

SCB 17528

The Proposed Cambridge Rowing Lake :

Archaeology

Sites and Monuments Record

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1993

Oxford Archaeological Unit

SCB 17528

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Bibliography

The Proposed Cambridge Rowing Lake : Archaeology

1. *Introduction*

- 1.1 This report is based upon the study of aerial photographs in the Cambridge University Committee for Aerial Photography Collection, combined with a visit to the site in the company of Professor William Friend and examination of the material from his small-scale excavation. The aim is to establish the basic state of knowledge about the site at present, the potential impact of a rowing course, and proposals for establishing sufficient information upon which to base a reasonable mitigation strategy.

2. *Background*

- 2.1 The land upon which it is proposed to construct the Cambridge Rowing Lake lies in the parishes of Milton, Waterbeach, and, to a lesser extent, Landbeach, 5 km north-east of Cambridge (Fig 1).
- 2.2 The area is almost flat and occupies the land below 10 m.o.d. between the A10 Cambridge-Ely road and the Cambridge-Ely railway with the River Cam beyond to the east.
- 2.3 The slightly higher ground which forms a spine close to the A10 is Gault, overlying Lower Greensand (which is only exposed in the north-west corner of Waterbeach parish. Most of the proposed Rowing Lake site is gravel terrace or islands of river gravel with alluvium close to the River Cam.

3. *Historical Background*

- 3.1 These parishes all form part of the Hundred of Northstow, which was in the Kings' hands throughout the Middle Ages. Milton is an ancient parish which expanded in size in 1912 but has since been reduced as the suburbs of Cambridge expanded northwards (Fig 2). The Manor of Milton passed to the new Abbey of Ely sometime before 984 and from 1166 until the 17th century the bishops of Ely were the tenants-in-chief.
- 3.2 In 1235 King Henry III gave Godfrey of Crowcombe ten timbers to construct a house at Milton. This was presumably the manor house site noted in the Victoria County History (VCH ii, 36) as a large rectangular moat still visible in the 20th century north of Fen End, also known, significantly, as Hall End. In 1780 William Cole found foundations, ditches and fishponds here which he identified as the early manorial site. This is now visible on aerial photographs (Site 1).
- 3.3 The Manor House was probably moved to a location near the church by William Cook about 1550 (Fig 4). It was again rebuilt by Samuel Knight in 1794. Knight also commissioned Humphrey Repton to design the surrounding park which was laid

out with a vista to the east and a lake to the south-east of the house. Knight was sufficiently influential to have the turnpike road in front of his house moved westwards in 1794-5 to give him more space. The park has been gradually reduced in size as sections were sold off, until in 1925 it covered only 30 acres.

- 3.4 Milton's medieval fields consisted of South Field, Middle Field (north-west of the village), Mill Field (towards Landbeach), and Iland (or Island) Field which covered 120 acres north of the village on the area at present under discussion. East of Island Field lay Milton Fen divided by the railway line in 1845 but mentioned in 1280 and used as common pasture until 1800.
- 3.5 In 1802 the medieval field system was subject to an Inclosure Act.
- 3.6 In the 20th century the southern part of the parish has been subject to suburban expansion, market gardening and to quarrying between 1936 to 1967, for brick and tile manufacture.

4. *Waterbeach* (Fig 4)

- 4.1 The northern part of the proposed Rowing Lake site is in Waterbeach parish, a large parish stretching almost 8 km along the west bank of the Cam. Its name 'Beach' implies a ridge or rise, closer to the river and fen than Landbeach.
- 4.2 Like Milton, part of the western boundary of the parish runs along the line of the Roman road known here as Akeman Street. The geology is also largely Gault, gravel and alluvium. However, there was a large peat fen in the northern section of the parish, and in the south a large fen or meadow known as Great Hallugh or Hollow (part of the Rowing Lake site).
- 4.3 In the 14th century parts of the Great Hollow were known as Rush Fen, Lugg Hollow and by the 1540's Reed Hollow, after their respective products. Similarly the land by the river was known as Osier Holts.
- 4.4 The Inclosure Act was passed in 1813 but not implemented until 1818.

5. *Archaeological Background*

- 5.1 This area occupies the gravel terraces alongside the River Cam at the southern margins of the fenland. As such it is land of high archaeological potential. Such ground is favoured for prehistoric, Roman and medieval settlement. The gravel terraces are relatively free draining and fertile yet are adjacent to the complementary resources of the fenland, without being so vulnerable to the fluctuations of water-level brought on by climatic change, land/sea level changes or human mismanagement.
- 5.2 This is not an area which has been subject to systematic archaeological study. However, the Cambridgeshire County Sites and Monuments Record indicates a

considerable density of sites. Combined with the aerial photographic evidence the record clearly indicates a complex historical landscape. Part of the area in the ownership of Cambridgeshire County Council has been studied by Malim (1990) who made recommendations for its management by Cambridgeshire County Council (Appendix 4 and 5).

- 5.3 The pattern of prehistoric settlement is not clear although sites particularly of the later prehistoric periods have been found at Milton (Late Iron Age settlement and burials).
- 5.4 In the Roman period Cambridge was first a military site and then a market town, with roads radiating from it. In its immediate neighbourhood pottery manufacturing sites are known at Milton in the Early Roman period and Horningsea from the 120's. Farming settlements are densely spread along the Cam.
- 5.5 The Roman Canal, now known as Car Dyke, which lies just north of the proposed Rowing Lake, probably provided a routeway for the products of this intensively settled area from the early 2nd century until the later 4th century. It linked the Cam to the Ouse and formed part of a canal system which ultimately joined the Lincolnshire Car Dyke.
- 5.6 It is thought that the ancient and modern courses of the River Cam more or less coincide between Cambridge and the Newmarket railway bridge. However, the Romans cut a series of lodes (eg the Bottisham and Swaffham Bulbeck Lodes) which diverted stream water into the Cam.
- 5.7 These major Roman engineering works are a reflection of the agricultural importance of the Fenland. From the 2nd century this appears to have been one of the most densely settled areas in Roman Britain. This settlement is largely of a peasant character though several villas are known in the river valleys and along the fen edge.
- 5.8 Flooding on the southern margins of the fenland in the mid 3rd century seems to have stimulated a movement of settlement onto higher ground.
- 5.9 The pattern and density of Anglo-Saxon settlement in the area is less well known. There seems to have been extensive depopulation of the Fenlands as conditions deteriorated and the fen of immense size, foul streams and thickets developed which was so vividly described in the 8th century by the monk Felix. Cemeteries such as that at St John's College cricket field indicate early Anglo-Saxon occupation around Cambridge. Early Anglo-Saxon sunken huts have been found near Waterbeach but there has been no substantial excavation of sites of this period.

6. *The Evidence of Air Photography*

- 6.1 An excellent series of aerial photographs in the Cambridge University Aerial Photography Committee's collection are the basis for the cropmark plots in the Cambridgeshire County Council Sites and Monuments Record (see Appendix 1).

- 6.2 Cropmarks indicate buried archaeological features. They appear when there is a soil moisture deficit and a suitable crop, such as barley or wheat. Cropmarks show best on free-draining soils such as gravel deposits. On this series of photographs the cropmarks indicate extensive ancient settlement on the gravel terraces and islands on the west bank of the River Cam (Fig 4).
- 6.3 The photographs also indicate areas of alluvium, relict streams or palaeochannels (sketched on Fig 4). The date and character of these areas is uncertain. Alluvium can be deposited as recently as the Roman and medieval periods. In such cases earlier archaeological features may be masked by the alluvium. Any man-made features beneath the alluvium can be protected from ploughing and, in anaerobic conditions, organic remains, both artefacts and environmental evidence, may be preserved.
- 6.4 Where the darker, wetter soils on aerial photographs indicate older palaeochannels then later prehistoric, Roman and medieval deposits will obviously not be found beneath them. However, older organic deposits may exist which can provide environmental evidence.
- 6.5 If later archaeological features cut into such deposits they may not be visible on aerial photographs as the necessary conditions of soil moisture deficit do not often occur on these damp soils.
- 6.6 The archaeological features which show best on aerial photographs are those which involve substantial intrusion into the sub-soil such as Early Bronze Age barrows, Iron Age storage pits and hut drainage gullies, and Roman paddock ditches and trackways. Certain types of site are notoriously elusive, eg pre-Iron Age settlements, early medieval ie Anglo-Saxon settlements, and, except in exceptional conditions, cemeteries of most periods.
- 6.7 Archaeologically blank areas on aerial photographs must always be examined critically.

7. *The Cropmark Sites* (Fig 4)

- 7.1 The proposed Rowing Lake area contains a number of discrete cropmark complexes; these are listed from south to north.

Site 1: Probable site of medieval moated manor of Milton with underlying features indicating Romano-British settlement. Sited on edge of lower gravel terrace.

SMR 08322 Complex of double-ditched enclosures aligned on the gravel terrace with dense internal settlement features. Penannular enclosures at northern end, one with a distinctive SE entrance suggests Iron Age occupation. The larger complex may be Romano-British in date. Site partly masked by spread of heavier soils.

SMR 08471 An incoherent group of linear features. Possible trackways but some of these marks may be traces of frost polygons and natural irregularities in the gravel surface. Two distinct ring-ditches are of uncertain date; they could represent Bronze Age barrows or large late prehistoric hut circles, though other interpretations are possible.

SMR 08873 Dense complex of settlement enclosures clearly aligned on a spit of gravel, with heavier soils to the east and west. The site has the characteristics of a Roman settlement with several phases of occupation (see Appendix 2, Professor Friend's report). The character of the enclosures changes from south to north. Those at the north are more regular, possibly indicating a change of status or date from those to the south. There are no buildings visible on the aerial photographs but stone or timber structures are likely to exist in such a site. Finds from the site (see Appendix 3) suggest that there is a higher status building in the area.

The linear features are clearly visible on the gravel spit but abruptly disappear where they meet the heavier soils. It is not known whether they disappear beneath an alluvial blanket or are invisible in the surface of the heavier soil. It is unlikely that they actually stop at the edge of the gravel terrace.

SMR 08316, 083131

An irregular group of linear features, difficult to interpret because this area is disturbed by narrow field plots, relict drainage ditches and 'block-marks' which probably indicate part gravel digging by hand. The poor quality linear marks suggest late prehistoric or Romano-British settlement and trackways. North of these features the stepped field boundaries mark the northern boundary of Milton parish where it was drawn around medieval furlongs (Figs 2 and 4).

SMR 08317 North of the parish boundary is the area of Waterbeach known as the Great Hollow. It is clear on the aerial photographs (K17 AL 129) that the fenland lay to the east. The western part of this area appears to be a free draining gravel subsoil on which good quality cropmarks are clearly visible. There appear to be two major phases present. The earlier is an irregular group of contiguous enclosures (possibly of Late Iron Age date). These are cut by the parallel lines of a trackway which runs NE-SW converging on a second trackway to the west. The westerly trackway joins with others coming from the west and east and there is a complex of enclosures at the junction.

Further west, beyond the proposed Rowing Lake site, there is a massive settlement complex at Lime Farm (SMR 08312 08314). Similar trackways radiate from this settlement and presumably connect with those to the east though there are gaps in the record caused by

crop differentiation and modern disturbance. All these features are characteristically Romano-British. The relationship of the trackways to the Roman Car Dyke canal to the north-east cannot be seen (see Appendix 5). Although Anglo-Saxon features cannot be identified on the aerial photographs hut remains have been excavated in 1926-7 adjacent to the Car Dyke and west of Waterbeach, and pottery scatters also suggest an extensive Anglo-Saxon settlement.

8. *Archaeological Summary*

- 8.1 The area contains a complex pattern of late prehistoric and Romano-British settlement features with associated enclosures and trackways. These settlements are essentially rural in character and focus on the gravel islands and terraces. They lie within a Roman landscape bounded by the military/market centre of Cambridge to the south, the Roman road of Akeman Street to the west, the River Cam to the east, and the Car Dyke to the north. The block of land between these is crossed by a number of subsidiary trackways.
- 8.2 On the basis of the rather piecemeal evidence it appears that the landscape was intensively exploited in the Roman period for arable farming and animal rearing. Site 08873 has produced large numbers of querns (see Appendix 2 & 3) and there is evidence of pottery manufacturing in the area (see Appendix 2 & 3). The bulk products of this Roman landscape were probably transported on the local road and canal system. The status of the River Cam is less well known but hythes and river crossings may exist in the alluvial areas on the eastern margins of the proposed Rowing Lake site.
- 8.3 This pattern of rural settlement was clearly developing in the Iron Age. Evidence of earlier settlement is unclear but may exist.
- 8.4 Early Anglo-Saxon settlement has been found in the northern part of the proposed Rowing Lake site (see Appendix 5). Settlements of this period are difficult to locate by aerial photography or field survey so this evidence may be indicative of quite extensive settlement. Characteristically settlements of the 5-6th centuries are not nucleated but straggle over a wide area and consist of timber hall houses and small sunken huts. Cemeteries are often associated with such sites.
- 8.5 The medieval landscape is relatively well documented. The proposed Rowing Course site lies across the fields and fens of Milton and Waterbeach with the remains of the early Milton Manor site at the southern end. The area has considerable potential for palaeoenvironmental studies, particularly along the margins of the settlement areas.

9. *Condition*

- 9.1 Most of the proposed site lies under arable. The cropmark complexes clearly lie on slight gravel islands or on the terraces. The area closest to the river (Site 08873)

rises slightly above its surrounding area. Field inspection (see Appendix 2) shows a dense scatter of Romano-British material much of which appears to have been freshly brought to the surface by ploughing. The soils over this site are approximately 0.20 m thick. This site is probably being eroded by current arable farming. It has not been possible to examine the arable fields at the northern end of the site. At the southern end the Early Milton Manor House site is under plough and sits on a clear terrace. To the east there is a small group of small hedged pastoral fields.

10. *Evaluation Criteria*

10.1 English Heritage use a specific set of criteria for evaluating sites as part of their Monument Protection Programme. On the basis of current information the sites of the proposed Rowing Lake area can be provisionally evaluated:

- i. **Survival/condition:** Medium to high. Extensive pattern of sites eroded by ploughing. Further assessment of waterlogging and alluviation needed.
- ii. **Period:** Low. There are many and varied sites of the Roman period in the region.
- iii. **Rarity:** Low to medium. The sites represented here are relatively common types though the location is significant.
- iv. **Fragility/
Vulnerability:** Medium. At present vulnerable to ploughing and drainage.
- v. **Diversity:** ?Medium. Information is limited about the character and date range of archaeological features.
- vi. **Documentation:** Medium. Little field evaluation but crop marks documented.
- vii. **Group Value:** High. Associated settlements and other features.
- viii. **Potential:** Medium. There may be features not visible on the aerial photography.
- ix. **Summary:** An archaeological area of regional importance.

11. *The Impact of the Rowing Course*

11.1 A Rowing Course approximately 2000 m x 150 m (30 ha) inevitably results in the removal of any archaeological features in its path. There may also be impacts from associated roadways, landscaping, tree planting, car parks, buildings and ancillary features. There are also potential impacts during the construction phase from the

movements of machinery.

- 11.2 There is little choice in how to construct a rowing lake. Therefore for archaeological mitigation the selection of the line is important. The original proposed line, running close to and almost parallel to the railway line, would have an impact on a large area of dense Roman settlement lying adjacent to a potential waterfront with high potential for environmental evidence (Fig 1).
- 11.3 The implications of a more westerly route are less certain. There appear to be sizeable areas with little or no archaeological features visible as cropmarks in the central area. At the southern end the Lake would have a limited impact on the Roman settlement and possibly the two circles visible on aerial photographs.
- 11.4 South-east and east of Penfold Farm there is an area relatively free of cropmarks partly on gravel terrace and partly on relict water course/alluvium. This land lies between known Roman settlement nuclei, though it probably contains remains of Roman trackways and fields. The presence of earlier prehistoric or later Anglo-Saxon features cannot be ruled out but needs to be assessed by field survey and trenching.
- 11.5 At the northern end the proposed Rowing Lake would impact on late prehistoric settlement and trackways (Appendix 5) and run across an area of Anglo-Saxon pottery scatter. The character of Anglo-Saxon activity here is not known. The terminal of the Rowing Lake would also be close to the Scheduled Ancient Monument of Car Dyke. Care would need to be taken with design and construction in order not to impinge on the Monument and its setting.

12. *Mitigation*

- 12.1 A rowing course inevitably impacts upon archaeological deposits on its route. It is suggested that there is no practicable alternative site for such a course in the Cambridge area. The selection of the precise line of the course is therefore the essential first step in a programme of mitigation.
- 12.2 From discussions with the local planning authority and English Heritage the Cambridge Rowing Trust concluded that the area of the Car Dyke Scheduled Monument should not be disturbed. The first choice of course line was therefore abandoned.
- 12.3 A course adjacent and parallel to the railway line was then considered. From examination of the cropmark evidence and the results of Professor Friend's small-scale field investigation it was decided to reconsider the line of the course a second time.
- 12.4 On the basis of more detailed study of the cropmark evidence and published sources it appears that a more westerly route (Fig 1) is likely to have the least impact on archaeological deposits.

- 12.5 Planning Policy Guidance Note 16 Archaeology and Planning advises (para 21) rapid and inexpensive field evaluation '*involving ground survey and small-scale trial trenching*' where important archaeological remains may exist in order that the planning authority can base its judgement on adequate archaeological information.
- 12.6 The principal issues in need of clarification are (from the southern end):
- i. the character, date, density and condition of archaeological features in the southern area (SMR 08471/08873). There is certainly Romano-British settlement here but it appears to be less dense than the area further north. The date and character of the two ring ditches are uncertain. If these are Bronze Age ring ditches they could act as a focus for wider funerary activities.
 - ii. North of the ring ditches and east of Penfold Farm no cropmarks are visible (Fig 4). Is this area devoid of archaeological features? What is the potential of the area of heavier soil for palaeoenvironmental deposits?
 - iii. North-east of Penfold Farm the site at SMR 08316 cannot be clearly defined from aerial photographs. Further information is needed about its extent and character.
 - iv. The proposed westerly route would impinge on the eastern part of the site at SMR 08317. This includes a Roman trackway and possibly an earlier series of settlement enclosures of uncertain date. The eastern edge of these cropmarks disappears into the heavier soils of the Great Hollow. There is the potential for good preservation and the survival of organic and palaeoenvironmental data here.
 - v. The character, extent, and state of preservation of Anglo-Saxon features needs to be established in the northern area.
- 12.7 Evaluation can be most effectively carried out by field survey and sample trenching. Geophysical survey will probably be of limited use given the relatively good quality of the aerial photographic evidence.

13. *Conclusion*

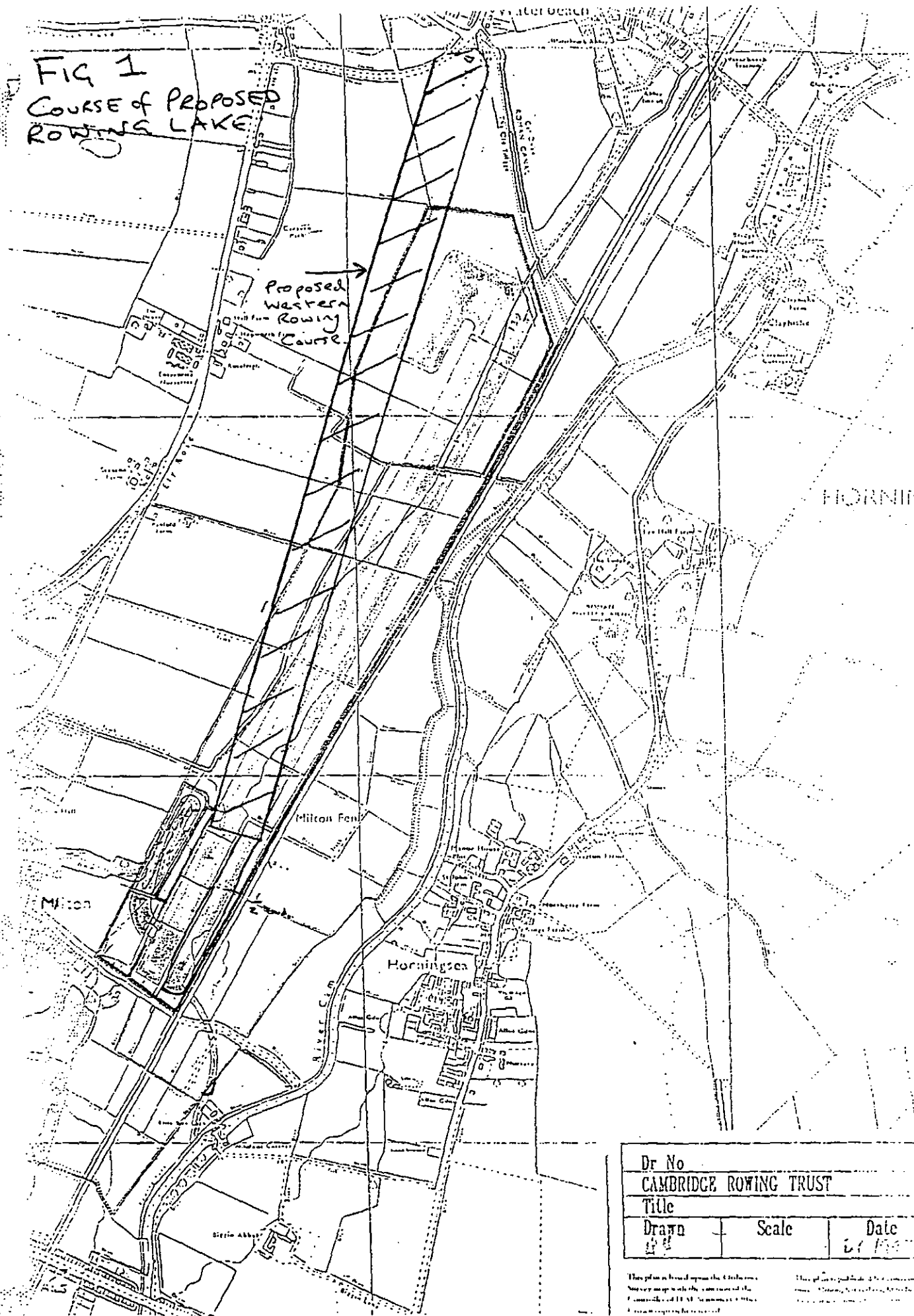
- 13.1 The archaeological sites considered here which have been identified from aerial photography and listed in the County Sites and Monuments Record are of considerable importance. They are typical Roman fen-edge/river valley settlements, of added importance because of their location adjacent to Cambridge and the Car Dyke. However, for the most part, they belong to a class of sites of which there are large numbers of examples. Their state of preservation is not particularly good and most areas are suffering erosion from ploughing. In conclusion, therefore, these are of regional importance but which it is justifiable to excavate, ie '*preserve by record*' in PPG 16 terms, rather than preserve *in-situ*.

how do
we know
this?
so
little?
etc.

- 13.2 A phased programme of mitigation will be necessary before any development should commence. The first phase will be field evaluation. This should establish the extent, character, date and conditions of archaeological features. It would allow more care to be taken in the precise location and design of the course, with landscaping and methods of construction.
- 13.3 The field evaluation would also provide the information for a research design, specifications and costings to be drawn up for a programme of archaeological excavation. The excavation should be followed by analysis and publication of results.
- 13.4 There is a considerable quantity of significant archaeology in the area of the proposed Cambridge Rowing Lake. However, if a properly planned programme of mitigation is established and carried out, the archaeological deposits are unlikely to present, in themselves, a major reason why the Rowing Course proposed should not be implemented.

David Miles
May 1993

FIG 1
COURSE of PROPOSED
ROWING LAKE

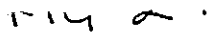


Dr No		
CAMBRIDGE ROWING TRUST		
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1/2"		21/1/57

This plan is based upon the Cambridge
Survey map with the consent of the
Committee of the Cambridge Rowing Trust

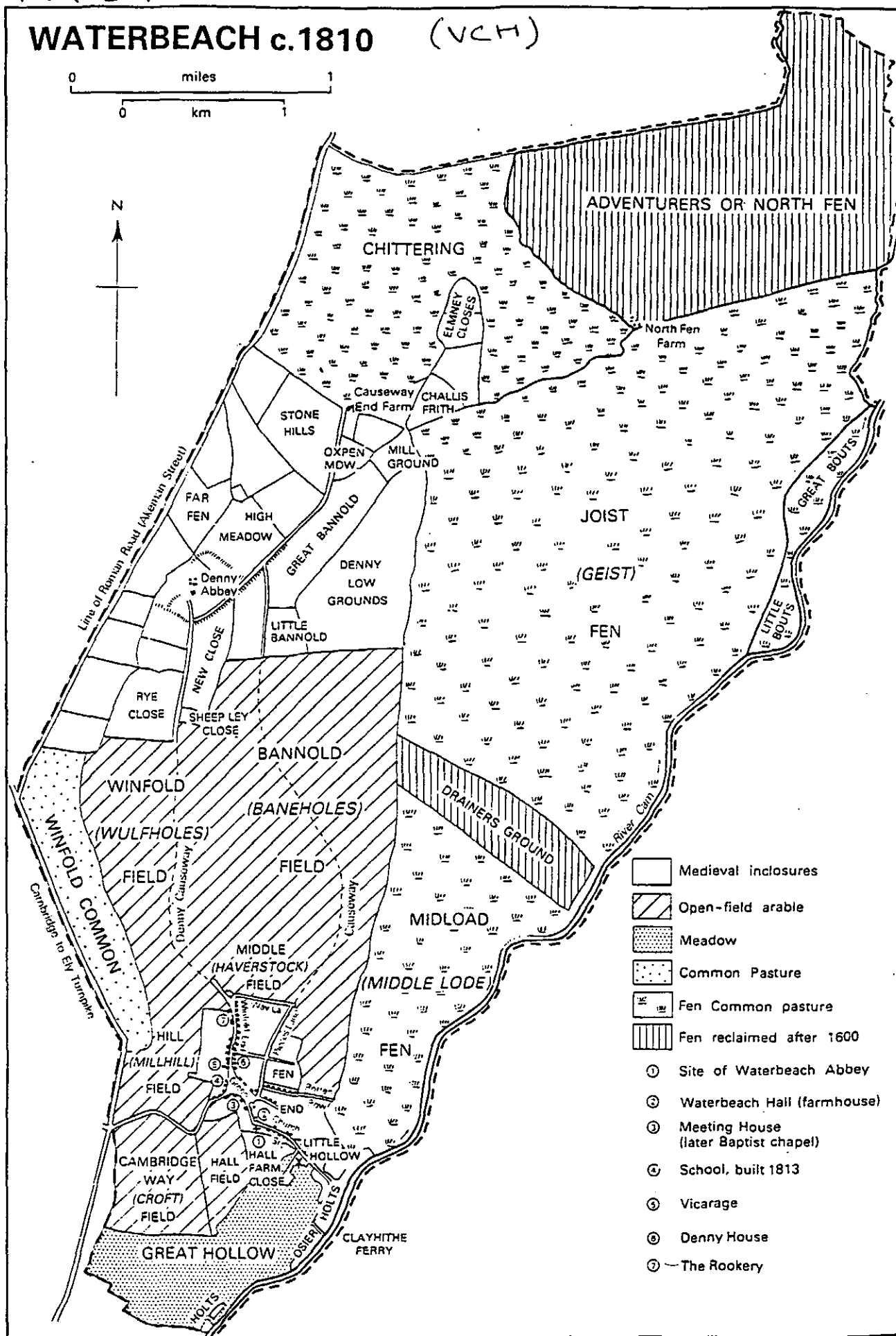
This plan is published by the Cambridge
Rowing Trust, 10, The Rowing Club, 10, The Rowing Club, 10, The Rowing Club

114 a.



WATERBEACH c.1810

(VCH)



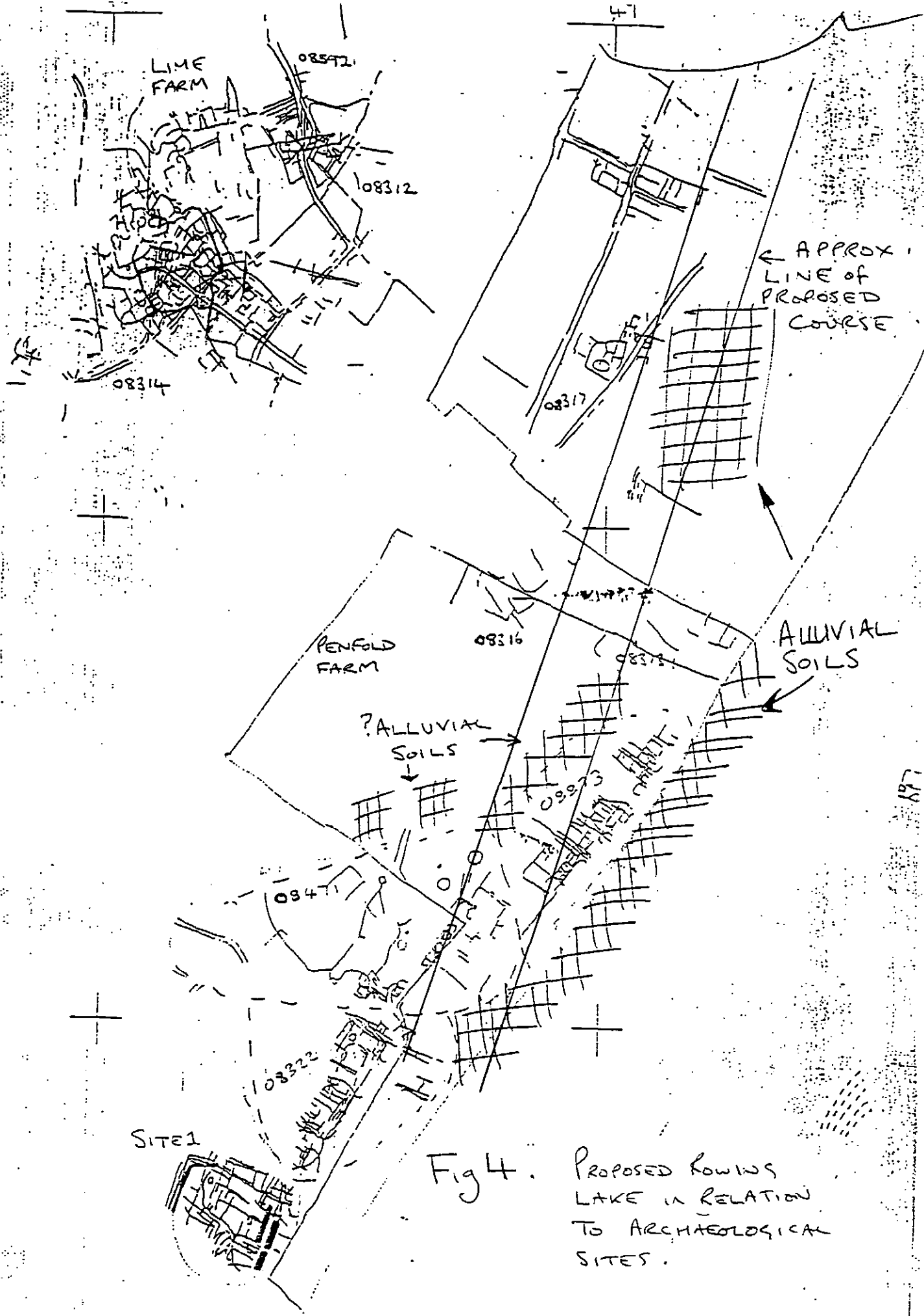


Fig 4. PROPOSED ROWING LAKE IN RELATION TO ARCHAEOLOGICAL SITES.

Appendix 1

Selected Aerial Photographs of the Proposed Rowing Lake Site

Cambridge University Catalogue Number	County SMR No./Site
BXZ 38	08312/4
BXZ 40	08312/4
BXZ 41	08312
KIZ AL 132	08312
CKU 49	08314
CDO 46	08873
CDO 44	SW of 08873 Circular features
CDO 45	SW of 08873 Circular features
CBC 5	02322
K17 AL 129	08316 08317
BZV 44/45	General view looking south
RC8 EH 106-8	Vertical photos showing Milton, Horningsea and Car Dyke centred on River Cam.
BQG 071	Milton Moated Manor
AIR 46	Milton Moated Manor
CAW 81	Milton Moated Manor

Penfold Farm, Roman Site in the Parish of Milton

During December 1992 and February-March 1993 archaeological walking and one trial trench on the lower fields belonging to Penfold Farm, Milton (OS 4906354-490637) revealed the existence of a substantial Roman site. This extended on a frontage totalling some 400 m along what would appear to have been a former course of the River Cam.

The activities were undertaken as part of a programme of archaeological evaluation on the proposed course of an Olympic-style rowing lake planned by the Cambridge Rowing Trust.

Air Photography had revealed two main areas of activity separated by about 100 m without cropmarks. At the north end of the field (Site i) the cropmarks indicate four small square enclosures extending down to the line of the former river bank and back up the field for a distance of about 70 m. They indicated occupation along the eastward surface of a gravel terrace whose edge formed the bank of the Cam. The northern area of cropmarks (Site ii) was more extensive, but still showed a series of small enclosures with the same east and west boundaries as Site i. The cropmarks showed that both sites extended into close neighbouring fields.

Fieldwalking and a trial excavation on Site i have modified the picture provided by the air photographs.

1. The extension of Site i into the northern field 08313 is much more extensive than suggested by the photographs. A spread of coarse pottery together with more building material than on Site i itself, extends some 60 m northward into the field on the same alignment.
2. At the extreme northern end of the field, a scatter of coarse orange pottery was found, together with a square 2.5 cm² grey stone tessera and a piece of orange exterior wall plaster, suggesting the existence of a building.
3. The space between Sites i and ii is not sterile. There is a scatter of pottery, including mortarium fragments and finer Nene Valley colour coated ware, also some building material.
4. On both Sites i and ii fragments of blue tile were found indicating buildings of some period. Also quern and mill-stone fragments. While most of the pottery can be dated to the 4th century, with a preponderance of large storage jars and Nene Valley colour coated ware, pointing to activity in the mid and late part of the century, fragments of Samian Ware indicate that Romano-British occupation of the site extends back to c. 150. Samian fragments included: the base of type 37 bowl, thin fragment of type 46 beaker, thin fragment of 19/31 shallow dish - all datable to mid of late 2nd century AD.

The trial excavation revealed intensive occupations on Site i:

The trench 4 m long and 1.5 m wide extending to 2 m at the east end showed:

Photo 1: A cobbled area 25 cm below the surface near the east end of the trench.

Abutting this on its west side was a large quantity of Horningsea ware (82 separate sherds); two large fragments were found on each leaning against a clay wall - perhaps of a kiln.

Photo 2: Behind the cobbles was a feature of hard orange, gravel mix whose purpose could not be ascertained, but on its south side there was friable dark earth and more cobbles, on which were lying two layers of pot, forming practically the complete side of a coarse pot of grey fabric but orange internal finish.

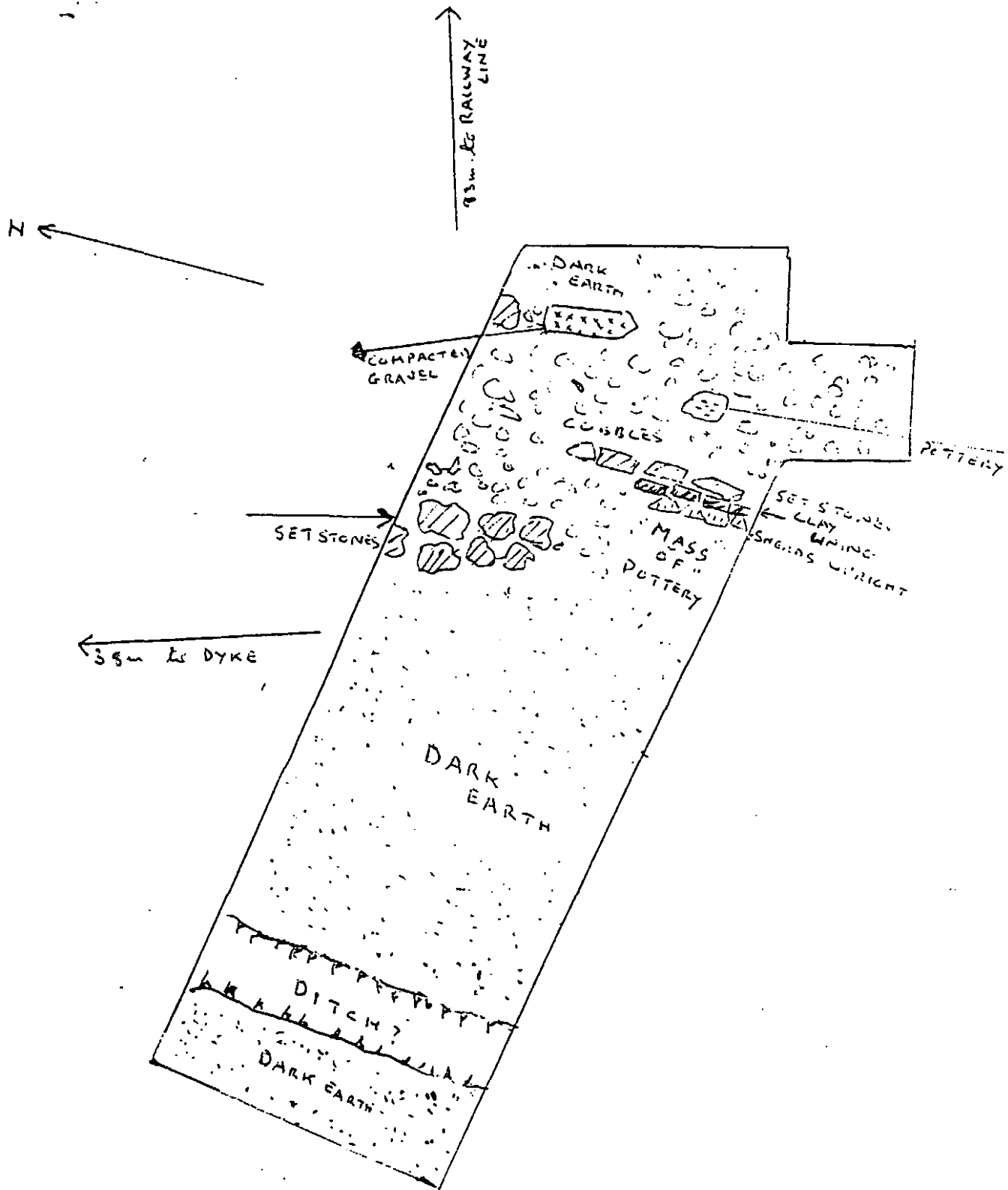
Photo 3: The west end of the trench was characterised by sandy burnt earth without cobbles or stone features. There was a prolific amount of coarse pot at the east end of the trench.

The results:

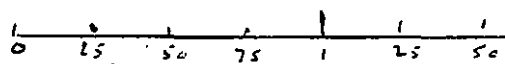
1. There is an important Roman site covering at least 500 m north-south along the former line of the River Cam. It is an agricultural/industrial site, yielding querns and mill-stones with a high quantity of large storage jars.
2. Where tested the occupation is dense, with features adjoining each other. Some burning was observed on the pottery and a millstone.
3. With Car Dyke barely a mile away, the presumption must be that this site was connected in some way with river transport of goods via the Cam to Car Dyke. The site does not appear to extend inland more than c. 75 m from the former river bank. It is a river site.
4. Occupation lasted from c.150 to c.400 AD.

The site would be worth thorough and careful excavation. In view of the shallow depth of the late Roman level below the surface, and the need to recover as much evidence as possible relating to the latest phase of occupation mechanical digging of any sort should be avoided. This is a site where careful trowelling from the top layer downwards is a necessity for the best results. Its ultimate extent can be determined by trenching.

W H C Frend, FBA, FSA
27/3/93



SCALE = 1cm = 25cm.



PENFOLD FARM SITE 1
OS 490635 (LEVEL I)

FEB '93

ROMAN POTTERY AND OTHER FINDS FROM PENFOLD FARM, MILTON, CAMBS

The finds come mainly from surface collections, though some are from the upper deposits in small trial holes. There were no significant differences in character between the material from different parts of the area examined.

The pottery was examined very briefly; no attempt was made at quantification. The average sherd size was large. Whilst this reflects the presence of substantial quantities of Horningsea jars it may also suggest that a) recent ploughing is newly affecting previously undisturbed archaeological deposits and/or b) that small sherds were not recovered from the surface of the fields.

The pottery consisted of a fairly narrow range of products. It included samian ware, a south Spanish amphora sherd, colour coated wares from the Nene Valley and Much Hadham (the last only represented by a very few sherds) and mortaria (very scarce) from the Nene Valley and Oxfordshire (the latter probably Young type C100). Coarse wares were dominated by local fabrics, almost all of which were probably Horningsea products. There were a few late Roman shell tempered sherds, probably from the kiln site at Harrold (Beds). The Horningsea products included very large numbers of sherds from characteristic substantial storage jars, but smaller jars, bowls and dishes were also present.

The general character of the assemblage is late-Roman, indicated eg by the Oxfordshire vessel, the shell tempered wares and the Nene Valley colour coated wares, most of which were in typical late forms such as bowls and dishes, rather than beakers. Such fabrics and types would suggest primarily a 4th century rather than an earlier date. Whilst the conventional dating of Horningsea products does not extend beyond the end of the 3rd century it has recently been suggested that this range may extend to the mid 4th (Evans 1991, 38). The occurrence of Horningsea products in overwhelming quantities here associated with late Nene Valley wares would support this suggestion. The presence of samian ware may indicate some 2nd century activity, but the quantities are small and the few recognisable forms are consistent with an Antonine date. There is no obviously earlier material. In general therefore, a date range of late 2nd-4th centuries is suggested, with the likely emphasis of activity in the latter part of the range. The products of the Milton kilns, which are poorly understood, are thought to be datable to the late 1st-early 2nd century. Their apparent absence here is therefore unsurprising.

The pottery implies a settlement of no more than middling status. The other finds consist of a little building material, including a piece of a box flue and floor tile fragments, and a tegula in a shell tempered fabric. There are 14 quern fragments, a high figure given the overall quantity of finds, and fragments of a ?schist whetstone and a shale box. These finds together suggest at least a moderately prosperous agricultural settlement which, if the tile was not imported from outside the area, incorporated a building with at least one heated room.

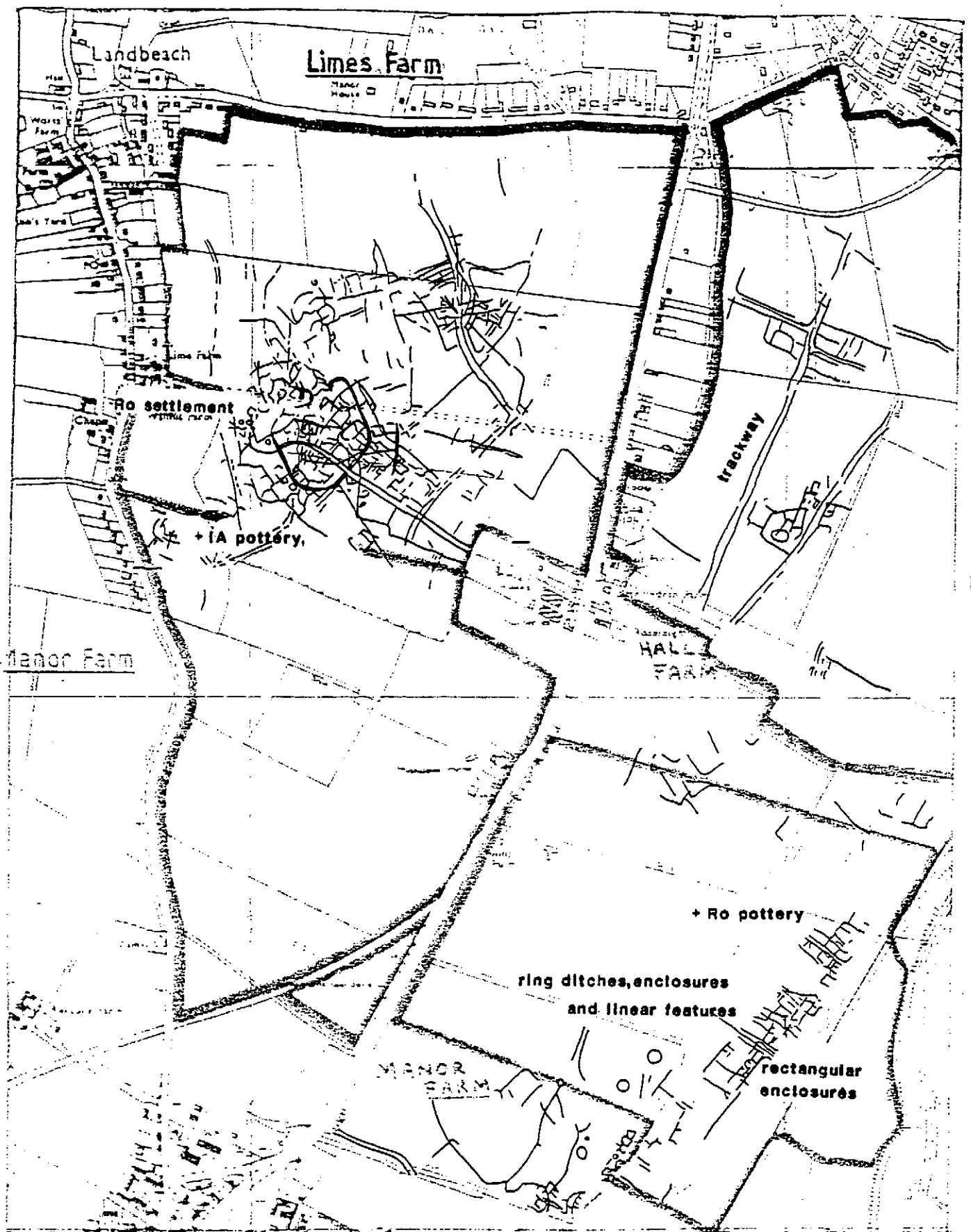
Reference

Evans, J, 1991, Some notes on the Horningsea Roman pottery,
J Roman pottery studies 4, 33-43

PAUL BOOTH O.A.U.

Paul B

24/3/93



Scale 1:10,000 (approximate) (1 inch = 100 feet) (1:10,000)
 Date of survey 1980-1981

For details see the main report



East of Cheshire
 County Council

Limes Farm, Landbeach
 Manor Farm, Milton

PROJECT NO.	10000
DATE	1980
BY	
FOR	

LANDBEACH AND MILTON: LIMES AND MANOR FARMS

Description of Sites Roman Settlement (Categories C & D)

Settlement and field system
Trackways
Roman pottery kiln
Iron Age and Roman pottery scatters
Quern

Nature of evidence: Cropmarks and artifacts.

Detailed description.

TL482644

The central area of these two abutting farms has a complex mass of cropmarks revealed by air photographs. They cover an area of 25 hectares and are split by a modern farm track running west - east.

These cropmarks show a grid of rectangular enclosures ranging in size from 20 - 50 metres along their axes, laid out from a trackway running in from the south-east. This trackway appears to be heading for the River Cam and to Horningsea Roman pottery kilns beyond it. A secondary track leads off to the north and goes through another group of enclosures 300 metres north-east of the main site. There is possibly a third track heading south west with some more features seen in the fields abutting Landbeach Road.

Sherds of Roman pottery from two distinct areas and remains of a Roman kiln have been found on these sites, with Iron Age pottery found on the south-west edge.

The regular layout of the site and direction of the tracks would also suggest a Roman date.

TL488633

Romano-British pottery and cropmarks have been found centred around this area, the western most part of **Manor Farm, Milton**. Extensive field systems of rectilinear ditched enclosures and some ring ditches show concentrated activity during the Roman period, and are very close to the Horningsea Roman pottery kilns just across the river Cam. Together with the Car Dyke on Hall Farm, Waterbeach, Akeman Street Roman road, and the extensive areas of Roman cropmarks in Landbeach at Limes Farm (outlined above) and at Car Dyke Farm, it is clear that the county farmland in this area contains a wealth of Roman remains.

Present importance and condition

The sites appear to represent a settlement of Roman date with associated field system and minor industrial activity, with artifactual evidence to suggest Iron Age occupation previous to this.

Nothing remains upstanding of the sites but the potential for good preservation beneath the depth of the plough remains strong. The air photographs were mostly taken during the hot summers of 1975 and 1976 when features were enhanced as cropmarks, and the relative scarcity of finds from field-walking might suggest that much of the sites has not been severely damaged. Without some excavation this is hard to judge.

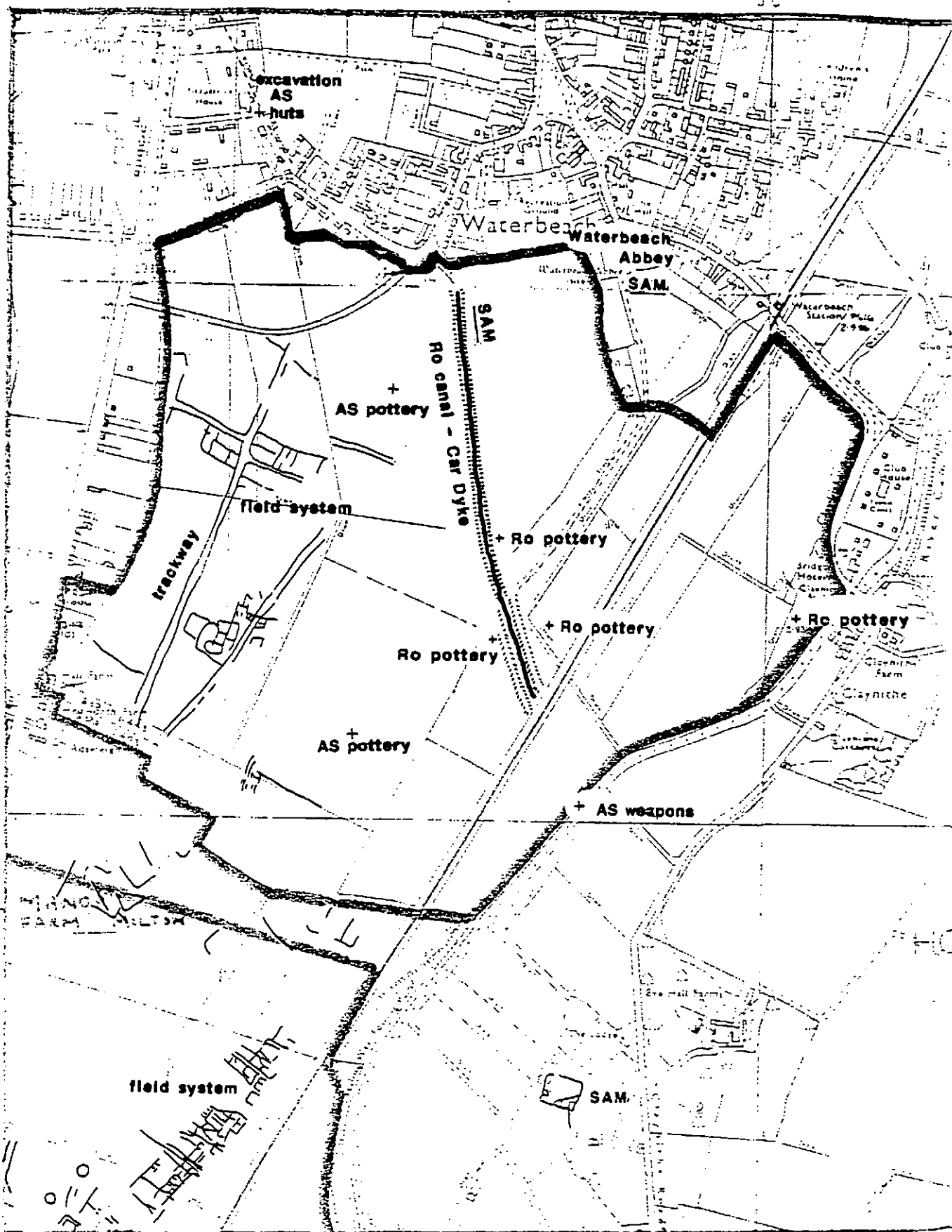
Present farming practices: Cultivation.

Nature of threat: Deeper ploughing could destroy the site.

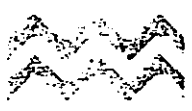
Recommendations

Further work is needed to determine whether any action needs be taken to preserve these sites both in Landbeach and Milton. Further fieldwalking in the autumn would help to see if fresh pottery is being disturbed, and a small excavation would reveal at what depth the features lie if any indeed are surviving. If the site is being damaged by ploughing then it needs to be protected by taking the fields out of cultivation, and putting them down to grass.

Deep ploughing must be avoided.



1. The boundary shown on the map is based on the 1900-1901 and 1902-1903 maps. For identification purposes only.



Devon County Council

Hall Farm, Waterbeach

CROWN COPYRIGHT 1954	
PREPARED BY	DATE
SCALE	
1:10,000	

CAR DYKE

NGR:TL494650-496640 Scheduled Ancient Monument:3 SMR:05405

WATERBEACH: HALL FARM

Monument Description

Roman "Canal"

(Category A)

A section of the Cambridgeshire Car Dyke (or Old Tillage) extending southwards 1 km from Cambridge Road, Waterbeach, to the Railway line.

The "canal" survives as a ditch 20 metres wide and up to 2 metres deep at points. Originally it was a flat-bottomed dyke with slow moving water, and may have had a subsidiary function for local drainage. A bank ran along the west side, and possibly another lay to the east. It was probably constructed in the late 2nd century A.D. and gravel in-fill blocked the waterway by the mid 4th century.

It was used by the Romans as a major link between the River Cam and the Old West River, and may have been part of an extensive system of communications to York by way of the Ouse, Nene, and the Lincolnshire Car Dyke. Sections of the Car Dyke in the north of the County and in Lincolnshire have been interpreted as a major catchwater drain.

Excavations in 1926-7 found Saxon hut remains on the banks of the Car Dyke in the garden of the Lodge. Two Saxon sites adjacent to Car Dyke on Hall Farm have recently been discovered and are being considered for scheduling as ancient monuments by English Heritage.

Present importance and condition

The monument can be seen to have been an impressive feat of Roman engineering and is one of only three sections of the Car Dyke surviving as an earthwork in this area.

The profile of the dyke varies. The northern-most section has been mutilated by cultivation of a vegetable plot, with subsequent flattening of the western side of the monument.

The central section presents a good profile, varying from 2 - 3 metres in depth, with water lying in the bottom over most of it. A bank 10 metres to the west of the canal can be seen as a soil mark and slight rise running parallel. This was a noticeable earthwork at the time of the original scheduling in c.1925, but it has been virtually ploughed out since then.

The southern section has a very flattened profile, but the banks on either side remain as obvious earthworks. Presently the western one is being damaged by ploughing.

Along some parts the growth of scrub and willows is uncontrolled, damaging and detracting from the monument.

Rubbish tipping can be seen in two areas.

Ploughing has come so close to the edge of the dyke on its eastern and north-western sides that the edge is being eroded and slipping down into the dyke.

Present vegetation cover:

Cultivated with vegetables at north-western end.

Northern section otherwise has well strimmed grass cover.

The remainder is mostly scrub covered, dense in parts, with old willows growing in the bottom, or along the sides.

Present farming practices: Arable cultivation surrounds the monument, except for a small plantation at its south-eastern end, and a narrow band of shrubs along its south-western edge.

Nature of threat: Ploughing has reduced the western bank to a minimal rise and also disturbed the edge of the dyke, beginning to infill it with earth.

Thick scrub cover and the possibility of old willows uprooting themselves threaten the sides of the dyke.

Silting of the channel prohibits the flow of water down the dyke.

Recommendations

The cultivation of vegetables at the northern end should cease, with soil pulled back to reinstate the profile.

The northern end of this site, adjacent to the modern road, could be reinstated as a dyke along its original profile following an archaeological excavation. This would give a good opportunity for an interpretation board, picnic area and restoration of fenland vegetation.

Selective scrub clearance should be undertaken, with special reference to thickly screened areas of bramble and elder.

Pollarding or tree surgery is needed on the majority of the mature trees.

Rubbish should be cleared out from the whole of the ditch length. Selective dredging of silt would encourage the return of a more substantial water content, with benefit to the wildlife, whilst giving the canal a closer resemblance to its original appearance.

A headland 3 metres wide should be introduced between the edge of the canal and cultivation to stop plough damage. Trees should be planted on the outside of this as a boundary marker. Enough room must be left inside to allow access for a strimming machine, and a footpath.

A track across the dyke towards the south end could be retained, which would give access down into the canal and a good view along the waterfilled channel.

The ploughed out track to Abbey Farm in the east, which shows as a soilmark beside a line of telegraph poles, should be reinstated to make a small circular walk along the Car Dyke and across to another scheduled ancient monument, Waterbeach Abbey.

Information boards could be erected at the north end, at the spot where the old track crosses the monument, and at its southern end.

If the county was to sell Manor Farm we recommend that the Car Dyke and a 5 metre wide headland on either side should be retained in order to implement the above ideas of a walk with on-site interpretation.

Conclusion

This is a good opportunity to protect a rare type of Roman monument whilst utilizing it for presenting archaeology to the public and creating a pleasant walk.

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