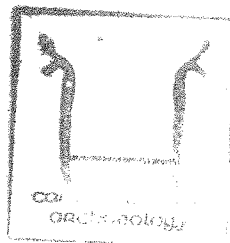
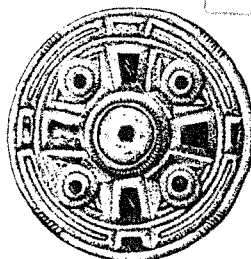


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Archaeological Field Unit

## Kings Farm, Horningsea An Archaeological Desktop Study

Stephen P Macaulay

1999

Cambridgeshire County Council

Report No. A145

*Commissioned By A.B. Dennis (Land & Water Consultant)*

**Kings Farm, Horningsea  
An Archaeological Desktop Study**

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1999

*Report No A145*

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## Summary

A proposed reservoir, covering an area of 1.75ha, located immediately to the east of Kings Farm, Horningsea, lies within an area of potentially rich archaeological remains. The most significant of these are of Romano-British in date, although Prehistoric material has been recovered in the area. The site lies on the edge of a gravel terrace, covered in part by alluvium, which in turn may be overlying archaeological deposits. Roman settlements are known to be located on the gravel terrace edges and earlier Prehistoric remains lie beneath the alluvium.

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# **Kings Farm, Horningsea**

## **An Archaeological Desktop Study**

### **1 Introduction**

- 1.1 This study was commissioned by A. B. Dennis (Land & Water Consultant), on behalf of the Cambridgeshire County Farms Estate, in advance of the construction of a proposed reservoir at Kings Farm, Horningsea. This desktop study aims to define the archaeological potential of the land likely to be affected by the development. It has been carried out in accordance with a specification drawn up by Stephen Macaulay in response to a design brief by Andy Thomas of Cambridgeshire County Council County Archaeology Office.
- 1.2 The site is located close to the village of Horningsea (2 miles northwest of Cambridge City), immediately to the east of Kings Farm and comprises about 1.75 hectares of land. The proposed development area is roughly rectangular and lies in the triangle of land at the junction of the Horningsea-Drove Way footpath and a field drain (Fig. 1). The site is centred on TL 4990 6280.

### **2 Topographical and Geological background**

- 2.1 Horningsea is situated on a peninsular of slightly higher land (Bedfordshire Lower Chalk) which projects northwards into the fens (5m+ OD). The site lies on the boundary of several geological formations. To the south is the Lower Chalk and to the north lies Gault Clay which also underlies the area. The development area is covered, in part, by alluvium, which in turn seals 1st and 2nd Terrace gravels. To the south and east 2nd Terrace gravels are not covered by alluvium.
- 2.2 Test Pit and Bore Holes

The Consultant (A.B Dennis) has commissioned and provided the results of two test pits and four boreholes on the site (Appendix B). These confirm that the site lies, in the main, on the gravel terrace, which lies on the edge of the Horningsea peninsular. To the north and east of the site alluvium has been recorded overlying the gravel to a depth of 600mm. These results confirm that the site lies on the edge of the gravel terrace, partially overlain by alluvium. To the northwest and southeast chalk marl overlies the gravel terrace to a maximum depth of 900mm. In conclusion the gravel terrace occurs at a depth of 300mm-1200mm across the site.

### **3 Methodology**

In order to map the potential for archaeology at Kings Farm the investigation centred on the accessible archaeological and historical resources held by Cambridgeshire County Council.

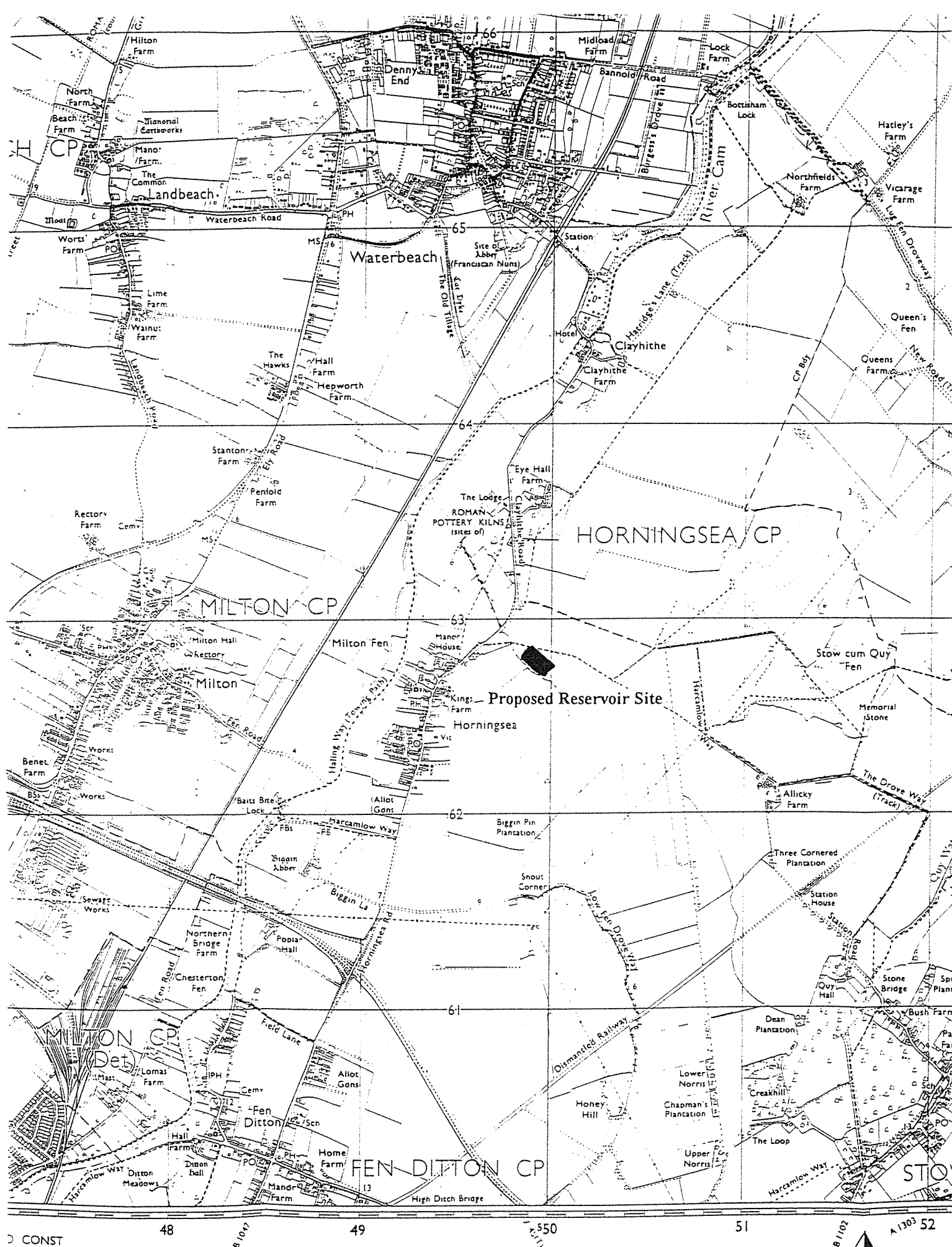


Fig 1 Location Map (Scale 1:25,000)

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### 3.1 Aerial Photographic Assessment

Following discussions with specialists aerial photographic survey work was not undertaken due to the extensive coverage of the site in the Fenland Survey (Hall 1996) and previous work undertaken with this resource during the survey of the archaeology on the Cambridgeshire County Farms Estate (Malim 1990). The relevant photographs were, however, consulted to meet the requirements of the Design Brief (CAO 14/12/98 2.3.1) and research methods of the AFU Specification (SPM 3/3/99 5.1 & 5.2). The search confirmed that the site was not well covered (already known) and that no archaeological features were visible. Nearby ridge and furrow, previously plotted on the SMR and recorded in both the Fenland Survey (Hall 1996), was the only archaeological features shown on these photographs.

- 3.2 The known archaeological resource was investigated through the County's Sites and Monuments Record held at Cambridgeshire County Council. Additional published resources such as the Victoria and County Histories, Fenland Research and Fenland Survey (Hall 1996), and Royal Commission inventories were all consulted. As well as local research into the Coprolite industry (Grove 1976) and the Cambridgeshire landscape (Taylor 1973) were reviewed. Finally, published and unpublished excavation reports on the Roman settlement in the Waterbeach, Horningsea and Milton area were investigated (Walker 1912, Guttman and Robinson 1996, Macaulay 1994 and forthcoming).

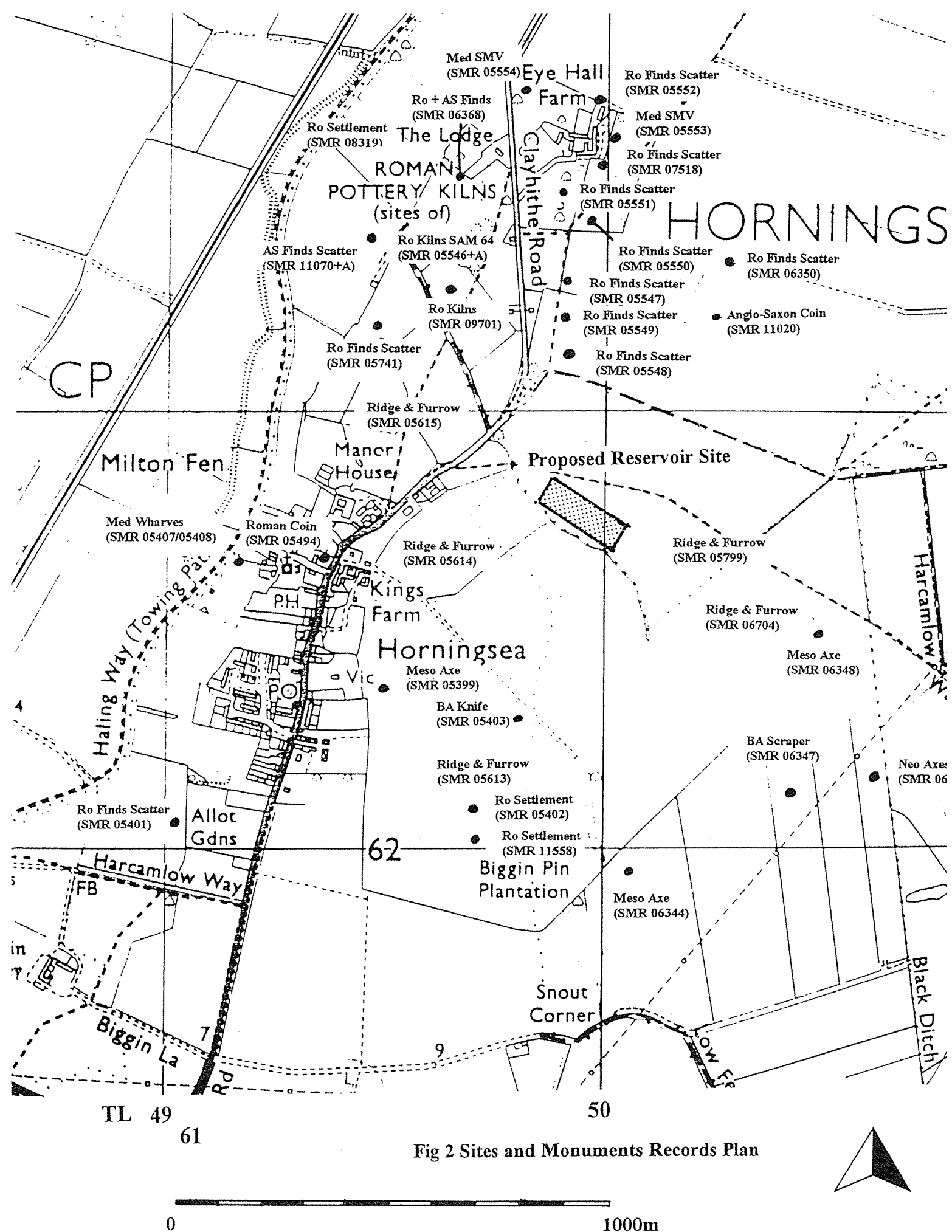
The historical records held at the County Council's Record Office in Cambridge were investigated. It holds copies of the 1810 Inclosure map (CR P94/26/2) Cambridge, the 1874, 1875 and 1885 plan of Eye Hall farm and mapping of coprolite mining. No Tithe map exists for Horningsea. This work was supplemented by the use of the subsequent Ordnance Survey maps of the area which in appropriate detail for this research date back to the 1 inch map published in 1886.

## 5 Archaeological and Historical background

The SMR maps and records show no archaeological remains within and immediately adjacent to the proposed development area. Those that do exist (Fig. 2) lie to the north, centred around the Roman potteries at Eye Hall Farm, Horningsea or finds spots for Prehistoric artefacts to the east, and south. The closest archaeology is the remains of medieval ridge and furrow lying to the east and west of the site.

### Prehistoric

Finds spots of lithic scatters and stray finds lie within 500m of the site (Fig. 2). Mesolithic Tranchet Axes (SMR Nos.: 05399 and 06348) have



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been recovered on the gravels to the east, as have Neolithic and Bronze Age lithic material to the southeast and northeast (SMR Nos.: 06347, 06349, 07820, 07821). The Fenland Project (Hall 1996) even suggests that a possible ploughed Bronze Age Barrow (SMR No: 07281) may lie to the northeast of the site. In addition Hall suggests that there is a background of Bronze Age flints on the gravelly-clay soils in this area (Hall 1996; 114). The only reference to Iron Age finds is a single coin (SMR No: 05546A) recovered during the excavations of the Roman pottery kilns at Eye Hall, Horningsea.

## **Roman**

The Horningsea area is very rich in Roman remains. To the north, west and southeast of Horningsea Village lie Roman settlements (Fig. 2). These are similar to other Roman settlement sites north of Cambridge, running up both banks of the River Cam, towards the Car Dyke canal at Waterbeach. Located on the higher ground and the gravel terraces, this is a model of the Roman occupation north of Cambridge. It was centred on small scale rural settlements and proto-industrial activity zones. In particular the Horningsea pottery industry is of importance, however recent investigations (Guttmann & Robinson 1996, Macaulay forthcoming) have demonstrated that this pottery industry was not confined to the site at Eye Hall alone (SMR No 05546), rather kilns are present on both banks of the Cam, running south towards Milton and Cambridge itself. The SMR records the extensive enclosure (pits, ditches) and kiln remains at Eye Hall, Horningsea (SMR 05546, 05546A, 05551), as well as numerous pottery and finds scatters (Fig. 2) to the east of Eye Hall Farm (approximately 500m north of the proposed development site).

Although no Roman artefacts have been recorded on the site, its location on the edge of a gravel terrace and on the fen edge suggest that a settlement might be present. An investigation into the Roman Car Dyke canal at Clayhithe, Waterbeach discovered hitherto unknown Roman remains located on the edge of the 1st Terrace gravels. Their presence masked, in part, by the alluvium covering the flood plain of the River Cam (Macaulay forthcoming). Roman remains recorded in the Horningsea area have focused on the excavations in and around Eye Hall Farm and the development of Horningsea village itself (Fig. 2). The site lies in what David Hall (Hall 1996) describes as the 'medieval' fen in the Fenland Project, which he suggests has no significant occupation from that time. This in itself may account for the lack of Roman material recovered from the site, where modern ploughing and development may not have disturbed deeply buried deposits.

## **Medieval**

The site lies in the 'medieval' fen (Hall 1996) and has no recorded instances of occupation. The SMR notes ridge and furrow to the east and west of the site (Fig. 2). Medieval buildings are identified in Horningsea village and two wharves (SMR No: 05407, 05408) are also recorded as earthworks to the west along the banks of the River Cam. The only other significant medieval remains

are building foundations and earthworks associated with a shrunken medieval village at Eye Hall (SMR No: 05554) which lie around 750m north of the site.

### Post-medieval

Significantly for this period, the Coprolite 'Mining Rush' during the 1870's is of importance. Maps of the workings at Eye Hall Farm, commissioned in 1872, 1873 and 1875 show that ultimately the whole farm was covered by rapid extraction works (Grove 1976; 23-24). The work was carried out in alternate years of digging (open quarrying) and crop rotation, and eventually covered all the land to the south of Clayhithe and east of Horningsea to Lode and south along the line of the old railway line to Cambridge (Fig. 3). The mining did not cover 100% of the fields and was not very deep, the effect of this disturbance is to have made the identification of archaeological features from aerial photographs very limited.

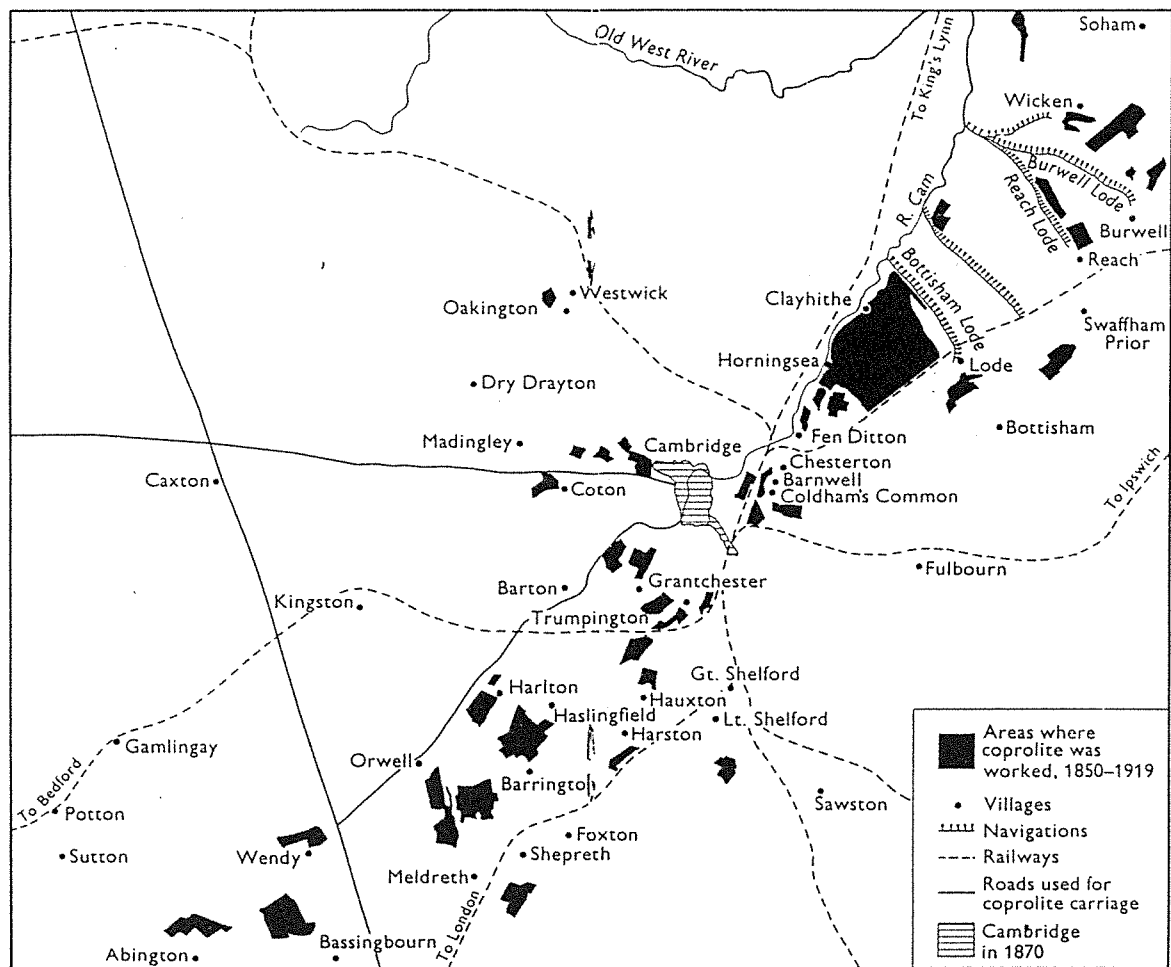


Fig 3 Map showing extent of coprolite mining in Cambridgeshire (After Groves 1976, no scale provided)

## 6 Archaeological potential

From the study of known archaeological and historical records and remains, it is clear that the land around Kings Farm, Horningsea is *potentially* very rich. The sites location, on the edge of the 1st and 2nd Terrace gravels, makes the recovery of Mesolithic, Neolithic and Bronze Age material a likelihood. The alluvial cover, particularly to the north of the development site, is likely to have masked and protected buried deposits which would be likely to be found on the fen edge. Importantly this equally applies to the potential of Roman remains being encountered within the proposed development area. The location of Roman remains on the gravel terraces is clearly identified in this area, and as stated above the importance of the *edge* of the terrace might imply that archaeology may be present.

In order to fully assess the impact of the development on the archaeology, it is worth placing it within a wider research perspective. Very little is known of the Prehistoric activity in the Horningsea Parish. Most finds have centred on isolated scatter and finds spots. Any investigation of a larger area will offer the potential for more detailed recording and potential settlement investigation. Although the Roman period is well represented in Horningsea, recent work on the Romano-British settlements of the area has placed a strong emphasis on a fuller understanding of the local pottery industries and the place of nearby rural settlement within the proto-industrial area north of Cambridge along the flood plain of the River Cam.

It is clear that despite the lack of recorded finds in the SMR, the sites location (geology and topography) taking into account the alluvial cover and the low quality of aerial photographic records (coprolite mining and poor coverage), it is likely that archaeology may be present on the site. Its proximity to extensive Roman remains and earlier Prehistoric material would make the discovery of either probable. Romano-British remains are commonly found on the gravel terraces and this is also the location of earlier Bronze Age material (Hall 1996) on the gravel/clay interface.

## 7 Impact of proposed development

Given the requirements of constructing a reservoir and the depths of ground works, the proposed development will impact on any archaeology it encounters. The reservoir is planned in an archaeology sensitive area.

The local topography and geology suggest that archaeology may be encountered at only 300mm on the gravel terrace, however it may be that some deposits may lie at over 900mm beneath the alluvium.

Although proposals of mitigation strategies is considered to be beyond the scope of this report, a few salient points are worthy of noting. The site has a *high* archaeological potential, although the nature of the proposed development

does not allow for any 'preservation in situ'. Given the nature of the site, investigation may uncover extensive remains or demonstrate that no archaeology exists, however without physical investigation this cannot be predicted.

## 8 Conclusions

In summary, the archaeological potential of the reservoir site can be described thus:

- |  |                  |
|--|------------------|
| • Mesolithic, Neolithic and Bronze Age finds scatter | low/unknown      |
| • Roman settlement (pits, ditches, kiln sites)       | moderate/unknown |
| • Medieval ridge & furrow                            | high/unknown     |

This study has demonstrated that the subject site lies within a rich archaeological landscape, with important sites to the north and west of Roman date. Whilst no archaeological sites or finds are known from the subject site itself, its archaeological potential must be considered high. the site is located on what was once an area of dry land, close to the fen edge. Despite 19th century coprolite mining, if archaeology is encountered on the site the conditions for preservation are likely to range from good to very good, where deposits on the gravels may be buried beneath a thick alluvial cover.

## APPENDIX A - Sites and Monuments Record GAZETTEER

Zone 1 - 0-250m

Zone 2 - 250-500m

Zone 3 - 500m+

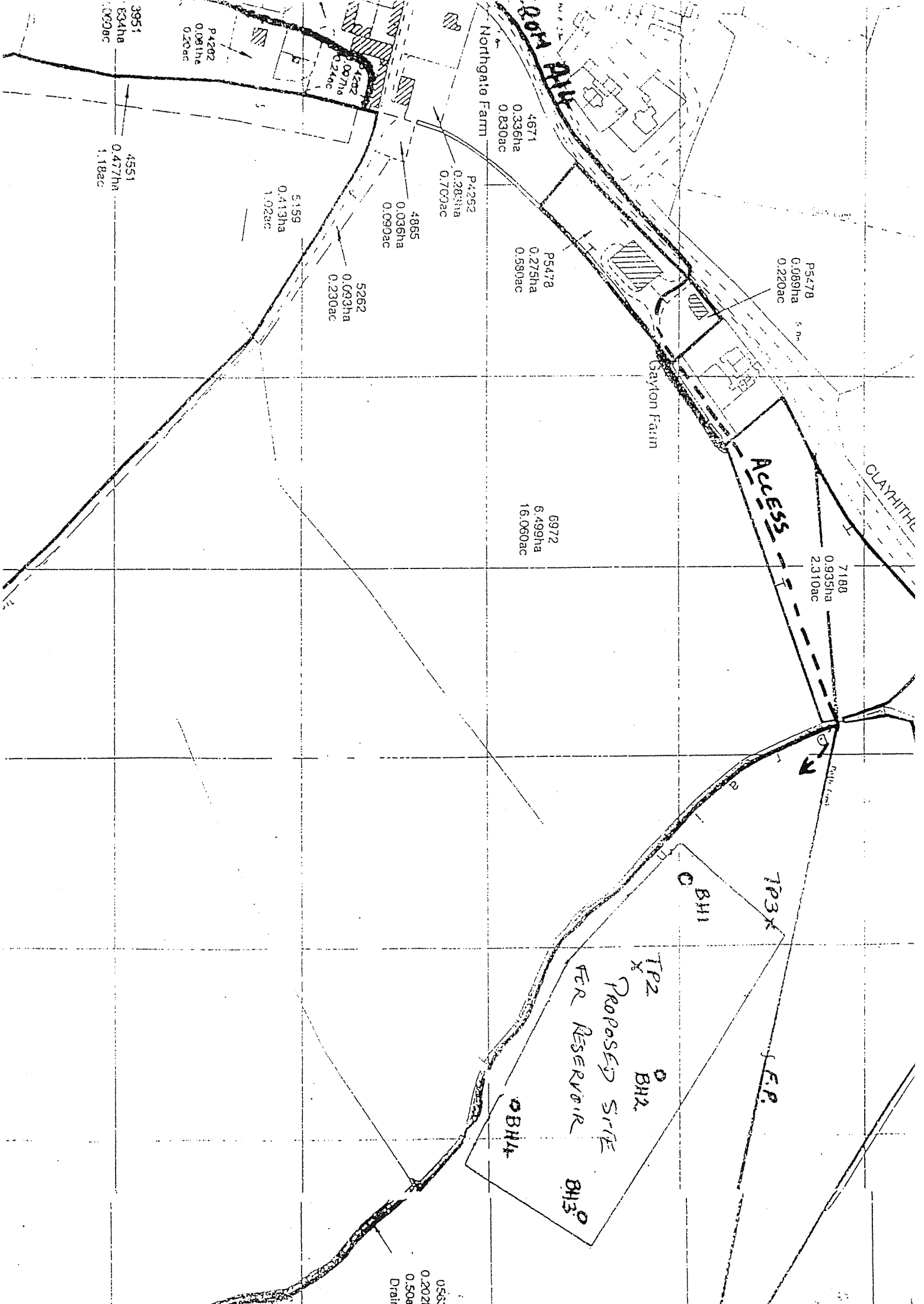
Zone	SMR No.	Nat. Grid Ref.	Description
1	05614	TL 495- 626-	Ridge & Furrow (documents & cropmark)
1	05615	TL 495- 628-	Ridge & Furrow (documents & cropmark)
1	05799	TL 502- 627-	Ridge & Furrow (earthwork)
1	06704	TL 503- 626-	Ridge & Furrow (earthwork)
2	05399	TL 495- 624-	Meso Tranchet axe (stray find)
2	05403	TL 497- 624-	BA flint knife (stray find)
2	05546	TL 496- 634-	RB Horningsea Kilns at Eye Hall (excavation/earthworks). Site is now a Scheduled Ancient Monument (SAM 64)
2	05546A	TL 496- 634-	RB pottery + IA coin (stray finds)
2	05547	TL 49-- 63--	RB pottery (stray finds)
2	05548	TL 4950 6334	RB pottery/kiln? (soilmark/finds scatter)
2	05549	TL 4981 6325	RB pottery/kiln? (finds scatter)
2	05550	TL 498- 633-	RB pottery & human remains (finds scatter)
2	05551	TL 4984 6347	RB settlement (excavation/earthworks)
2	05613	TL 497- 623-	Ridge & Furrow (earthwork)
2	05741	TL 4945 6325	RB pottery/kiln? (finds scatter)
2	06348	TL 505- 625-	Meso Tranchet axes (stray finds)
2	06350	TL 501- 634-	RB pottery (finds scatter)
2	07818	TL 4981 6345	RB pottery/kiln? (finds scatter)
2	09701	TL 497- 634-	RB Horningsea Kilns (excavation)
2	11020	TL 503- 633-	AS coin (stray find)
2	11070a	TL 496- 635-	RB brooch (stray metal detecting find)
2	11070b	TL 496- 635-	RB cu alloy pin (stray metal detecting find)
3	05400	TL 49-- 62--	pewter spoon (stray find)
3	05401	TL 491- 620-	RB pottery (finds scatter)
3	05402	TL 4965 6214	RB settlement (cropmarks & finds scatter)
3	05404	TL 49-- 63--	Preh flint (stray find)
3	05407	TL 4922 6278	Med wharves (documents & earthworks)
3	05408	TL 4919 6272	Med wharves (documents & earthworks)
3	05423	TL 4966 6403	BA weapons (stray find)
3	05423A	TL 4966 6403	AS shield (stray find)
3	05494	TL 493- 626-	RB coin (stray find)
3	05552	TL 4993 6368	RB pottery (finds scatter)
3	05553	TL 4995 6347	Med foundations/DMV? (Eye Hall excavation see 05546)
3	05554+A	TL 498- 636-	Med DMV enclosure (excavation see 05546, earthworks)
3	05611	TL 495- 609-	Ridge & Furrow (earthwork)
3	05612	TL 491- 611	Med headland/boundary (earthwork)
3	05798	TL 501- 611-	Ridge & Furrow (earthwork)
3	06343	TL 503- 607-	BA artefacts (stray finds)
3	06344	TL 501- 618-	BA palstave (stray find)
3	06345	TL 502- 618-	BA spear head (stray find)
3	06346	TL 505- 613-	Neo polished axe (stray find)
3	06347	TL 505- 621-	BA scraper (stray find)
3	06349	TL 507- 621-	Neo axes (stray finds)

Zone	SMR No.	Nat. Grid Ref.	Description
3	06353	TL 502- 643-	RB brooch (stray find)
3	06368	TL 5115 6230	BA? ring-ditch (cropmark/earthwork)
3	06372	TL 503- 637-	RB pottery in coprolite quarry (finds scatter)
3	07812	TL 4940 6140	BA flints (finds scatter)
3	07820	TL 5090 6320	BA flints (finds scatter)
3	07281	TL 5096 6323	BA flints/barrows? (finds scatter)
3	08319	TL 496- 635-	RB enclosure (cropmark)
3	10868	TL 4964 6352	AS pottery/coins (finds scatter)
3	10868A	TL 4964 6352	RB coins (finds scatter)
3	11555	TL 4920 6110	RB settlement (cropmark/finds scatter)
3	11556	TL 4940 6140	BA flints (finds scatter)
3	11557	TL 4888 6190	RB pottery (finds scatter)
3	11558	TL 4969 6209	RB pottery (finds scatter)

## APPENDIX B - Test Pits and Borehole Results

Two test pits (TP2, TP3) and four boreholes (BH1-4) were excavated by the Consultant. The results and copy of plan supplied are detailed below:-

TP2	-	0-250mm	-	topsoil
		250-1600	-	sand and gravel
		1600-3000+	-	stiff grey clay (Gault)
TP3	-	0-250mm	-	topsoil
		250-700	-	grey chalky marl (Beds Lower chalk)
		700-1400	-	sand and gravel
		1400-2200+	-	stiff grey clay (Gault)
BH1	-	0-300mm	-	topsoil
		300-1700	-	sand and gravel
		1700-6000+	-	stiff grey clay (Gault)
BH2	-	0-400mm	-	topsoil
		400-1000	-	firm sandy clay (alluvium)
		1000-1800	-	sand and gravel
		1800-6000+	-	stiff grey clay (Gault)
BH3	-	0-350mm	-	topsoil
		350-1200	-	grey chalky marl (Beds Lower chalk)
		1200-1800	-	sand and gravel
		1800-6000+	-	stiff grey clay (Gault)
BH4	-	0-300mm	-	topsoil
		300-1700	-	sand and gravel
		1700-6000+	-	stiff grey clay (Gault)



## References

### **Cambridgeshire Sites and Monuments Record (SMR).**

Coles, J and Hall, D. (1998). **Changing Landscapes: The Ancient Fenland.** Cambridgeshire County Council.

Darby, H.C. 1983. **The Changing Fenland.** University Press Cambridge..

English Heritage (1997). **English Heritage Archaeology Division Research Agenda.** Draft.

Fox, C. (1923). **The Archaeology of the Cambridgeshire Region.** University Press Cambridge.

Glazebrook, J. ed (1997). **Research and Archaeology: a Framework for the Eastern Counties, 1. Resource assessment.** EAA Occ. Paper No. 3.

Grove, R. (1976). **The Cambridgeshire Coprolite Mining Rush.** Oleander Press.

Guttmann, E. and Robinson, B. (1996). 'An Archaeological Evaluation of the proposed site of the **Cambridge Rowing Trust Rowing Lake at Milton and Waterbeach, Cambridgeshire.** Cambs CC Arch. Field Unit Report No. 120.

Hall, D. (1985a). 'Cambridgeshire' In R.J. Silvester (ed) **Fenland Research Vol 2:** 46-49..

Hall, D. & Coles, J. (1994). **Fenland Survey.** English Heritage, Billington Press Ltd.

Hall, D. (1996). **The Fenland Project 10: Cambridgeshire Survey, the Isle of Ely and Wisbech.** EAA No. 79.

Macaulay, S.P. (forthcoming). **The Car Dyke canal and Roman Warehouse Clayhithe, Waterbeach** Cambs CC Arch. Field Unit Report No.

Macaulay, S.P. and Reynolds, T. (1994). **Car Dyke: a Roman Canal at Waterbeach.** Cambs CC Arch. Field Unit Report No. 98.

Macaulay, S.P (1997). **Car Dyke Roman Canal, Waterbeach 1997. Summary report.** Cambridgeshire County Council Arch Field Unit Internal/SMR Report.

Malim, T. (1990). **Archaeology on the Cambridgeshire County Farms Estate.** Cambridgeshire County Council.

Phillips, C.W.(ed) 1970. **The Fenland in Roman Times.** RGS Research Series No.5: 126

Potter, T.W. (1992). 'Fenland Research Priorities: Roman' in **Fenland Research No. 7.** CAU.

Ravensdale, J.R. (1974). **Liable to Flood.** University Press Cambridge.

Reynolds, T (1994). **Iron Age/Romano-British Settlement at Milton Rescue Project 1994.** Cambs CC Arch. Field Unit Report No. 104.

Taylor, C. (1973). **The Cambridgehire Landscape.** Hodder & Stoughton.

Walker, F.G. (1912). 'Roman Pottery Kilns at Horningsea'. **Proc. Cambridge Antiq. Soc XX:** 14-69

Wilkes, J.J. & Elrington, C.L (1978). '**Roman Cambridgeshire**' A History of the County **Cambridgeshire and the Isle of Ely Vol VII,** University Press Oxford.



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