

Archaeological monitoring at the former Co-op site, Fengate, Peterborough



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With a contribution from
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Summary

This report presents the results of archaeological monitoring carried out by the Cambridge Archaeological Unit on 27th August 2008, at Fengate (former CAU Co-op site adjacent to Elliott site) on behalf of Atkins as part of a Geotechnical test pit survey associated with the proposed development of a Waste Management Facility.

The site was located at TL 218 918 on the eastern industrial edge of the city of Peterborough, lying upon First Terrace Nene gravels. Whilst excavations revealed no positive archaeological features, the archaeological potential of the area was confirmed by the observation of a sealed palaeosol deposit beneath previously recognised and securely dated strata.

Introduction

Archaeological monitoring was undertaken on geotechnical test pits associated with the proposed Peterborough Waste Management Facility at Fengate (Figure 1). The study area is currently overgrown vacant land and contains spoil heaps from previous development in the near vicinity. Archaeological remains are known from the site which has had previous phases of archaeological evaluation and excavation.

Background

The study area is situated to the south west of the Flag Fen Basin on a raised gravel landform that has undergone extensive archaeological research since the turn of the twentieth century (Abbott 1910; Pryor 1974, 1978, 1980, 1982, 1984, 2001; Pryor *et al* 1992; Evans 1992, 1993; Gibson 1997; Beadsmore 2005; 2006). This has produced an rich array of prehistoric evidence for human activity and palaeoenvironmental change, and comprises a nationally important and well-preserved archaeological landscapes (see Figure 2).

The present survey, whilst deliberately avoiding the exposure of fresh archaeological remains, highlights that the site has archaeological potential as evidenced by the identification of sealed ancient soil surfaces.

Late Mesolithic and Early Neolithic flint tools have been recovered in scatters from buried palaeosols to the northwest of the watching brief site, and represent the earliest-known human activity in the Fengate region. The evidence for Neolithic presence in the area of the site is of particular importance. Earlier Neolithic activity is noted in the form of a rectilinear series of post-holes and pits, probably forming a structure that remains comparatively rare both locally and nationally (Gibson 1997); later Neolithic activity is indicated by the probable circular ditched single-entrance henge monument (Pryor 2001), and a scatter of pits containing excellent examples of later Neolithic pottery (Gibson 1997). Early Bronze Age pits have been found either scattered or within groups to the northwest (Pryor 1984; Beadsmore 2006), and an important network of mid-late Bronze Age field ditches with related wells, pits and other features, some of which contain rare and sensitive waterlogged material, run near to the site of the watching brief on a northwest-southeast alignment towards the fen edge (Pryor 1980; 1984; 1997b; Evans 1992; 1993; Beadsmore 2006). A Later Iron Age and Romano-British settlement lies to the northwest of the site, with roundhouses and a variety of domestic assemblages (Pryor 1984; Beadsmore 2006); in addition, a Roman road runs approximately east-west to the north of the site (Fincham 1996; Bamforth 2007).

As a consequence of previous works in the site area a substantial depth of the upper strata had already been removed, including all the topsoil, but lower (prehistoric) archaeological deposits are unlikely to have been truncated.

Methodology

Four test pits were excavated using a JCB with a 50cm-wide flat-toothed hooded bucket. Each of these test pits was dug to a length of c.3.5m, with a width of 1m, and

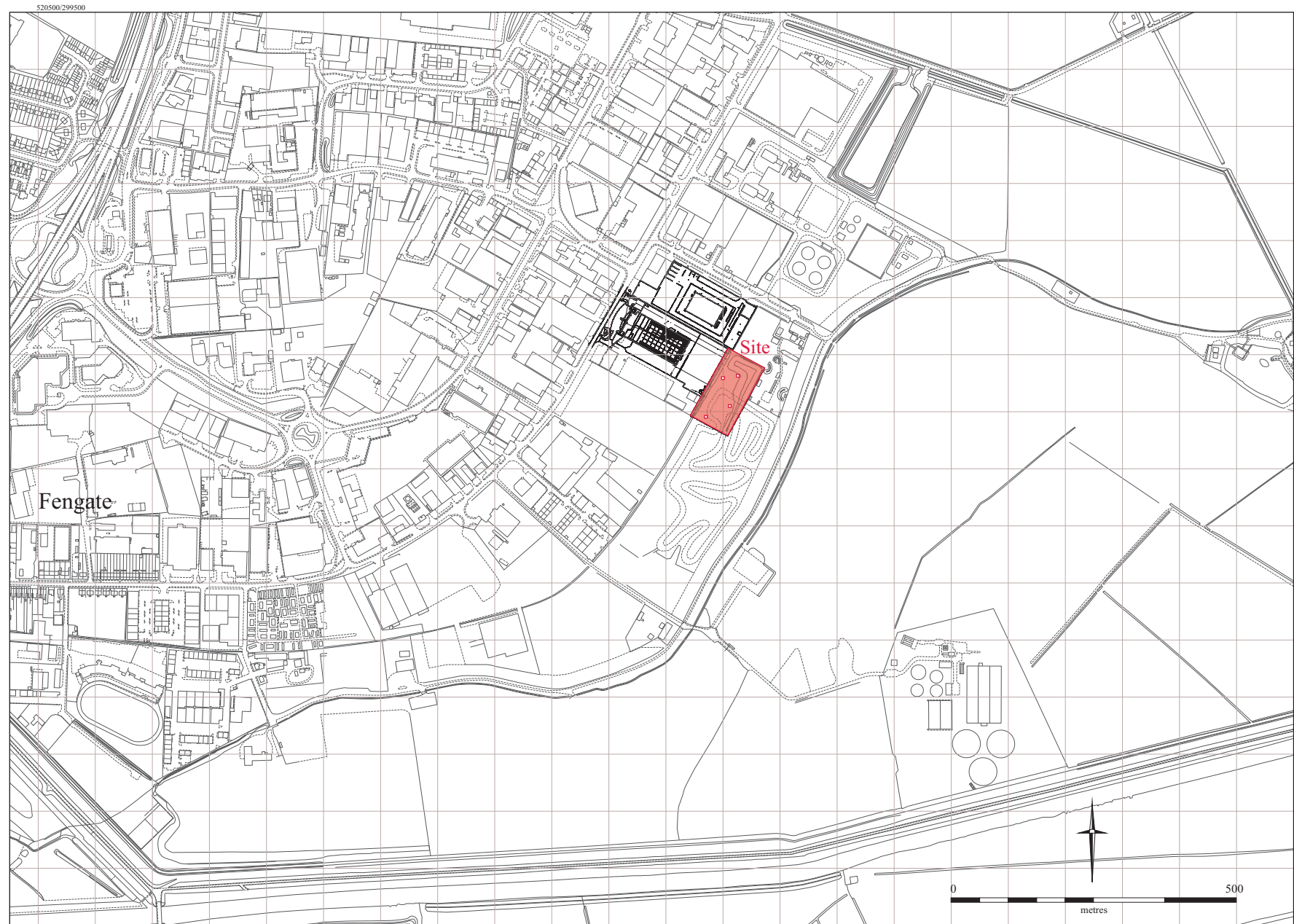


Figure 1. Site location

Based on the Ordnance Survey 1:2500 map
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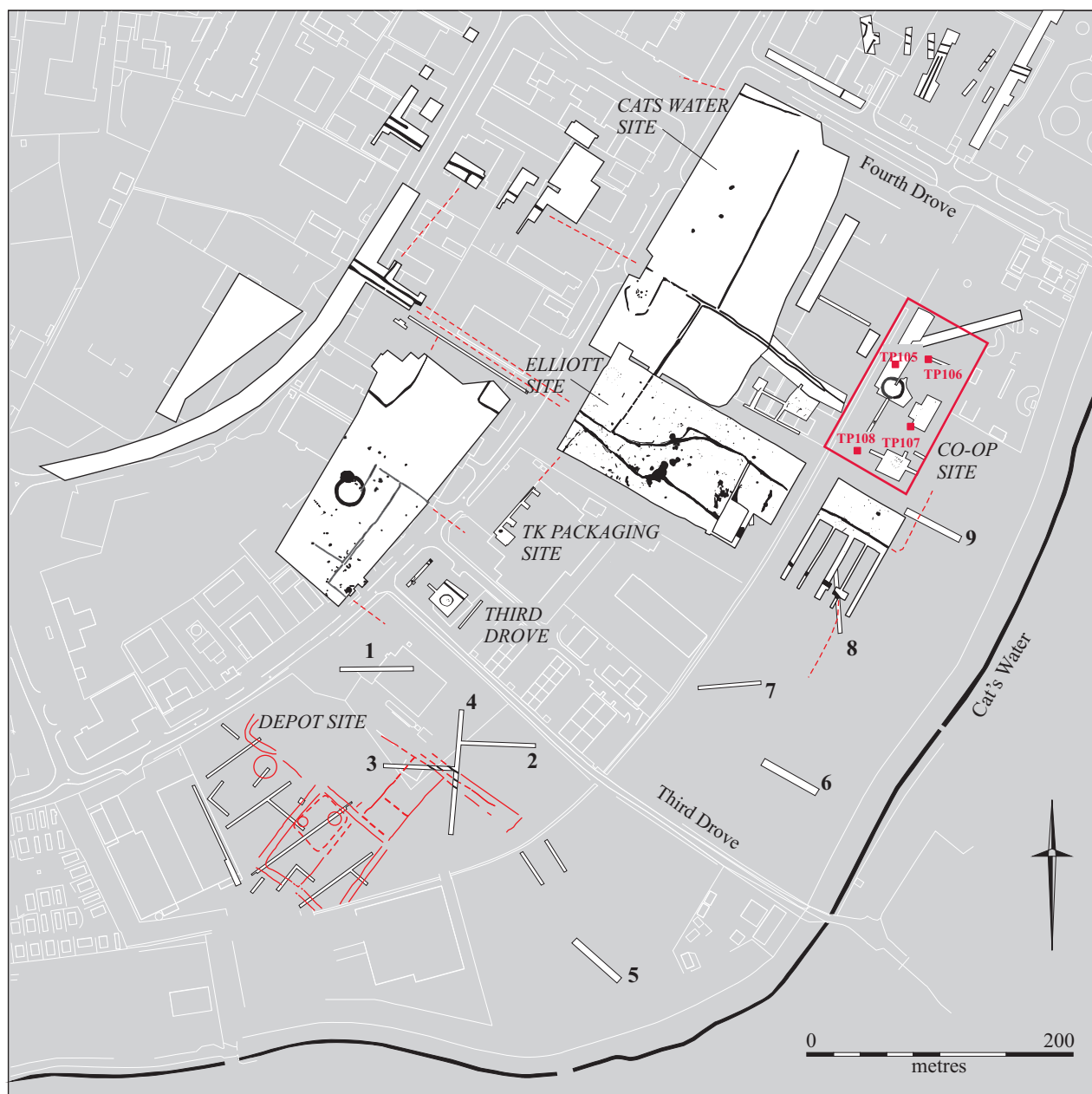


Figure 2. Test Pit locations against known Bronze Age and Neolithic archaeology

to a depth where archaeological deposits would normally be expected plus 50cm thereafter. Machining was supervised by an Archaeologist and Geotechnician, with the work being halted whenever sensitive archaeological deposits were encountered.

All archaeological features and deposits were recorded using the CAU modified version of the MoLAS recording system, and were photographed using a digital camera. Features were planned at a scale of 1:50, and the sequence of deposits was planned at 1:10. Atkins surveyed the test pits into the OS grid and took levels on the current ground surface using a Global Positioning System. The site code was WPF 08.

Results

Summary

In each test pit a similar sequence was observed, with modern disturbance accounting for the variation in the sequence found in TP107: an alluvial clay [TP 107, 106, 108] overlying a thin lens of desiccated peat, above an alluvial clay [TP 105, 108] sealing a developed buried palaeosol [TP 105, 106, 108] resting upon the natural gravels.

The natural orange sandy gravel was encountered in three trenches [TP 105, 106, 108] between 0.6m and 0.77m below the ground surface, with a developed to semi-developed palaeosol resting above with a thickness varying between 15cm and 19cm. No features or finds were observed, with the possible exception of a gulley or tree rootlet (F1) in TP108. Each test pit was dry, with a high degree of oxidation; the water table was recorded at depths of between 2.15m and 2.6m from current ground level.

TP105 – NGR 521700 / 298859, 2.83m OD

Whilst no features were encountered, a 15cm thick palaeosol [004] was observed above a secondary mottled horizon [005] resting upon the natural gravels. This may represent two phases of palaeosol development, but is equally likely to be a simple intermediary horizon.

The water table was recorded at a depth of 2.15m, and excavation was halted at a depth of 3.1m

Archaeo-logical layers 0-0.7m	0-0.25m	[001] Moderately compact mid yellowish-brown loamy (silt) oxidised alluvial clay
	0.25-0.32m	[002] Friable and fairly loose dark orangey-grey desiccated peat
	0.32-0.52m	[003] Stiff dark orangey-brown silty clay with mottling (oxidation) of dark orange sandy streaks
	0.52-0.63m	[004] Soft and fine friable light yellowish-grey sandy silt with mottling (oxidation) of dark orange sandy streaks
	0.63-0.7m	[005] Soft and fine light yellow and grey mottled silt
Natural layers 0.7->2.45m	0.7-1.3m	[006] Fine and clean mid orange sand
	1.3-1.8m	[007] Firm dark orange sandy gravel
	1.8-2.45m	[008] Loose light yellowish-brown pebbly sand
	>2.45m	[009] Stiff dark blue clay

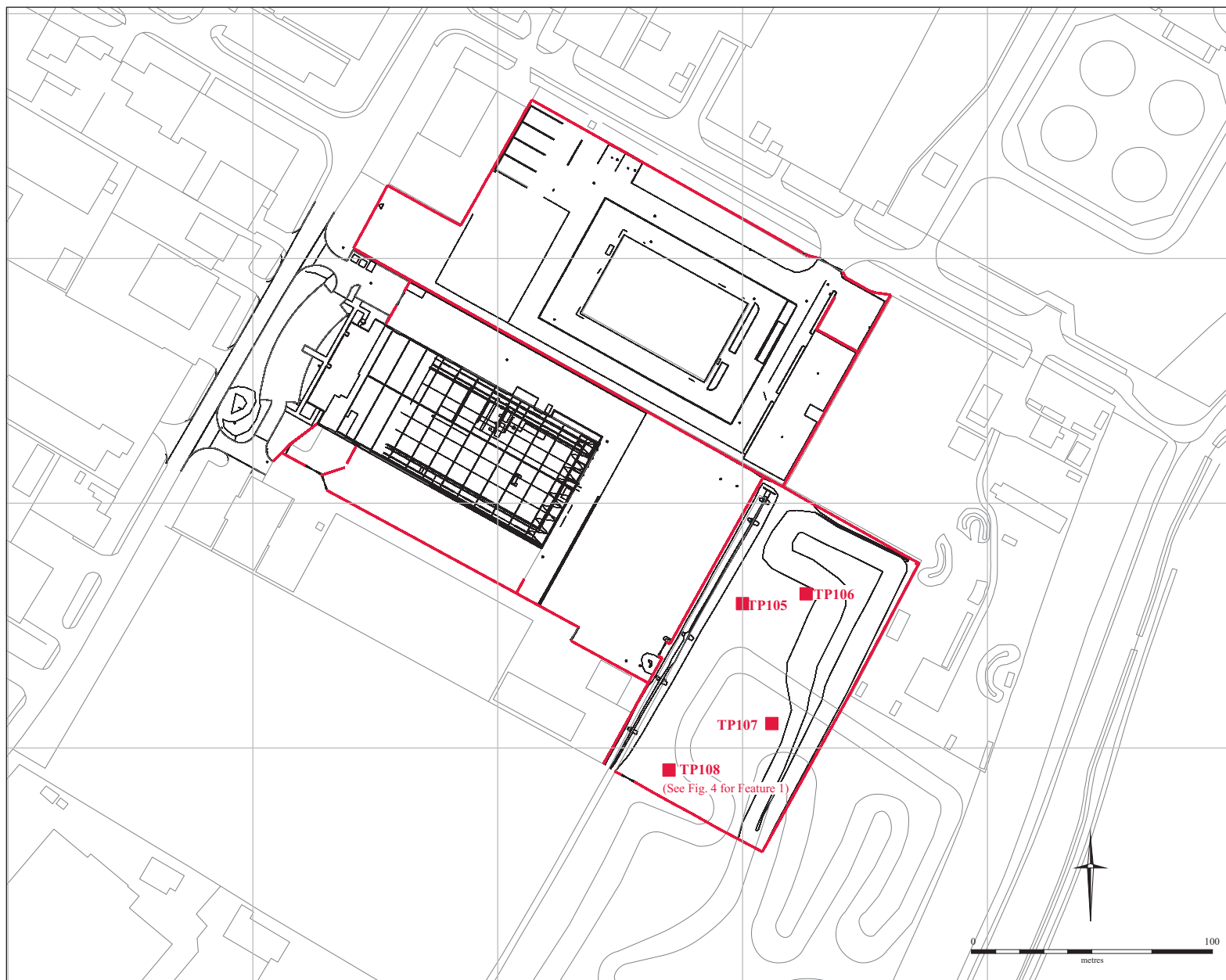


Figure 3. Study area with Test Pits TP105 to TP108

TP106 - NGR 521726 / 298863, 2.73m OD

No features were encountered, but a palaeosol of 15cm thickness was observed above the natural gravels at 0.45m depth. The excavation was halted at a depth of 3.4m

Achaeo-logical layers 0-0.45m	0-0.3m	[010] Moderately compact mid yellowish-brown loamy (silt) oxidised alluvial clay
	0.3-0.45m	[011] Friable and fairly loose dark orangey-grey desiccated peat
Natural layers 0.45->2.65m	0.45-0.6m	[012] Soft and fine friable light yellowish-grey sandy silt with mottling (oxidation) of dark orange sandy streaks
	0.6-1.25m	[013] Firm dark orange sandy gravel
	1.25-2.65m	[014] Loose light yellowish-brown pebbly sand
	>2.65m	[015] Stiff dark blue clay

TP107 – NGR 521712 / 298810, 2.78m OD

[016]-[018] represent modern disturbance that has been encountered elsewhere along the Fengate fen edge (e.g. Pryor 1997a), and had removed any signs of archaeological potential. However, the strata beneath these modern layers (especially [019]-[021]) may indicate a geological variation when compared to the other test pits, probably formed by slow-moving water action either through a channel or a pond.

The water table was recorded at a depth of 2.6m, and excavation was halted at a depth of 3.1m

Modern disturbance 0.0-1.0m	0-0.37m	[016] Loose mid orangey-brown sand with occasional patches of mid greyish-brown silty (loam) sand containing small rootlets. Inclusions of large sandstones c.15cm diameter [modern]
	0.37-0.57m	[017] Loose fine mid-yellow sand with frequent small rounded (50%) stones <1cm diameter [modern]
	0.57-1.0m	[018] Stiff dark bluish-grey silty clay with frequent organic matter, glass and shattered field drain debris [modern]
Pond or channel? 1.0-1.85m	1.0-1.4m	[019] Soft dark orange silty sand
	1.4-1.7m	[020] Compact dark orange sandy gravel
	1.7-1.85m	[021] Fairly soft light yellow silty sand
Natural layers 1.85->2.8m	1.85-2.8m	[022] Fairly stiff light blue silty clay with occasional reedy organic matter, and rare small angular stones <3cm diameter
	>2.8m	[023] Stiff dark blue clay

TP108 – NGR 521670 / 298791, 2.75m OD

TP108 proved the best indicator of archaeological potential with a thick palaeosol of 19cm containing frequent flecks of charcoal recorded at a depth of 0.58m. No finds



Figure 4. Feature 1 in TP108

were retrieved, but a possible feature (**F1**) was recorded towards the south-west of the trench.

Excavation was halted at a depth of 3.2m.

Archaeo-logical layers 0.0-0.77m	0-0.41m	[024] Moderately compact mid yellowish-brown loamy (silt) oxidised alluvial clay
	0.41-0.58m	[025] mixed stiff and loose yellowish-brown silty clay and mid-brown sandy loam with friable dark orange sandy streaks [possible mixed horizon of alluvial mud & desiccated peat]
	0.58-0.77m	[026] Soft and fine friable light yellowish-grey sandy silt with mottling (oxidation) of dark orange sandy streaks, and frequent charcoal flecks
Natural layers 0.77->2.65m	0.77-1.4m	[027] Firm dark orange sandy gravel
	1.4-2.25m	[028] Fine mid orangey-yellow gravelly sand
	2.25-2.65m	[029] Loose light yellowish-brown pebbly sand
	>2.65m	[030] Stiff dark blue clay

Features

F1 (Fig. 4) Approximately 1m length of a small curvilinear gully 20cm wide was observed in the SW corner of TP108 running beneath the south to the west baulk. This was encountered within the palaeosol [026] with occasional small flecks of charcoal scattered throughout the surface, the composition of which appeared the same as the [026]. The feature was photographed but unexcavated with the test pit moved 1m north to allow preservation *in situ*.

Discussion

Although the watching brief revealed little by way of archaeological features, a number of observations may still be made regarding its relevance to previous works, particularly in relation to the character of the fen-edge.

The presence of Neolithic and Bronze Age activity in the vicinity of the watching brief reaffirms the ongoing archaeological potential of the fen-edge. However, this activity appears sporadic, localised only by virtue of discrete features such as individual pits, wells or structures (Gibson 1997; Pryor 2001; Beadsmoore 2006). Whilst the lack of surface finds is perhaps unusual on the fen-edge, which often produces the bulk of material assemblages, inland settlement is typically characterised by features largely devoid of finds, particularly from the 2nd millennium BC. The watching brief was located within the margins of the landfall and the ‘mainland’, and the dearth of features and finds illustrates, at the least, the bounded limits of activity areas along Fengate, clearly demarcated by boundary ditches and fence lines near the area of the watching brief. Furthermore, the possible feature and charcoal content within the palaeosol of TP108 is redolent of wooded clearance as well as localised

settlement activity. With this in mind, F1 may indeed be a tree-throw, similar to those with traces of fire found elsewhere in the vicinity (Beadsmoore 2006).

The subtle undulation of the fen topography is illustrated by the small variation in depth of the natural orange gravels. But of most interest from this watching brief are the geological strata observed in TP107 and their variation relative to the other three test pits that displayed a more characteristic fen-edge sequence. A relict water-course has been traced along the contour of the present-day Cat's Water along the Fengate fen-edge (Pryor 1997; Brittain, *forthcoming*), but whilst this could be observed from laminated muds in the upper horizons of these previous works (horizons that are likely to have been removed by modern truncation in TP107), the depths of the organic muds in TP107 appear to indicate an irregularity in the contour of the fen edge. Again this is not unusual, for previous excavations have mapped a formation of subtle promontories and estuaries along the Fengate fen edge (Evans 1992; Pryor 1997a, 1997b; 2001).

Considering the small scale of the test pitting it is unsurprising that little or no archaeological activity was observed. The archaeological features that have been exposed in previous works nearby have been rare and significant in terms of both local and national prehistory, and additional features within the area should not be discounted.

Acknowledgements

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