1868 a vast quantity of clay was dumped over the area to a depth of approximately 2.10m. This was used as a platform over which the dockyard extension was built. The top of this layer effectively comprises the modern land surface.

2.2. Statement of Potential

2.2.1. Project Objectives

2.2.1.1. A major objective of the excavation was to ascertain the date and status of the primary anthropically-derived deposits on the cliff top. This was only partially achieved although the evidence strongly suggested the deposits represented an occupied site that was also a focus for flint working.

The substantial assemblage of struck flints recovered from the deposits will require expert analysis for proper evaluation to take place (see below 'Recommendations'). However, it is clear that the assemblage represents the result of extensive flint working on the site using fresh flint nodes from a variety of sources.

The ceramic assemblage indicated an early to mid-Neolithic date but other such evidence is sufficiently rare for such a typology-based date to be problematic. This means that the assemblage, though small, presents an important opportunity for dating other early/mid-Neolithic wares if a precise date could be attributed to it. As two carbon samples from the primary potsherd and flint bearing deposit were taken this is possible using radiocarbon dating.

Only two excavated features of potential significance were associated with the primary cliff top occupation. This was insufficient for any interpretation to be attempted regarding their use (see above 'The Stratigraphic Archive Phase 1').

2.2.1.2. Another objective of the excavation was to integrate the alluvial deposit sequence in the Medway tidal flood plain with the mixed anthropically derived and alluvial deposit sequence covering the ancient cliff. This would provide information by which the development of the estuarine palaeo-landscape and the associated settlement pattern could be better understood.

Sufficient data in the form of cultural and environmental materials were recovered for this to take place. From the upper part of the estuarine sediments, residual ceramic material was recovered from which a

sequence integration could be achieved using comparison with similar material recovered from sealed deposits on the cliff top.

An integration of the lower parts of the estuarine and the cliff top deposit sequences rests entirely on radiocarbon dating. A chronology based on radiocarbon dating has already been proposed for the estuarine sequence (Chris Pine. Forthcoming). Radiocarbon dates derived from samples taken from the cliff top primary occupation will provide points of chronological comparison whereby a partial reconstruction of the palaeo-landscape during the earlier part of the Holocene could be achieved.

2.1.1.3. The closer examination of a series of apparent dump deposits provisionally dated by ceramic analysis as 'Belgic' and Early Roman was also an objective of the

excavation. These deposits proved to be far more complex than was originally thought. Their potential is discussed in the following section.

2.2.2. Potential of Stratigraphic Data

2.2.2.1. Phase 1.

It is clear that the excavation exposed a small part of well preserved prehistoric land surface rich in cultural material in good condition. On this land surface traces of structural activity coupled with two probable fire sites surrounded by potsherds and struck flints strongly suggested the site of a prehistoric settlement occupying a headland overlooking the Medway tidal flood plain. It appeared that this settlement was a focus for flint working.

As this appears to represent primary settlement in the vicinity any further excavation in the area would present a fine opportunity to investigate an early riverside settlement on the Lower Medway. It is important to note that this site, provisionally dated to the early/mid-Neolithic was sealed and preserved under a thick band of alluvial clay. This implies that any other evidence of this or earlier occupation activity surviving on the cliff top at the time of inundation would be preserved beneath the clay. Therefore the prehistoric archaeological potential is very high.

The flint assemblage is also of great significance in a wider context especially in view of its in situ status. Most of the evidence for Neolithic settlement in Kent is limited to isolated pits and artefact scatters. The evidence uncovered by the Medway excavation is in comparison highly diagnostic. Any further work would provide the opportunity for a detailed study of a little-understood period. "There are few well-provenanced assemblages from Neolithic sites in Kent. The need for stratified assemblages cannot be over-emphasized, particularly in view of the evidence discussed below, which suggests that Kentish material could prove important in understanding the development and associations of Neolithic traditions". (Clarke, 1982, 68).

2.2.2.2. Phase 2

The excavation exposed a series of features consistent with the site of a circular hut. This appeared to represent a late Iron Age settlement on recently reclaimed land. It is probable that only a quarter of the base area of the proposed hut was exposed. Associated with the features described above were a number of potsherd-rich deposits almost certainly laid down during the building and subsequent occupation of the hut.

The potential here clearly lies in the possibility of exposing more of the proposed hut ground plan and recovering a better sample of Late Iron Age ceramic material contemporary with the use of the hut.

The Sites and Monuments Record lists only patchy and badly recorded examples of Late Iron Age occupation activity in rural Kent. In this respect it should be noted that the Rochester area is thought to have played a central role as a riverside trade centre for the south-eastern culture characterized by 'Aylesford-Swarling' or 'Belgic' ceramic ware (Cuncliffe, 1991, 130; Pollard, 1988, 31). Convincing stratified evidence of this is however extremely rare. It is highly probable that further investigation would afford sufficient evidence to begin to redress this shortfall.

2.2.2.3. Phase 3.

The settlement site described above underlay an occupation sequence extending into the mid-Roman period. Within the upper strata of that sequence a terminating ditch describing a right-angle in plan and a substantial flint cobbled surface suggested that the excavation may have uncovered part of an enclosure most of which is to the north-east. Additional evidence of structural activity including post-holes, drainage ditches, levelling layers and a hearth indicated rapid development on a recently reclaimed tract of land over an approximately two hundred year period. *

The small area of the excavation did not allow any firm interpretation of this evidence to be made. However the large quantity of features and associated ceramic material in well stratified contexts indicates that the area is of high archaeological potential for the early to mid-Roman period.

2.2.2.4. Phase 4.

The excavation exposed a peaty land surface over which debris from the adjacent dockyard had accumulated. As the ceramic material from this accumulation was of well known and well understood eighteenth and nineteenth century types, and as the documentary and cartographic record for the area from the early eighteenth century onwards is extensive, the archaeological potential for this period is low. It can be said to have been effectively realized during the excavation.

2.3. Recommendations

2.3.1. It is recommended that the carbon samples currently held by C.A.T. undergo radiocarbon date tests in order to establish the date of the pre-historic site. This would also assist the integration of the lower part of the

estuarine sediment sequence with the lower deposits on the cliff top thus providing an environmental overview.

2.3.2. It is also recommended that the struck and worked flint assemblage recovered from the prehistoric site be evaluated by a recognized specialist.

2.3.3. It is recommended that before further civil engineering work take place in the area, a controlled archaeological excavation be undertaken. This would effectively extend the existing archaeological site to the north-east and south in an area now identified as being of high archaeological potential.

3. The Prehistoric Flints

3.1. The Factual Data

3.1.1. Quantity and Location of Material

A total of 343 struck and worked flints were recovered from the prehistoric horizon. Of these 254 (74%) were struck flakes, 4 (1%) were cores and 85 (25%) were worked (i.e. re-touched) flints. The assemblage is held in the finds store of Canterbury Archaeological Trust.

3.1.2. The State of the Archive

All flints have been individually packaged, recorded and provisionally catalogued (specialist evaluation is required for a full catalogue to be compiled). For those flints recovered from the controlled excavation a record of their individual co-ordinates and heights above sea level form part of the archive.

3.1.3. The Quality/Condition of the Material

As no or very little abrasion was evident on the great majority of the flints the assemblage can be said to be in excellent condition.

3.2. Statement of Potential

The large size of the flint assemblage relative to the small area of the excavation coupled with its fine state of preservation along with other in situ cultural material in a well stratified context indicates a high archaeological potential.

Initial examination suggests that the assemblage has good potential for core refits. From this specialist evaluation may reveal details of Neolithic flint working techniques adding specific information to this field of study.

A variety of flint types was observed within the assemblage. This offers the possibility of identifying the sources of supply for those types which in turn may have ramifications regarding the understanding of early-mid Neolithic trading patterns.

4. The Prehistoric Pottery

4.1. The Factual Data

4.1.1. Quantity and Location of the Material

54 sherds (weight: 133 grammes) representing probable Neolithic pottery was recovered. It is held in storage at the offices of the Canterbury Archaeological Trust in a controlled environment.

4.1.2. The State of the Archive

The assemblage has been fully labelled, catalogued and properly packaged.

4.1.3. Quality/Condition of the Material

The bulk of the material is fresh and unabraded. A small percentage however shows some sign of abrasion. The condition of the assemblage can be said to be excellent given its apparent age.

4.2. Statement of Potential

Assuming a Neolithic date is confirmed by other associated factors - artefact types, stratigraphic position, environmental evidence and radiocarbon dating, the opportunity for further work should be pursued. Though the bulk of the material is fresh a small number of sherds are worn to a degree suggesting that the occupation horizon represented by this material is of some duration. The quality of the ceramics indicates a fair degree of technical competence. 4 fineware bowls of thin-walled large diameter type were present. Their walls were of fairly regular width and two were burnished to a fairly high degree. The general lack of abrasion evident within the assemblage strongly suggests that the pottery is from an in situ horizon and is not redeposited.

4.3 Diagnostic Problems

Within the ceramic assemblage recovered from the primary hill top occupation five vessels are represented; four by one or two sherds each, one by the remainder. All the fabrics are flint tempered, two worn sherds from the same vessel containing flint and ?chalk fillers (the chalk element has leached out). Apart from the latter, the rest of the pottery is essentially fresh and represents thin-walled fineware-type vessels. Three rims are

present: one with marked inner-rim bevel; one with a flaring curving everted thickened rim from a large diameter open mouthed bowl and one simple upright rim, again from a large diameter more closed-form jar/bowl.

There are problems in dating this material: the forms are simple. However all are from the same context and as there was no reason to suspect intrusion this should preclude any possibility of contamination from Late Iron Age contexts. The potential Early Neolithic attribution is based on the open-mouthed bowl - however there are problems. The bevelled rim and the more closed-form jar are both forms that would be perfectly acceptable in earlier first millennium BC assemblages, principally of Late Bronze plainware-type or LBA/EIA transition date (c.850-550BC); the profuse finely crushed flint temper of the jar would again be completely compatible with such a date. Conversely the everted rim bowl is atypical and much more characteristic of earlier Neolithic types. If a Neolithic date is acceptable on stratigraphic or other grounds, then the form of jar would again not be out of place.

Allocation problems centre around two factors: one - there is a general lack of sizeable regional earlier Neolithic assemblages with which to compare this material; two - the very fine quality of this material is generally atypical of Neolithic ceramics known to date from this region.

On balance a Neolithic date is preferred, arguably c.3500-2500 BC, but there is a strong caveat to this date, highlighted by the above discussion.

5) The Late Iron Age/'Belgic' and Roman Pottery: An Initial Assessment

5.1. Factual Data

5.1.1. Quantity and Location

A total of 3,256 'Belgic' and Roman sherds were identified. The material is held in C.A.T. storage.

5.1.2. State of the Archive

All the pottery was examined and divided into 14 basic fabrics on the basis of a brief visual examination; these fabrics were quantified by sherd count within each context. It is expected that further work will result in refinement of certain fabric categories used in this assessment report, particularly fabrics 1, 2 and 7.

5.1.3. Quantity/Condition of the Material

Generally the physical condition of the pottery was poor. Chemical weathering had resulted in the severe degradation of the surfaces of many sherds. The problem affected sandywares particularly badly; a notably high proportion of 'oxidised'

sandywares among the later contexts is in part due (is perhaps largely due) to the stripping away of grey or black surfaces to reveal a brownish or reddish core. This has rendered the identification of burnished sandywares almost impossible.

5.2. Statement of Potential

That part of the north Medway valley in which this site is situated lies within the boundary margins of five overlapping ceramic 'style-zones' and/or production areas previously identified by ceramic workers:

- 1) An East Kent zone, characterized in the 'Belgic' and early Roman periods by the use of grog-tempered pottery of 'Aylesford-Swarling' type.
- 2) A West Kent zone, west of the Medway valley, characterized by the general absence of pottery of 'Aylesford-Swarling' type and the use of shell and sand as ceramic tempering agents.
- 3) A central Medway valley zone, centred around Maidstone, which produced glauconitic sandywares in the first century B.C.
- 4) To the north-west, the area of the North Kent Thameside Roman pottery industry, also the location of limited pre-conquest production.
- 5) To the north-east, the area of the 'Upchurch' Roman pottery industry, also the location of pre-conquest production.

Products of all these industries and zones have been identified at this site, which thus offers an opportunity, in the context of a settlement assemblage, to quantify the pottery in use from these 'competing' sources at a single point of consumption. Clearly there is a possibility of learning much about the nature and development of the marketing spheres of the various industries/traditions. Of critical importance in this regard will be the accurate assignation of fabric-types to production area. In some cases, such as the well-established use of flint-tempering in the production of coarsewares in the Upchurch area in the pre-conquest and conquest periods, there may be little ambiguity. In others, a limited programme of thin-section analysis should at least be considered. Certainly, use should be made of local expertise (particularly, perhaps, that of Ian Jackson) and of the fabric reference collection compiled by Jason Monaghan and now in the possession of the Dartford and District Archaeological group.

Monaghan has noted, regarding pre-conquest Upchurch area production, that "there is only a limited amount of evidence relating to the late Iron Age in the area of interest ... what evidence there is suggests that production was low in volume and

highly localized" (ref.2). The pre-conquest development of the Kentish Thameside industries is similarly poorly understood; pottery production appears to have been sporadic (ref.3).

Given the proximity of the site to both these production areas, the well-defined pre-conquest levels clearly offer at least the opportunity to enhance our understand of pottery production and use in the area in this period. The extent of that opportunity will become clearer upon future completion of the pottery catalogue.

5.3 Recommendations

That the post-excavation processing of the pottery should be carried out in two stages:

- 1) Compilation of the basic catalogue with reference to local expertise/resources and possible use of thin-section analysis.
- 2) Further work (in the directions indicated in 'Research Potential', above) to be dependent on completion of the catalogue and reassessment of objectives.

Tim Allen
with additional material by Nigel Macpherson-Grant and
Andrew Savage

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6) References

- T. Allen, A.J. Barham and C. Pine. Interim Report on the On-Site Archaeological and Palaeo-environmental Assessment and Monitoring of the Eastern Approach to the Medway Tunnel, 1993.
- A.J. Barham Preliminary Stratigraphic Evaluation and Environmental Archaeological Assessment of The Eastern Approach of the Medway Tunnel, 1993.
- D. Barnes Gillingham - An Archaeological and Historical Review, 1990.
- P. Bennett and A.J. Barham Discussion Document on Future Archaeological Response to the Medway Tunnel Eastern and Western Approaches, 1993.
- A.F. Clarke The Neolithic of Kent: a review. Archaeology in Kent to A.D.1500, 1982.
- B. Cuncliffe Iron Age Communities in Britain 3rd ed., 1991.
- J.H. Evans Archaeological Horizons in the North Marshes. Archaeologia Cantiana LXVI 1953.
- J. Monaghan Upchurch and Thameside Roman Pottery, BAR British Series 173, 1987, 215.
- A.J. Pollard The Roman Pottery of Kent, 1988
- R. Pollard in A.C. Harrison 'Rochester 1974-75', Archaeologia Cantiana, vol. xcvi, 1981, 95-136.
- C. Seymour Survey of Kent, 1779.
- R.S. Williams Brompton Lines Draft Conservation Policy, 1981.
- Ibid., 221.
- The Chatham and Rochester Observer 10/13/1883.
- The Illustrated London News 7/11/1871 and 4/20/1867.