NORFOLK ARCHAEOLOGICAL UNIT

Report No. 787

An Archaeological Evaluation at Chettisham S101A Pumping Station, Chettisham, Cambridgeshire

TL 54422 83285 Parish - Ely

Date of work - June 2002

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Local Authority No.076759

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Summary

An archaeological evaluation was carried out by the Norfolk Archaeological Unit at Chettisham S101A Pumping Station, during June 2002. The work was commissioned by Anglian Water.

Previous archaeological work in the vicinity of the proposed pumping station suggested that prehistoric, Roman, Saxon and medieval artefacts, features and deposits might be present on the site. However, during the evaluation the only two features found were a field drain and a drainage feature, both of which were modern in date. As a result, it seems probable that the development area has not been used in such a way to warrant the cutting of features through the natural clay until relatively recently. It has probably been mostly used, since the Iron Age, for agricultural purposes.

1.0 Introduction

An archaeological evaluation was carried out by the Norfolk Archaeological Unit (NAU) at Chettisham S101A Pumping Station, Chettisham (TL 5442 8327) in June 2002. The work was commissioned by Mr Ian Boon of Anglian Water.

This archaeological evaluation was undertaken in accordance with Project Design prepared by the NAU (NAU Ref: 1352) in response to a Brief issued by the County Archaeology Office, Cambridgeshire County Council (CAO).

A proposal to construct a pumping station on the 0.06ha site has been submitted to the Local Planning Authority. The work was designed to assist in defining the character and extent of any archaeological remains within the proposed development area, following the guidelines set out in *Planning and Policy Guidance 16 — Archaeology and Planning* (Department of the Environment 1990). The results will enable decisions to be made by the Local Planning Authority with regard to the treatment of any archaeological remains found.

The site archive is held by the Norfolk Museums and Archaeology Service, following the relevant policy on archiving standards.

2.0 Background

Geology and Topography

Figs 1 & 2

Chettisham is located on a northern peninsula of the Isle of Ely (Hall 1996, fig.19), approximately 2.5km north of Ely city centre and about 3.5km to the south of Littleport. The site is situated to the north-west of the hamlet, adjacent to the A10 and to the west of Church Farm.

The site is undulating, although it generally slopes gently from east-to-west. The highest point of the site, with an elevation of approximately 5m OD is in the northeast. The lowest is in the west, with a height of about 3.6m OD. At the time of evaluation the land was used for agricultural purposes.

The depth of topsoil varies from 0.3m to 0.45m. This overlies a natural clay deposit, a possible boulder clay (AF Howland Associates 2002). The underlying bedrock is Jurassic Kimmeridge Clay (Hodge *et al.* 1984, 7 and 11; Soil Survey of England and Wales 1983).

Archaeological and Historical Background

Fig. 2

A search of the Cambridgeshire Sites and Monuments Record (SMR) revealed that a series of archaeological investigations have taken place within a 1km radius of the site. These include two major fieldwalking surveys. One of these was carried out as part of the Fenland Project (Hall 1996); the second was conducted between 1982 and 1984 ahead of the construction of the present A10 (Holton-Krayenbuhl & Young 2000). Along with a number of other small projects, these provide evidence for activity in and around Chettisham from the Neolithic through to the post-medieval period.

A Neolithic flint chisel has been found to the north-east of the site (SMR 07180). Other prehistoric flint artefacts discovered in the vicinity of the development area

include a scraper, a retouched blade and seven struck flints found to the south (SMR 07168) and scrapers, blades, struck flints and a pot boiler located to the north (SMR 07171, 07178 and 07254)

Three Iron Age settlements have been identified near the site (SMR 06141A, 07178B & 10942). All were discovered during fieldwalking and consist of dark soil areas associated with Late Iron Age pottery and animal bone (Hall 1996, 35). One is located on a hill-top site close to Church Farm (SMR 10942). Iron Age pottery has also been found directly to the north of the development area (SMR 07254A). The Iron Age material is the first definite evidence for settlement in the vicinity of the site. It may imply the spread of settlement into the area, and if so, fits with the general pattern of settlement extension from light soil areas into firmer clay soil areas in Eastern England during the Iron Age (Hall 1996, 35).

Two of the Iron Age settlements continued to be occupied in the Roman period (SMR 06141 & 10942A). Pottery of Roman date has also been collected from a site to the north of the development area (07171A). These discoveries are two of the numerous Roman sites known in the wider area around Ely and Littleport (Hall 1996, 25-27 & 35-36).

The pottery evidence from Iron Age and Roman settlement at Church Farm suggests that it continued to be occupied through into the Early and Middle Saxon periods (SMR 10942B; Hall 1996, 36). This site, along with the discovery of an Anglo-Saxon finger ring to the south-west of the pumping station (SMR CB14775), is important as only a few Saxon sites are known from the Ely, Littleport and Little Downham area (Hall 1996, 17-18, 27 & 36-37).

Chettisham is not mentioned in the Domesday Book of 1086, although the settlement may have existed and been incorporated into the entry for the lordship of Ely (Rumble 1981, 57) (during the medieval period Chettisham was within the parish of Ely St. Mary). The first surviving reference to Chettisham comes from 1170. In a survey of the City of Ely in 1251 it was described as wooded assart (Pugh 1953, 49); this may be a comment on woodland around the hamlet that had been cleared for pasture or arable cropping or it may allude to woodland which was being used for agricultural purposes, such as pig grazing, and copicing. During the 15th century Chettisham was held from Ely Cathedral with the lease of New Barns (Pugh 1953, 35 & 49).

Medieval pottery has been collected at a number of locations within the vicinity of the site, including one directly to the north-west (SMR 07168A, 07169, 07254B & 07254C; SMR07170). A moat measuring about 15m by 9m and trackway, of probable medieval date, are situated just to the north of the site (SMR 07254C; Holton-Krayenbuhl & Young 2000, 16-17 & 26). Much of St Michael and All Angels' Church is of 12th- and 13th-century date, although the building was heavily restored during the 19th century (Pugh 1953, 85). It stands about 0.3km to the east of the site.

During the medieval period, the hamlet of Chettisham lay within the large open fields known as "Chettisham Field" and "Priest Meadow Field" (County Record Office, Cambridge (CROC) 283). A number of enclosures of the common land within the open fields were made, under episcopal licence, during the 15th and 16th centuries. This produced resentment amongst commoners, including those who complained to the 1548 Commission on Inclosures (Pugh 1953, 40, 41 & 49-50). In the 1840s both

the land that had been enclosed and that which had not was formally enclosed by Act of Parliament. The Enclosure Map of 1844 (CROC 1884) details land ownership and organisation at this time, as well showing roads, rights of way and the main concentration of buildings at the northern end of The Hamlet. The area of the site is not illustrated; it is located just beyond to northern extent of the central part of the map. The Tithe Map of the area around Chettisham, dating to the 1830s, may have included the development area but unfortunately it is missing from the County Records Office, Cambridge. The site is illustrated on the 1885 1st edition Ordnance Survey Map. It is situated amongst agricultural land, with a pit or pond to the north and a hedgerow and path to the south and west (CROC Ordnance Survey 1885).

Post-medieval artefacts have been collected from a number of locations in the vicinity of the site. They include a button, a bell, tokens, clay tobacco pipes, pottery, tile and building material (SMR 07169A, 07170, 07178A, 07254D & CB14775). At some point in the post-medieval period or later, kiln debris from the Babylon area of Ely was dumped in hollows to the east of the development area (SMR 10943; Hall 1996, 38).

3.0 Methodology

Fig. 3

The objective of the evaluation was to determine as far as reasonably possible the presence or absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.

The development area described in the Brief and the Project Design was a trapezoidal shaped piece of land, of approximately 0.06ha area, located to the south of a track. The Brief required that not less than a 5% sample of the site should be excavated. The intention was to achieve this using three trenches (two measuring 5m by 1.6m and one measuring 9m by 1.6m) situated to give broad coverage, as specified in the Project Design.

Following discussions between the Anglian Water and the landowner, however, a decision was made to move the development area to the north of the track. A similar shape and size development area was involved. As a result of the change, the three evaluation trenches were moved to the north of the track. They were located during on-site work using a total station. They were located in areas where the development was due to have the most below-ground impact; at the same time they were sized to cover 5% of the site.

Machine excavation was carried out with a wheeled JCB-type excavator using a toothless ditching bucket. The machine process was subject to constant archaeological supervision.

Spoil and exposed surfaces were scanned with a metal detector. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken.

Site surveying and level calculations were undertaken by Barhale, Anglian Water's on-site contractors. A total station and Anglian Water surveying stations were used.

During the evaluation it was generally warm and sunny. No adverse weather conditions that could have had an impact on the successful completion of the project were encountered. Access to the site was from the track to the south and was straight forward.

4.0 The Investigation

Fig. 3

Two modern features were discovered during the evaluation. As no earlier archaeological features or deposits were identified, no context numbers were assigned. No finds were recovered.

Trench 1

Trench 1 was located in the south-western part of the site and measured 9m by 1.6m. Aligned east-to-west, it was machined to a maximum depth of 0.35m.

The earliest deposit observed was the yellow natural clay. At the centre of the trench, the top surface of this was encountered at 3.59m OD. The clay was cut by a modern land drain at the western end of the trench. It was about 0.2m wide and was aligned north-west to south-east. The land drain was sealed by a black brown organic sand topsoil.

Trench 2

Orientated north-west to south-east, Trench 2 was located in the north-east of site. It measured 8m by 1.6m and was machined to a maximum depth 0.45m.

The yellow natural clay was the earliest deposit encountered. Its top surface, at the centre of the trench, was at 3.49m OD. No archaeological features were identified cutting through the clay. The clay was sealed by a black brown organic sand topsoil.

Trench 3

Trench 3 was aligned north-to-south, measured 6m by 1.6m and was located in the south-eastern part of the site. It was machined to a maximum depth of 0.4m.

The earliest deposit observed was the yellow natural clay. At the centre of the trench, the top surface of this was encountered at 3.78m OD. The clay was cut by a modern drainage feature at the western end of the trench. It extended across the width of the trench, continued north from the southern edge of the trench by approximately 0.8m and contained a gravel infill. The fill of the feature was sealed by a black brown organic sand topsoil.

5.0 Discussion

Previous archaeological work in the vicinity of the proposed pumping station suggested that prehistoric, Roman, Saxon and medieval artefacts, features and deposits might be present on the site. However, during the evaluation the only two features found were a field drain and a drainage feature, both of which were modern in date. This suggests that the development area has not been used in such a way to warrant the cutting of features through the natural clay until relatively recently. As a result, it has probably been an area peripheral to nearby settlements since the Iron Age. It may mostly have been used for agricultural purposes, as the 19th century maps suggest.

Once the fieldwork was completed, the negative results of this project were verbally reported to the CAO.

Acknowledgements

The fieldwork was carried out Piers Wallace. Archaeological advice was kindly provided by Jayne Bown (NAU), Jeremy Parsons and Andrew Thomas (both CAO). Thanks are due to the staff of the Cambridgeshire SMR and the County Record Office, Cambridge, Anglian Water and Barhale for help during the project. Plant machinery was provided by Barhale.

David Robertson carried out the SMR, Record Office and library research and digitised the site drawings. The illustrations for the report were produced, and the report formatted, by Maggie Foottit. The report was edited by Alice Lyons.

Bibliography

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AF Howland Associates	2002	Chettisham Section 101A First Time Sewerage Scheme: Site Location Plan AF Howland Associates Report (unpublished)
County Record Office, Cambridge	1884	Ely St Mary's Open Fields and Inclosure of the New Allotments and of the Lands Exchanged 1844, Map, 283
County Record Office, Cambridge/Ordnance Survey	1885	25" map, Cambridgeshire sheet XXV1.6
Hall, D.,	1996	The Fenland Project, Number 10: Cambridgeshire Survey, The Isle of Ely and Wisbech, East Anglian Archaeology 79
Hodge, C.A.H., Burton, R.G.O., Corbett, W.M., Evans, R. & Seale, R.S.,	1984	Soils and their use in Eastern England, soil Survey of England and Wales, Bulletin No. 13 (Harpenden: Soil Survey of England and Wales)
Holton-Krayenbuhl, A., & Young, M.,	2000	Report of Field Walking along the routes of the by-passes in the Ely area and at Apes Hall, Littleport, Ely and District Archaeological Society Report (unpublished)
Pugh, R.B.,	1953	The Victoria History of the County of Cambridgeshire and the Isle of Ely, Volume 4 (London: Oxford University Press)
Rumble, A., (ed.)	1981	<i>Domesday Book 18: Cambridgeshire</i> , (Chichester: Phillimore)
Soil Survey of England and Wales	1983	Soils of England and Wales: Sheet 4 Eastern England, 1:250,000 (Harpenden: Soil Survey of England and Wales)

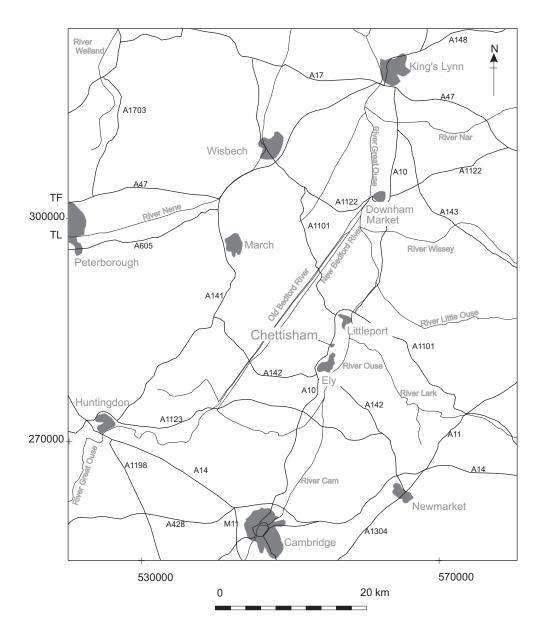


Figure 1. Chettisham and the Surrounding Area. Scale 1:500,000

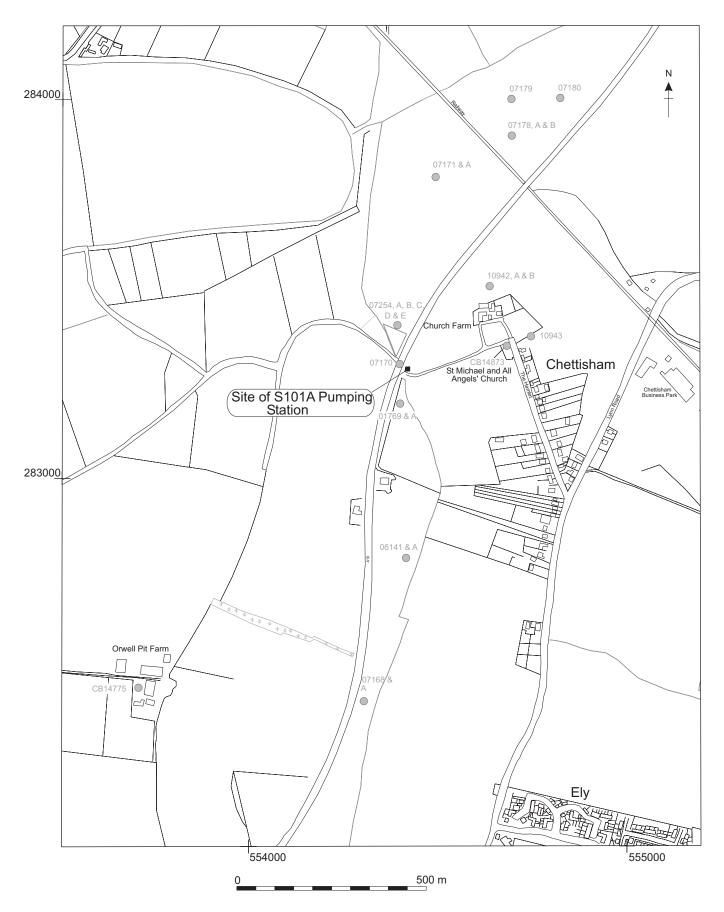


Figure 2. Site Location, with archaeological sites recorded in the Cambridgeshire SMR located within 1km of Chettisham S101A Pumping Station. Scale 1:1000

