

Archaeological and Geoarchaeological Evaluation Report: Land at Fantaseas, Bow Arrow Lane, Dartford

NGR: TQ 5601 7749

ASE Project No: 6221 Site Code: DAF 13

ASE Report No: 2013180 OASIS ID: archaeol6-155344

By Lukasz Miciak

With contributions by Pete Allen, Gemma Ayton and Anna Doherty

Illustrations by Andrew Lewsey and Justin Russell

July 2013

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Abstract

Archaeology South-East (ASE), the contracting division of the Centre for Applied Archaeology (CAA), Institute of Archaeology (IoA), University College London (UCL) was commissioned by CgMs Consulting to carry out an archaeological evaluation on land at Fantaseas, Bow Arrow Lane, Dartford, in advance of the re-development of the site and the construction of residential housing with associated infrastructure.

Nine evaluation trenches were excavated. Natural geology was encountered at a height of c.37.5m AOD. The only archaeological remains encountered were several east/west aligned, linear features identified in the trenches in eastern part of the site. These contained modern finds and are interpreted as 20th century plough furrows. Modern truncation and layers of made ground, most likely associated with the construction of the Fantaseas swimming complex, were identified across all evaluation trenches.

Three geoarchaeological test pits excavated at the end of Trenches 1, 3 and 4, did not reach any potential Palaeolithic horizon which the pits have demonstrated must be below the impact depth of the development.

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1.0 INTRODUCTION

1.1 Introduction

1.1.1 Archaeology South-East (ASE), the contracting division of the Centre for Applied Archaeology (CAA) at the Institute of Archaeology (IoA), University College London (UCL) was commissioned by CgMs Consulting Ltd to undertake an archaeological and geoarchaeological evaluation of land at Fantaseas, Bow Arrow Lane, Dartford, Kent. The site is centred on National Grid Reference (NGR) TQ 5601 7749 and its location is shown in Figure 1.

1.2 Geology and Topography

1.2.1 According to current data from the British Geological Survey (BGS 2013), the site lies on Boyn Hill gravels, overlying Thanet Sand. The 0.4ha site is roughly rectangular in plan and is located approximately 1.5km northeast of Dartford town centre, at the junction of Bow Arrow Lane and Cotton Lane.

1.3 Planning Background

1.3.1 Planning permission has been granted by Dartford Borough Council for the redevelopment of the site, comprising the construction of residential housing with associated access roads, parking and gardens, subject to conditions (Planning Ref: Da/11/00766/OUT). Due to the archaeological potential of the site, Condition 07 of the permission stated that:

'No development shall take place until the applicant, or their agents or successors in title. has secured the implementation of

- i) archaeological field evaluation works in accordance with a specification and written timetable which has been submitted to and approved by the Local Planning Authority
- ii) following on from the evaluation, any safeguarding measures to ensure preservation in situ of important archaeological remains and/or further archaeological investigation and recording in accordance with a specification and timetable which has been submitted to and approved by the Local Planning Authority'.
- 1.3.2 A Written Scheme of Investigation outlining the scope of the archaeological work was produced by Archaeology South-East (ASE 2013) and duly approved by the Kent County Council Heritage Conservation Group (KCC HCG) in their role as advisors to the Local Planning Authority.

1.4 **Aims and Objectives**

- 1.4.1 The aims of the evaluation as set out in the WSI (ibid) were:
 - To establish the presence or absence of archaeological remains and deposits with palaeoenvironmental potential within the footprint of the proposed development
 - To determine the survival, extent and minimum depth below modern ground level of any such remains
 - To determine the nature and significance of any archaeological deposits
 - To enable the KCC Archaeologist to make an informed decision as to the requirement for any further archaeological work at the site in order to fulfil the archaeology planning condition.
- 1.4.2 The specific aims of the evaluation were:
 - To determine the presence and nature of any Palaeolithic remains encountered.
 - To determine the presence or absence of Bronze Age remains on the site.
 - To determine the presence of Iron Age and Roman remains on the site, specifically those relating to the nearby cemeteries.
 - To determine the presence of Saxon remains on the site.
 - To assess the extent and severity of any modern truncation on the site due to the previous development.
- 1.4.3 In addition, the aims of the geoarchaeological investigations were to:
 - observe and record these investigations
 - interpret the sub-surface stratigraphy across the site
 - highlight sediments of potential palaeoenvironmental significance.

1.5 Scope of Report

1.5.1 This report details the results of the archaeological evaluation carried out between 9th and 12th July 2013. The fieldwork was undertaken by Giles Dawkes, Samara King and Lukasz Miciak. The project was managed by Andy Leonard (fieldwork) and Jim Stevenson (post-excavation).

2.0 ARCHAEOLOGICAL BACKGROUND

2.1 Introduction

2.1.1 The following archaeological background is summarised from information contained in the Archaeological Desk-Based Assessment (DBA) prepared for the site by CgMs Consulting (CgMs 2013).

2.2. Geoarchaeological and Palaeolithic Background by Peter Allen

2.2.1 The site lies approximately 2.5 km east of Dartford at an elevation of approximately 38m OD. Gravel on the higher ground around Bow Arrow Lane is mapped as Boyn Hill Gravel by the British Geological Survey which is anomalously high for the majority of the Boyn Hill Terrace (Table 1). In the literature, the term Dartford Heath Gravel is used for this higher gravel (e.g. Gibbard, 1995; White et al., 1995; Woods et al., 2004), but Bridgland (1994, 1995) regards it as an extension of the Orsett Heath Gravel which forms the Boyn Hill Terrace (Bridgland, 1995). The Dartford Heath Gravel is overlain, and channelled into, by the Dartford Silt, also known as the Wansunt Loam. The Boyn Hill Terrace gravel overlies Tertiary Thanet Sand and local valleys are cut down into the Cretaceous Chalk.

| Era | Period | Stage | Unit | Age (yrs) |
|------------|-------------|---------|-----------------------|-------------|
| Quaternary | Pleistocene | Hoxnian | Wansunt Loam | 420,000 |
| | | | Dartford Heath Gravel | |
| Tertiary | Palaeocene | | Thanet Sand | 55,000,000 |
| Mesozoic | Upper | | Upper Chalk | >65,000,000 |
| | Cretaceous | | | |

Table 1: Stratigraphy of the Fantaseas, Bow Arrow Lane locale

- 2.2.2 Dartford Heath, 5km to the west, has a ground surface of 35-40m OD. Artefacts and vertebrate bones have been recovered, mostly from the base of the Wansunt Loam, at ca. 30m OD, where it overlies the Dartford Heath Gravel (Bowman's Lodge pit) or from within channels, infilled with the Loam, cut into the Gravel (e.g. ca. 30-33m OD at Wansunt Pit) (Wymer, 1968). Few artefacts appear to have been recovered from the Dartford Heath Gravel itself.
- 2.2.1 The Swanscombe site is 3.5 km to the east of Dartford and is on the Boyn Hill Terrace. With a ground surface height of 34m OD, the Upper Middle Gravel and Upper Loam are regarded as the equivalents of the Dartford Heath Gravel and the Wansunt Loam (Bridgland, 1995). However The Upper Middle Gravel is mostly sands, with associated bedding structures, rather than a gravel. The majority of the artefacts, vertebrates and molluscs were found in the Lower Gravel, Lower Loam and Lower Middle Gravel, between *ca.* 23.0 and 28.0m OD, possibly stratigraphically too low for direct correlation with the Dartford Heath material.

2.3 Prehistoric

- 2.3.1 Very little Mesolithic or Neolithic activity has been recorded within 1km of the site.
- 2.3.2 Bronze Age features close to the site include a possible barrow to the north as well as a curvilinear earthwork. To the north-west of the site, a Late Iron Age cremation cemetery was excavated during the mid-20th century; no other Iron Age artefacts have been recorded within 1km of the site.

2.4 Roman

2.4.1 A Roman cemetery has been recorded immediately to the north of the site; this included a mixture of cremations and inhumations. A large number of roman coins and other artefacts have also been retrieved from within 1km of the site.

2.5 Anglo-Saxon and Early Medieval

2.5.1 A small Saxon inhumation cemetery has been recorded near Littlebrook Farm and a number of other artefacts dating to this period have been found close to the site. A probable Saxon burial was recorded during the construction of the Dartford Tunnel Approach Road in 1937. This site is likely to have been largely agricultural during this period.

2.6 Late Medieval and Post-Medieval

2.6.1 The site probably continued to be wholly agricultural land in the post-medieval period. Historic maps show that small orchards began to be established by 1895 and had been expanded to cover all but the eastern part of the site by 1931. The Fantaseas swimming complex was constructed between 1988 and 1992, before finally being closed in 2004 due to structural failure.

3.0 ARCHAEOLOGICAL METHODOLOGY

3.1 Excavation and Recording

- 3.1.1 All work was carried out in accordance with the WSI (ASE 2013) and with the relevant Standard and Guidance of the Institute for Archaeologists (IfA 2009). The trench plan originally proposed in the WSI involved trenching totalling c. 470 m², comprising nine trenches, varying in length from 10.5m to 30m and measuring 2.1m in width (Figure 2). The length and location of Trenches 2, 3, 4 and 9 had to be changed on site due to the existence of thick concrete and large spoil heaps. These trenches measured 15.2m, 26.5m, 10.5m and 18.2m respectively, while the remaining trenches were 30m long each (Figure 2).
- 3.1.2 All machine excavation was undertaken under archaeological supervision using a mechanical excavator fitted with a toothless ditching bucket. Spoil from the machine excavations was scanned for the presence of any artefacts, both visually and using a metal detector.
- 3.1.3 All trenches were located with a Differential Global Positioning System (DGPS) receiver (Leica Viva Smartrover). All trenches and contexts were recorded on stard pro-forma record sheets. A digital photographic record of the work was also kept
- 3.1.4 After the completion of the archaeological evaluation, three geoarchaeological pits were machine excavated at the end of trenches 1, 3 and 4. A fourth trial pit (at the north-western end of Trench 2) encountered a concrete base and did not penetrate further. The geology was recorded by a field log at 1m to 4cm (1:25) and photographically. The surface exposed by each scrape of the machine blade was examined visually for changes in the sedimentology of the deposits and for fossil material and the contents of the bucket for worked flint, bone material and other fossil material. This work was carried out by Quaternary Scientific (QUEST).

3.2 Quantification of Archive

3.2.1 Dartford museum is currently unable to accept archaeological archives. The archive (quantified in Table 2) will continue to be held Archaeology South-East at offices in Braintree, Essex until a suitable long term storage location can be identified.

| Number of Contexts | 6 |
|-----------------------------|--|
| No. of files/paper record | 10 records (evaluation trench record sheet, digital photo register, drawing register). |
| Plan and sections sheets | 1 |
| Bulk Samples | None |
| Photographs | 7 Digital |
| Bulk finds | none |
| Registered finds | none |
| Environmental flots/residue | none |

Table 2: Quantification of Site Archive

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4.0 **RESULTS**

4.1 Trenches 1-9

- The natural geology comprised mid yellowish orange compact sandy gravel mixed 4.1.1 with light grey compact sandy gravel. Directly above was a 0.3m-0.4m layer of light grey loose sandy gravel subsoil that was overlain by 0.1m-0.2m of mid orangeyvellow compact sandy gravel made ground (with the exception of Trenches 2, 3 and 4 where this layer was not identified). This was in turn, overlain by a layer of topsoil that comprised 0.2m-0.3m of mid grey loose sandy gravel. The context numbers are listed in full in Table 3.
- 4.1.2 Trenches 5 to 8 on the eastern side of the site contained several east/west aligned narrow, linear cuts. A sample of these were excavated in Trench 7 and were assigned the contexts numbers [7/001], [7/003] and [7/005]. All of them were shallow, 0.1m-0.2m deep, and have been interpreted as plough furrows (See Trench 7 photograph; Figure 3). They produced modern finds, including fragments of ceramic, glass and plastic.
- 4.1.3 Large localised areas of modern truncation were noted in Trenches 8 and 9.
- 4.1.4 Three geoarchaeological test pits were excavated at the northwest end of Trench 1, the southwest end of Trench 3 and northwest end of Trench 4.
- 4.1.5 Aside from the modern plough furrows, no archaeological features were discovered in any of the trenches.

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| Trench Number | Context | Туре | Description | Deposit Thickness m | Height m AOD |
|------------------|---------|-------|---------------|------------------------|-----------------|
| 1 | 1/001 | Layer | Topsoil | 0.25 | 37.85-38.25 |
| 1 | 1/002 | Layer | Made ground | 0.1 | 37.60-38.00 |
| 1 | 1/003 | Layer | Subsoil | 0.4 | 37.50-37.90 |
| 1 | 1/004 | Layer | Natural | | 37.10-37.50 |
| | | | Geology | | |
| 2 | 2/001 | Layer | Topsoil | 0.3 | 37.60-37.80 |
| 2 2 | 2/002 | Layer | Natural | | 37.30-37.50 |
| | | | Geology | | |
| 3 | 3/001 | Layer | Topsoil | 0.3 | 37.80-38.00 |
| 3 | 3/002 | Layer | Natural | | 37.50-37.70 |
| | | | Geology | | |
| 4 | 4/001 | Layer | Topsoil | 0.3 | 37.90-38.00 |
| 4 | 4/002 | Layer | Subsoil | 0.2 | 37.60-37.70 |
| 4 | 4/003 | Layer | Natural | - | 37.40-37.50 |
| | ., | | Geology | | |
| 5 | 5/001 | Layer | Topsoil | 0.2 | 38.14-38.23 |
| 5 | 5/002 | Layer | Made ground | 0.2 | 37.94-38.03 |
| 5 | 5/003 | Layer | Subsoil | 0.3 | 37.74-37.83 |
| 5 | 5/004 | Layer | Natural | 0.0 | 37.44-37.53 |
| - | ,,,,,, | | Geology | | |
| 6 | 6/001 | Layer | Topsoil | 0.15 | 38.18-38.22 |
| 6 | 6/002 | Layer | Made ground | 0.25 | 38.03-38.07 |
| 6 | 6/003 | Layer | Subsoil | 0.3 | 37.78-37.82 |
| 6 | 6/004 | Layer | Natural | 0.0 | 37.48-37.52 |
| • | 0,00. | | Geology | | 00 |
| 7 | 7/001 | Cut | Plough Furrow | 0.12 | 37.55-37.67 |
| <u> </u> | 7/002 | Fill | Plough Furrow | 0.12 | 37.55-37.67 |
| | 7/003 | Cut | Plough Furrow | 0.10 | 37.55-37.67 |
| | 7/004 | Fill | Plough Furrow | 0.10 | 37.55-37.67 |
| | 7/005 | Cut | Plough Furrow | 0.16 | 37.55-37.67 |
| | 7/006 | Fill | Plough Furrow | 0.16 | 37.55-37.67 |
| | 7/007 | Layer | Topsoil | 0.2 | 38.30-38.42 |
| 7 | 7/008 | Layer | Made ground | 0.2 | 38.10-38.22 |
| 7 | 7/009 | Layer | Subsoil | 0.35 | 37.90-38.02 |
| • | 7/010 | Layer | Natural | 3.55 | 37.55-37.67 |
| | 17010 | _ayo. | Geology | | 07.00 07.07 |
| 8 | 8/001 | Layer | Topsoil | 0.1 | 38.21-38.64 |
| 8 | 8/002 | Layer | Made ground | 0.2 | 38.11-38.54 |
| 8 | 8/003 | Layer | Subsoil | 0.3 | 37.91-38.34 |
| 8 | 8/004 | Layer | Natural | 3.5 | 5.151 00.0 r |
| J | 3,001 | | Geology | | |
| 9 | 9/001 | Layer | Topsoil | 0.2 | 38.40-38.60 |
| 9 | 9/002 | Layer | Made ground | 0.1 | 38.20-38.40 |
| 9 | 9/003 | Layer | Subsoil | 0.3 | 38.10-38.30 |
| 9 | 9/004 | Layer | Natural | 0.0 | 37.80-38.00 |
| <u></u> | 3/004 | Layer | Geology | | 37.00-30.00 |

Table 3: Trench 1-9 list of recorded contexts

4.2 Summary of Geoarchaeological Test Pits by Peter Allen

4.2.1 Although within the units, poorly developed or no bedding structures were seen, overall the beds themselves were either horizontal or dipped gently to the south. The assemblage is not one of classical terrace sedimentology, the units lacking internal bedding structures. However, the separation of the deposits into distinct beds indicates river deposition. The sandy gravels of 1.03, 1.05, 3.02, 3.04 and 4.02 are interpreted as braid bar deposits and the sand lens such as in 1.04 and the lower part of 4.02 as channel deposits between the bars. The coarser flint content of 2.04 and its equivalents suggests stronger river flows at the time of deposition. The ovoid sand lenses in 1.05 may indicate deformation of the beds. Detailed sediment logs are provided in Tables 4 to 6.

| Unit | Depth | Depth | Description |
|------|-------------------------|----------------------------------|---|
| | (m bgs) | (m OD) | |
| 1.01 | 0.0 to 0.2 | 38.25 to 38.05 | Topsoil. |
| 1.02 | 0.2 to 0.3 | 38.05 to 37.95 | Bleached flint, sparse matrix, lag deposit, former ground surface. |
| 1.03 | 0.3 to 0.5/0.6 | 37.95 to 37.75/37.65 | Coarse gravelly sand, no discernible bedding; base slopes to south |
| 1.04 | 0.5/0.6 to 0.75/1.00 | 37.75/37.65 to 37.45/37.25 | Sand unit of variable thickness, no discernible bedding, but unit as a whole dips to the south. Impersistent. |
| 1.05 | 0.75/1.00 to 1.30 | 37.45/37.25 to 36.95 | Coarse flint gravel and irregular ovoid sand lenses, gravel clasts up to 10cm, but mostly 2 – 3 cm, rounded to subangular. Matrix – clayey medium sand, string brown (7.5YR 5/8). |

Table 4: Trial Pit Trench 1(north end, west face) (The beds dipped gently to the north)

| Unit | Depth (m bgs) | Depth (m OD) | Description |
|------|------------------|-------------------|--|
| 3.01 | 0.0 to 0.35 | 38.00 to 37.65 | Topsoil, with flinty subsoil. |
| 3.02 | 0.35 to 0.75 | 37.65 to 37.25 | Sandy coarse gravel, flints up to 10 cm, most 2-3 cm; larger clasts sub-angular to sub-rounded, smaller clasts often rounded. Strong brown (7.5YR 5/6) |
| 3.03 | 0.75 to 0.85 | 37.25 to 37.15 | Sand lens. Impersistent. |
| 3.04 | 0.85 to 1.25 | 37.15 to 36.75 | As 3.02 but slightly coarser, with large flints up to 12 cm. |

Table 5: Trial Pit Trench 3 (south end, east face)

| Unit | Depth | Depth | Description |
|------|--------------|-------------------|---|
| | (m bgs) | (m OD) | |
| 4.01 | 0.0.to 0.35 | 38.00 to 37.65 | Topsoil and sub-soil. |
| 4.02 | 0.35 to 1.25 | 37.65 to 36.75 | Sandy gravel, flint clasts occasionally up to 12 cm, but the larger clasts were mostly up to 10 cm, sub-angular to sub-rounded, and the smaller clasts 2 – 3 cm, rounded to sub-angular. Strong brown (7.5YR5/8). Poorly bedded with coarse gravels alternating sandy finer gravel. Sandy lenses towards lower limit of exposed sediment. |

Table 6: Trial Pit Trench 4, (north end, west face)

5.0 THE FINDS by Gemma Ayton and Anna Doherty

5.1 Introduction

5.1.1 A small assemblage of 19th-20th century finds was recovered from the fills of plough furrows in Trench 7. A few other finds including plastic and coal were noted in the same fills but not collected. The finds are quantified in Table 7.

| Context | Pottery | Wt (g) | CBM | Wt (g) | Bone | Wt (g) | Glass | Wt (g) |
|---------|---------|--------|-----|--------|------|--------|-------|--------|
| 7/002 | 1 | <2 | 1 | 24 | | | | |
| 7/004 | | | | | | | 1 | 4 |
| 7/006 | | | | | 6 | 54 | | |
| Total | 1 | | 1 | 24 | 6 | 54 | 1 | 4 |

Table 7: Quantification of finds

5.2 **Pottery**

A tiny rimsherd possibly from a plate, in a 19th to 20th century white porcelain fabric 5.2.1 was recovered from plough furrow fill [7/002]

5.3 **Ceramic Building Material**

Plough furrow fill [7/002] produced a fragment of machine made tile of 20th century 5.3.1 date, in a fine sandy fabric.

5.4. **Glass**

A fragment of 19th to 20th century colourless bottle glass was found in furrow fill 5.4.1 [7/004].

5.5 **Animal Bone**

A total of six fragments of animal bone were recovered from fill [7/006]. These were 5.5.1 all conjoining fragments of a single cattle rib. A number of shallow, transverse cuts were visible on the surface and the rib shaft had been completely chopped through at one end.

6.0 DISCUSSION AND CONCLUSIONS

6.1 Summary of Archaeological Results

- 6.1.1 Although the site is situated in a wider landscape of high archaeological potential, which has produced evidence for Bronze Age, Iron Age and Roman activity, no archaeological finds or features relating to these periods were recorded in any of the trenches.
- 6.1.2 The shallow linear features, discovered in the eastern part of the site are probably plough scars formed in the 20th century. These confirm evidence from historic maps which show that this area remained part of agricultural fields to the east, in contrast to the rest of the site which was occupied by a large orchard during the 20th century.

6.2 Extent of Modern Truncation

- 6.2.1 Modern made-ground was identified across the eastern part of the site and in Trench 1 on the western side. This presumably relates to an episode of levelling during the construction of the Fantaseas swimming complex. However the made-ground was consistently found to overlay intact subsoil, suggesting that archaeology probably would have survived had it been present in these areas. Having said this, localised areas of modern truncation were identified in many of the trenches, particularly in Trenches 8 and 9.
- 6.2.2 The made-ground was not found in Trenches 2, 3 and 4.on the western side of the site but Trenches 2 and 3 may have undergone some degree of truncation because natural geology was overlain by only c. 0.3m of topsoil, and subsoil was absent.

6.3 Geoarchaeological Evaluation by Peter Allen

6.3.1 Few artefacts have been recovered from the Dartford Heath Gravel itself in the Dartford Heath area. The main finds of artefacts at Dartford Heath were from the base of, or channels, of the Wansunt Loam (Dartford Silt), overlying the Dartford Heath Gravel. The Wansunt Loam is not mapped locally in the Bow Arrow Lane area. The majority of artefacts from Swanscombe were found at altitudes 7 to 10m lower than the gravels at Bow Arrow Lane, making a correlation unlikely. A river gradient of 2 to 3 metres per kilometre would be required, when a prevailing gradient of 1m/km would be more likely. The gravels, therefore, are unlikely to be worthy of further archaeological investigation. Any artefacts found are likely to be very few and too rolled as part of the river bedload, and so out of primary context and of lesser interpretive value.

6.4 Conclusion

6.4.1 Although some evidence of modern truncation was noted, it seems likely that the absence of archaeological features, deposits or finds reflects a lack of past activity rather than being entirely the result of disturbance caused by the construction of the Fantaseas complex. Evaluation: Land at Fantaseas, Bow Arrow Lane, Dartford ASE Report No: 2013180

Bibliography

ASE, 2013, Written Scheme of Investigation for Archaeological and Geoarchaeological Investigation, Land at Fantaseas, Bow Arrow Lane, Dartford, Archaeology South-East unpublished document

BGS 2013, British Geological Survey, Geology of Britain Viewer, accessed 01.07.2013 http://maps.bgs.ac.uk/geologyviewer_google/googleviewer.html

Bridgland, D.R. 1994. Quaternary of the Thames, Geological Conservation Review Series No. 7, Chapman and Hall, London. 441 pp.

Bridgland, D.R. 1995 The Quaternary sequence of the eastern Thames Basin: problems of correlation. In (Bridgland, D.R., Allen, P. and Haggart, B.A. eds) The Quaternary of the Lower Reaches of the Thames: Field Guide, pp. 35 – 52. Quaternary Research Association, Durham.

Bridgland, D.R., Allen, P. and Haggart, B.A. (eds) 1995. The Quaternary of the Lower Reaches of the Thames: Field Guide. Quaternary Research Association, Durham. 372 pp.

CgMs 2013, Fantaseas, Bow Arrow Lane, Dartford, Kent. Archaeological Desk-Based Assessment. CgMs Consulting Ltd Unpublished Report

Gibbard, P.L. 1995. Palaeogeographical evolution of the Lower Thames. In Bridgland, D.R., Allen, P. and Haggart, B.A. (eds) The Quaternary of the Lower Reaches of the Thames: Field Guide, pp. 5 – 34. Quaternary Research Association, Durham.

IfA 2009 Standard and Guidance for Archaeological Field Evaluation, Published online at http://www.archaeologists.net/

White, M., Bridgland, D.R., Ashton, N.M., McNabb, J. and Berger, M.A. 1995. Wansunt Pit, Dartford Heath (TQ 513737). In Bridgland, D.R., Allen, P. and Haggart, B.A. (eds) The Quaternary of the Lower Reaches of the Thames: Field Guide, pp. 117 – 128. Quaternary Research Association, Durham.

Wood, M.A., Allen, D.J., Forster, A., Pharoah, T.C. and King, C. 2004. Geology of London. Special Memoir for 1:50 000 Geological Sheets 256 (North London), 257 (Romford), 270 (South London) and 271 (Dartford) (England and Wales). British Geological Survey.

Wymer, J. 1968. Lower Palaeolithic Archaeology in Britain. Baker, London.

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HER Summary Form

| Site Code | DAF13 | DAF13 | | | | | |
|------------------------------------|--------------------------------|---|-------------------|-----------------------|--------|-------|--|
| Identification Name and Address | Land at Far | Land at Fantaseas, Bow Aroow Lane, Dartford | | | | | |
| County, District &/or Borough | Kent, Dartfo | Kent, Dartford | | | | | |
| OS Grid Refs. | TQ 5601 77 | TQ 5601 7749 | | | | | |
| Geology | Boyn Hill G | ravels, overly | ing Thanet Sai | nd | | | |
| Arch. South-East Project Number | 6221 | 6221 | | | | | |
| Type of Fieldwork | Eval. X | Excav. | Watching Brief | Standing Structure | Survey | Other | |
| Type of Site | Green Field | Shallow Urban X | Deep Urban | Other | | | |
| Dates of Fieldwork | Eval. 09.07.13- 12.07.13 | Excav. | WB. | Other | | | |
| Sponsor/Client | CgMs Cons | ulting Ltd on | behalf of Ward | Homes Ltd | | | |
| Project Manager | Andy Leona | ard | | | | | |
| Project Supervisor | Giles Dawkes/ Lukasz Miciak | | | | | | |
| Period Summary | Palaeo. | Meso. | Neo. | BA | IA | RB | |
| 0 | AS | MED | PM X | Other Modern | | | |

Summary

Archaeology South-East (ASE), the contracting division of the Centre for Applied Archaeology (CAA), Institute of Archaeology (IoA), University College London (UCL) was commissioned by CgMs Consulting to carry out an archaeological evaluation on land at Fantaseas, Bow Arrow Lane, Dartford, in advance of the re-development of the site and the construction of residential housing with associated infrastructure.

Nine evaluation trenches were excavated. Natural geology was encountered at a height of c.37.5m AOD. The only archaeological remains encountered were several east/west aligned, linear features identified in the trenches in eastern part of the site. These contained modern finds and are interpreted as probable plough furrows. Modern truncation and layers of made ground, most likely associated with the construction of Fantaseas, were identified across all evaluation trenches.

Three geoarchaeological pits were excavated at the end of Trenches 1, 3 and 4, although due to the depth limits they did not reach the Palaeolithic horizon, which will not be impacted by the development.

OASIS ID: archaeol6-155344

Project details

Project name Fantaseas, Dartford

the project

Short description of Archaeology South-East (ASE), the contracting division of the Centre for Applied Archaeology (CAA), Institute of Archaeology (IoA), University College London (UCL) was commissioned by CgMs Consulting to carry out an archaeological evaluation on land at Fantaseas, Bow Arrow Lane, Dartford, in advance of the redevelopment of the site and the construction of residential housing with associated infrastructure.

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> Three geoarchaeological pits were excavated at the end of Trenches 1, 3 and 4, although due to the depth limits they did not reach the Palaeolithic horizon, which will not be impacted by the development.

Project dates Start: 09-07-2013 End: 12-07-2013

Previous/future

work

No / Not known

Any associated project reference

codes

6221 - Contracting Unit No.

Field evaluation Type of project

Current Land use Vacant Land 1 - Vacant land previously developed

NONE None Monument type

Significant Finds **BRICK FRAGMENT Modern**

Methods & techniques "Sample Trenches"

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Development type Housing estate

Prompt National Planning Policy Framework - NPPF

Position in the planning process

After full determination (eg. As a condition)

Project location

Country England

Site location KENT DARTFORD DARTFORD Land at Fantaseas, Bow Arrow Lane

Postcode DA2 6PQ

Study area 0.40 Hectares

Site coordinates TQ 5601 7749 51 0 51 28 27 N 000 14 47 E Point

Lat/Long Datum Position derived from charts

Height OD / Depth Min: 37.00m Max: 38.00m

Project creators

Name of Organisation

Archaeology South-East

Project brief originator

Heritage Conservation Group at Kent County Council

Project design

originator

Archaeology South-East

Project

director/manager

Andrew Leonard

Project supervisor Lukasz Miciak

Type of Developer

sponsor/funding body

Project archives

Physical Archive

Exists?

No

Digital Archive

recipient

Dartford Museum

Digital Contents

"none"

Digital Media available

"Images raster / digital photography", "Survey", "Text"

Paper Archive

recipient

Dartford Museum

Paper Contents

"Stratigraphic", "Survey"

Paper Media available

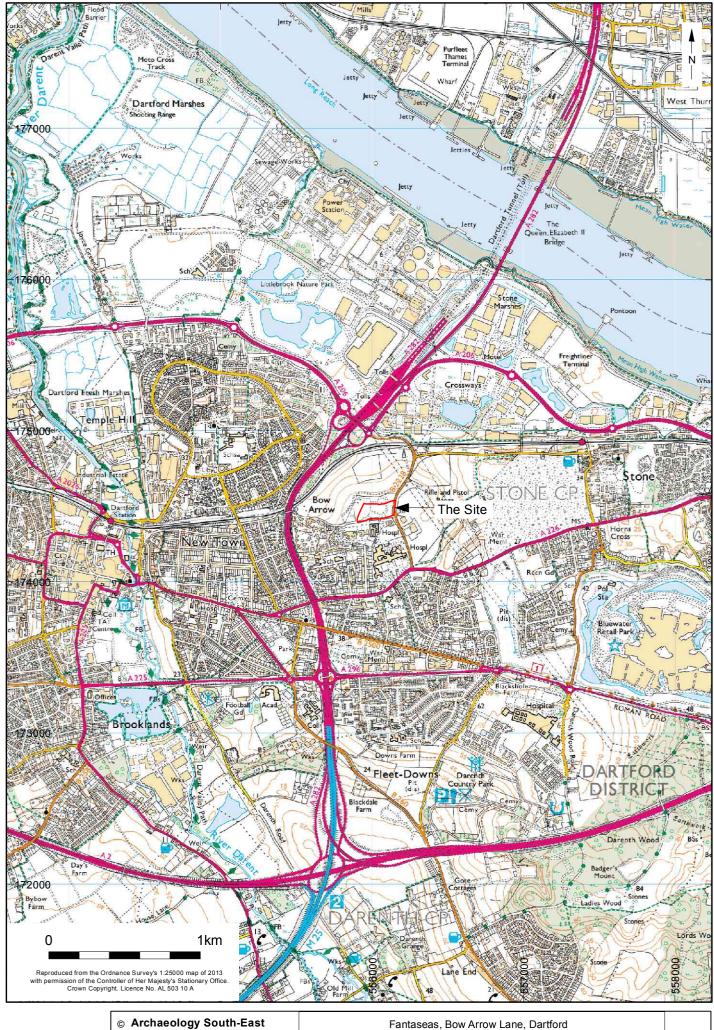
"Plan","Report","Unpublished Text","Photograph"

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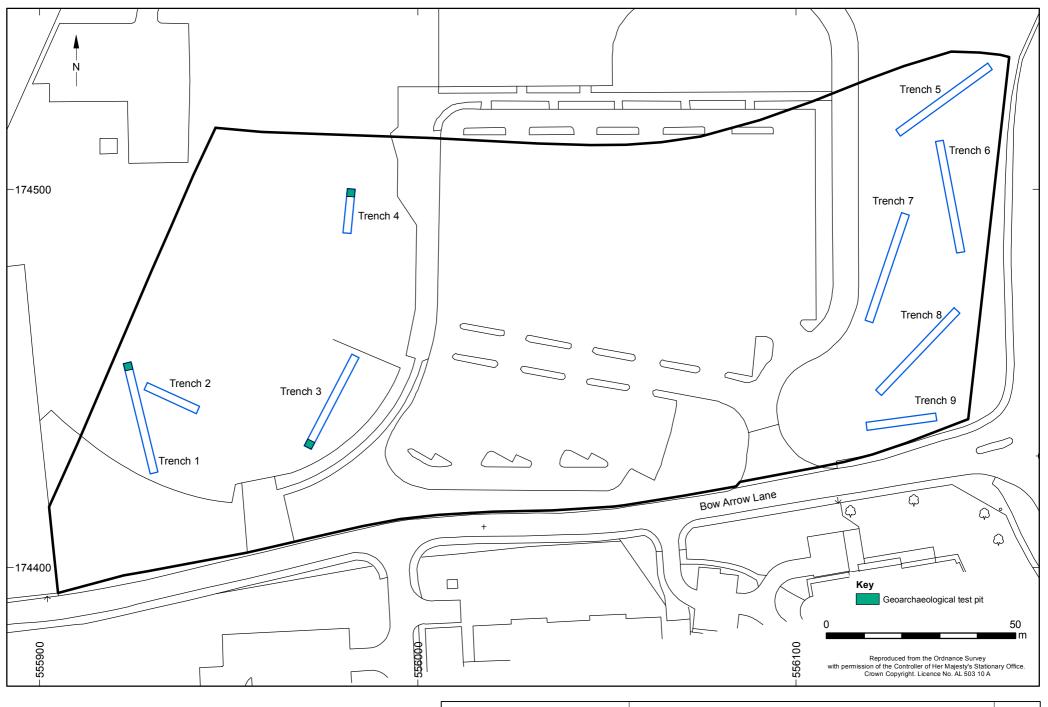
Lukasz Miciak (I.miciak@ucl.ac.uk)

Entered on

22 July 2013



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|--------------------------|---------------|-------------------------------------|--------|
| Project Ref: 6221 | July 2013 | Site location | Fig. 1 |
| Report Ref: 2013180 | Drawn by: JLR | Site location | |



| | © Archaeology South-East | | Fantaseas, Bow Arrow Lane, Dartford | Fig. 2 |
|---|--------------------------|---------------|-------------------------------------|---------|
| ı | Project Ref: 6221 | July 2013 | Trench location | 1 19. Z |
| ı | Report Ref: 2013180 | Drawn by: APL | TIGHOLIOCALION | |



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