NORFOLK ARCHAEOLOGICAL UNIT

Report No. 788

A Basic Archaeological Investigation at Chettisham S101A Sewer, Chettisham, Cambridgeshire

TL 54422 83285 to 54839 82956 Parish - Ely

Date of work - May to July 2002

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Summary

A basic archaeological investigation was carried out by the Norfolk Archaeological Unit along the line of the Chettisham S101A Sewer, Chettisham between May and July 2002. The work was commissioned by Anglian Water.

Previous archaeological work in the vicinity of the sewer suggested that prehistoric, Roman, Saxon and medieval artefacts, features and deposits might be present along its length. However, during the investigation only a limited number of modern features were found. 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. It is probable that the area around the north-east to south-west aligned part of the main sewer has been mostly used, since the Iron Age, for agricultural purposes. The lack of any settlement evidence beneath The Hamlet might suggest that the road is of relatively early date, although the only former road surface observed was a modern one.

1.0 Introduction

A basic archaeological investigation was carried out by the Norfolk Archaeological Unit (NAU) along the line of the Chettisham S101A Sewer, Chettisham between May and July 2002. The work was commissioned by Mr Ian Boon of Anglian Water.

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

A proposal to construct a 1.4km long gravity sewer has been accepted by the Local Planning Authority. The work was designed to assist in defining the character and extent of any archaeological remains along the length of the proposed sewer, following the guidelines set out in *Planning and Policy Guidance 16 — Archaeology and Planning* (Department of the Environment 1990).

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 sewer began adjacent to the A10 and a proposed pumping station, to the west of the village. It extended north-eastwards along the centre of a track before turning south-eastwards just to the south of Church Farm. From Church Farm it continued along the centre of The Hamlet, terminating at the junction of the road and Lynn Road. Beginning about 0.25km to the south of Church Farm, a branch sewer extended north-eastwards from the main sewer for approximately 0.1km, before it turned south-eastwards to meet Lynn Road. A subsidiary branch of the branch sewer began at the turning point and continued south-westwards for about 0.1km.

The site slopes gently from south-east to north-west. The highest point of the sewer, with an elevation of approximately 15m OD, was in the south, at the junction The Hamlet and Lynn Road. The lowest was in the west, close to the pumping station, and has a height of about 4.5m OD.

At the time of archaeological investigation the land the sewer passed through was used for a number of purposes. To the north and the south of the track, and to the west of the northern part of The Hamlet, were arable fields. Along the eastern side and the southern half of the western side of the Hamlet were gardens and houses.

The depth of topsoil varies from 0.3m to 0.6m. This overlies a natural clay deposit, a possible boulder clay (AF Howland 2002). The underlying bedrock is Jurassic Kimmeridge Clay (Hodge *et al.* 1984, 7 & 11; Soil Survey of England and Wales 1983).

Archaeological and Historical Background

Fig. 2

A search of the Cambridgeshire Sites and Monuments Records (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 sewer (SMR 07180). A South of the development, a Bronze Age flint scatter has been identified (SMR 06137). Other prehistoric flint artefacts discovered in the vicinity 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)

Five Iron Age settlements have been identified near the sewer (SMR 06137A, 06141A, 07178B, 07264 & 10942). All were discovered during fieldwalking; three consist of dark soil areas associated with Late Iron Age pottery and animal bone (SMR 06141A, 07178B & 10942; Hall 1996, 35). One is located on a hill-top site close to Church Farm (SMR 10942). To the south two fragmentary enclosures, which may date to the Iron Age, have been identified from aerial photographs (SMR 06145 & 06145/1; Hall 1996, 79). Iron Age pottery has also been found to the north (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 sites to the south and north of the sewer (SMR 07167 & 07171A). These discoveries are three 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 sewer (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 (SMR 07168A, 07169, 07170, 07254B & 07254C). A moat measuring about 15m by 9m and trackway, of probable medieval date, are situated just to the north-west of the north-western end of the sewer (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 (CB14873; Pugh 1953, 85). It stands close to the sewer, beside The Hamlet.

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 north-eastern part of the sewer (SMR 10943; Hall 1996, 38).

3.0 Methodology

The objective of the archaeological investigation was to the presence or absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits along the length of the sewer.

The trench for the main sewer was excavated by Barhale, Anglian Water's on-site contractors. It was over 3m in depth and, for safety reasons, was dug in a series of short sections (each of which was approximately 5m long). Machining was carried out with a wheeled JCB-type excavator using a toothless ditching bucket and was subject to constant archaeological supervision. The trenches for the branch sewers were bored beneath property boundaries and fields. Following discussions with CAO, these were not monitored by the NAU.

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. A total station and Anglian Water survey stations were used.

During the investigation it was generally warm and dry with occasional periods of rain. 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

The earliest deposit observed during the investigation was a yellow brown natural clay. This was recorded throughout the length of the main sewer. A number of modern features were identified; all but one were situated within the north-east to south-west aligned part of the sewer trench. Along the length of the track and The Hamlet, a series of modern surfaces and make-up levels were recorded. No other archaeological features were observed.

As all of the features or deposits encountered were modern in date, no context numbers were assigned. No finds were recovered.

The North-East to South-West Aligned Track

Between 5m and 10.5m west of the junction of The Hamlet and the track, two features were observed cutting the natural clay. The first, probably a pit, was 0.35m deep and contained two lower gravel fills, a fill of black clay and two upper fills consisting of ash and clinker. As a result of later truncation it was not clear if the second feature was a pit or another type of feature. It had a lower fill of redeposited clay (in which tip lines were visible), an upper fill of concrete and tile and a depth of 0.35m.

Both of the features were cut by later events. The probable pit was truncated by a pit measuring 0.35m deep; it contained a series of deposits made up of brick, clinker and flint pebbles. The fill of the feature of uncertain nature was cut by a pipe trench, the fill of which was truncated by either a pit or a cut associated with a former road surface. This feature contained three mixed fills consisting of clinker, bitumen and ash.

The two latest pits were cut by a feature measuring 0.3m in width. It contained brick, ash, concrete and clay and was sealed by the gravel and bitumen surface of the present track. Beneath this, along most of the length of the track, a modern gravel and bitumen layer was observed. This was probably a former track surface. How this related to the cut features was not clear.

The Hamlet

A modern feature was observed in both sides of the sewer trench about 75m north of the junction of the Hamlet and Lynn Road. It cut the natural clay, was about 0.3m deep, contained brick rubble and black clay, and may have been a ditch.

The fill of the feature was sealed by a deposit of grey clay with brick inclusions. Above this was a layer of loose flint pebbles and clinker with a depth of 0.2m, which itself was sealed by a tarmac surface 0.1m in depth. The pebbles and clinker were probably make-up for the tarmac which was a modern, former road surface. The present tarmac road surface was 0.1m deep and lay directly above it. The sequence

of make-up, former surface and present road surface was identified throughout the length of the sewer trench along the Hamlet.

5.0 Discussion

Previous archaeological work in the vicinity of the sewer suggested that prehistoric, Roman, Saxon and medieval artefacts, features and deposits might be present along its length. During the investigation however, only a limited number of modern features were found. 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.

It is probable that the area around the north-east to south-west aligned part of the main sewer 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. The medieval and post-medieval pottery found during previous work towards its western end may have been deposited during manuring.

The lack of any settlement evidence beneath The Hamlet is disappointing. However, this absence could be used to suggest that the road line has been established for sometime. With 12th to 13th century elements to the church and Roman and Saxon pottery found just beyond its northern end, it could be of relatively early date. The identification of pre-modern road surfaces may have helped determine this, but none were observed. If any existed previously they were probably destroyed during the construction of the former (modern) road observed in section.

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

Acknowledgements

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

David Robertson digitised the site drawings. The report was illustrated, formatted and produced by Maggie Foottit. David Robertson carried out the SMR, Record Office and library research. Thanks are due to the staff of the Cambridgeshire SMR and the County Record Office, Cambridge for their help. The report was edited by Alice Lyons.

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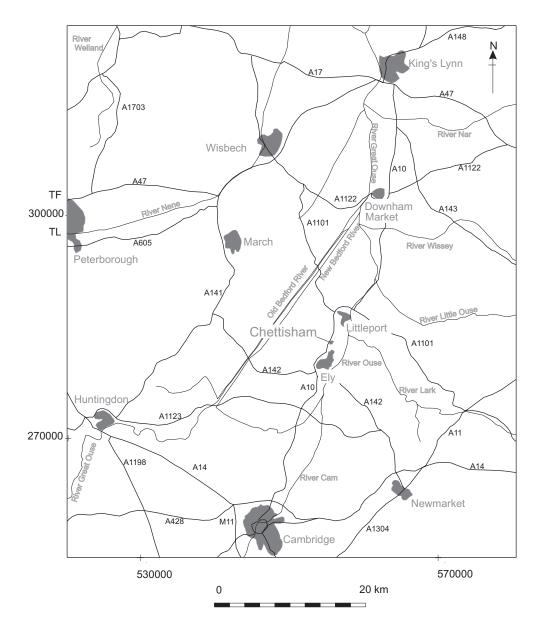


Figure 1. Chettisham and the Surrounding Area. Scale 1:500,000

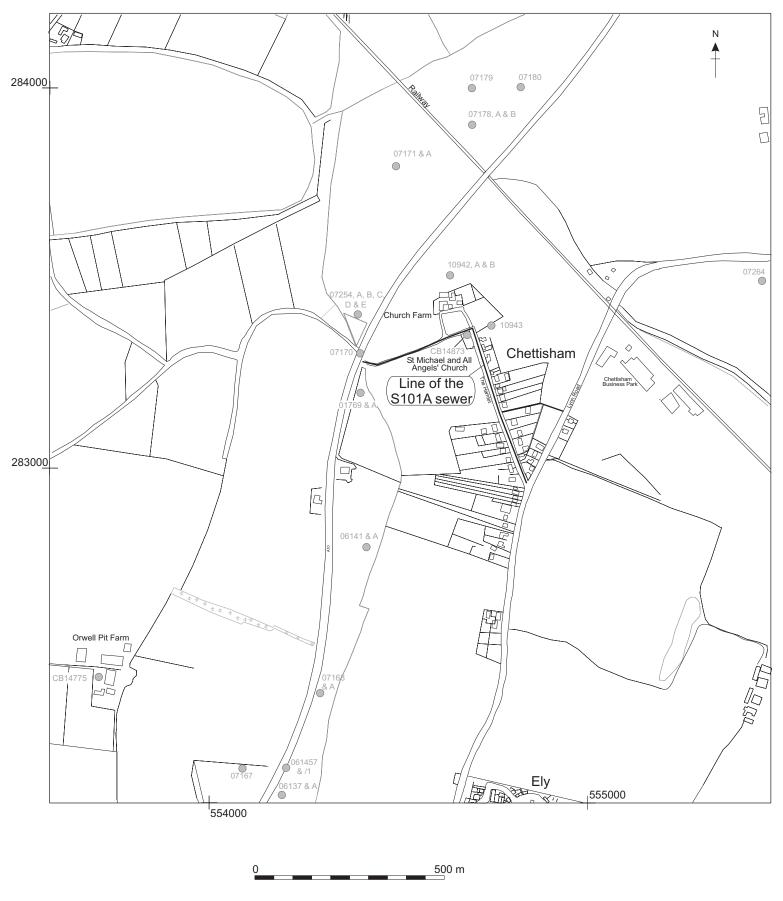


Figure 2. Site Location, with archaeological sites recorded in the Cambridgeshire SMR located within 1km of Chettisham S101A Sewer. Scale 1:1000