

Archaeological Field Unit

## A141 to Norwood Road, March -Anglian Water Pipeline Archaeological Evaluation

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August 2005

**Cambridgeshire County Council** 

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Commissioned by Anglian Water Services Ltd

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#### SUMMARY

A small evaluation, comprising 282m of trenching, was undertaken by the Cambridgeshire County Council Archaeological Field Unit (CCC AFU) along the route of a proposed Anglian Water pipeline from the A141 to Norwood Road in March, Cambridgeshire.

Limited evidence for prehistoric activity, in the form of a small Early Neolithic utilised flint flake, was found in the topsoil during machining of trench 1.

Six small, modern ditches aligned approximately north to south were identified in the western half of trench 1, and two extensive, possibly linear, modern truncations were recorded in trenches 4 and 5. Trenches 2 and 3 contained no archaeological features.

No subsoil survived in any of the trenches, and this combined with the general absence of artefacts in the topsoil and the presence of a number of modern features indicates that the site (at least along the route of the pipeline) has been subject to recent disturbance and/or truncation. This is most likely to have been associated with the construction of the railway and embankment to the immediate south of the evaluation in the 19th century.

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## Drawing Conventions

| S                          | ections                                   | F                      | Plans |
|----------------------------|---|------------------------|-------|
| Limit of Excavation        |   | Limit of Excavation    |       |
| Cut                        |   | Deposit - Conjectured  |       |
| Cut-Conjectured            |   | Natural Features       |       |
| Soil Horizon               |   | Intrusion/Truncation   |       |
| Soil Horizon - Conjectured |   | Sondages/Machine Strip |       |
| Intrusion/Truncation       |   | Illustrated Section    | S.14  |
| Top of Natural             |   | Archaeological Deposit |       |
| Top Surface                |   | Excavated Slot         |       |
| Break in Section           |   | Cut Number             | 118   |
| Cut Number                 | 118                                       |                        |       |
| Deposit Number             | 117                                       |                        |       |
| Ordnance Datum             | $18.45 \mathrm{m} \mathrm{OD} \mathrm{N}$ |                        |       |

#### A141 to Norwood Road, March - Anglian Water Pipeline

#### **Archaeological Evaluation**

(TL 41713 98063 to 40250 97596)

#### **1 INTRODUCTION**

An archaeological evaluation, comprising the machine-excavation of five trenches, was undertaken by the Archaeological Field Unit of Cambridgeshire County Council (CCC AFU) along the route of a proposed Anglian Water pipeline in March, Cambridgeshire. The proposed development includes the installation of a reinforcement water main pipeline across a 1.7km stretch of land from the A141 to Norwood Road, March. The water main will be constructed in a 1m-wide trench set within a 10m-wide construction corridor. The evaluation was in response to a brief produced by Andy Thomas of Cambridgeshire Archaeology Planning and Countryside Advice (CAPCA); the Cambridge Historic Environment Record Office reference number is ECB1992. The work (Site code MAR NRD 05) was commissioned by Anglian Water Services Ltd and undertaken between 5/8/05 and 9/8/05.

#### 2 GEOLOGY AND TOPOGRAPHY

The line of the proposed pipeline is located in the north of the town and traverses several fields in an area of mixed geology comprising Boulder Clay Till and March Gravels (BGS 1978, Sheet 158/159). Deep drainage ditches delineate the fields. The land is relatively flat (*c*.3.m OD) and is currently under arable cultivation; industrial units and a landfill site lie to the north and the railway line runs along an embankment to the south.

#### **3** ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Although there are no known archaeological remains within the evaluation area, a number of find spots and sites are recorded within the vicinity in the Cambridgeshire Historic Environment Record (CHER).

#### Prehistoric

Mesolithic and Neolithic flint artefacts have been found (CHERs 8455 and 10913) c. 1km to the south of the railway line and c. 2km to the south-east of the site respectively.



**Figure 1** Site location showing position of trenches (black) and pipeline route (red)

A number of lithic scatters and prehistoric artefacts (*e.g.* CHER 5210 and 5007) are also known from the northern fringes of March island, some distance from the pipeline route. Bronze Age artefacts have been found *c.*30m to the north-west of the pipeline route (CHER 4548). Excavations at March Northern Offices on March island (CHER 280; O'Brien 2003) have also revealed a Late Bronze Age to Middle Iron Age ritual and agricultural landscape.

The Fenland Survey (Hall 1987) suggests that this part of March was dry land throughout the Neolithic and Bronze Age periods. By the Iron Age it appears that the land to the west was marsh/rough ground and there was an inlet, which probably ran close to the western end of the pipeline route.

#### Roman

During the Roman period the environment remained marshy to the west of the development site, although the presence of cropmarks on March island (*e.g.* CHER 10763) indicates extensive settlement here at this time. Roman pottery has also been found to the south (CHER 5905) and to the north of the site, at Westry Farm (CHER 8440 and 5096). The latter is close to the Fen Causeway Roman road (CHER 15033), which runs *c*. 0.8km to the north of the pipeline route. The road connected Peterborough with fenland settlements such as March on its route to Denver in Norfolk.

#### Medieval and post-medieval

In the post-Roman period the fen encroached on the site; the Fenland Survey has plotted the edge of the fen from the Tithe Map of 1840. The later 19th century Ordnance Survey maps of the area indicates that there has been relatively little change to the layout and topography of the site up until the present day.

#### 4 METHODOLOGY

The evaluation was designed to establish the character, date, state of preservation and extent of any archaeological remains within the proposed development area.

The proposed route of the pipeline extends for 1.7km, although the area to be evaluated measured c.1km in length. The pipe trench is intended to be 1m wide, set within a 10m-wide construction corridor (see Figs 1 and 2). A total of five trenches measuring between 48m and 60m long were excavated by 360° mechanical excavator (JCB) within the easement of the proposed pipeline under the supervision of an archaeologist.

The original scheme specified that an additional trench be excavated to the south of the railway line, however this was removed from the evaluation area as a result of a diversion to the pipeline route.

The reduced area to be evaluated measured approximately  $815m \log$ ; the total length of trenching was *c*. 282m. A plan of the proposed trenching strategy was sent to CAPCA for approval before the commencement of the evaluation.

Three of the trenches (1-3) were orientated approximately east-west to the north of, and parallel with, the railway line; a safe distance of between 8m and 11m was maintained between the trenches and the track. The fourth trench was aligned approximately north-south, parallel to a field boundary/drainage ditch. The fifth trench was located along the southern boundary of a long rectangular field in the eastern part of the proposed development (Figs 1 and 2).

Topsoil was scanned for artefactual material during machining and recording of the trenches. Where appropriate, the exposed surfaces at the base of the trenches were cleaned by trowel as necessary in order to clarify deposits. No subsoil was present in any of the trenches; topsoil between 0.26m and 0.46m thick was removed down to the surface of the geology and/or modern deposits in all five trenches. The extremely dry conditions had caused the natural to become very hard; the modern intrusions identified in trenches 4 and 5 were also noticeably compacted.

Trench plans, where appropriate, were drawn at a scale of 1:100 (Trenches 1 and 4); the trenches were located using a Leica TCR 705 Total Station Theodolite. The written record comprises context descriptions on CCC AFU pro-forma context sheets and trench record sheets. The photographic record includes monochrome prints, colour slides and digital photographs. No deposits suitable for environmental sampling were identified.

#### 5 **RESULTS**

A summary of the contexts can be found in a tabulated form in Appendix 1.

Trench 1 (Figs 2 and 3; Plate 1)

| Length | Width | Orientation | Topsoil         | Geology   |
|--------|-------|-------------|-----------------|-----------|
| 60.53m | 1.2m  | E-W         | 0.35m (average) | clay till |

Six small, linear ditches (1, 3, 5, 7, 9 and 11) orientated approximately northsouth were investigated in the western half of the trench. All six features contained similar (single) fills of dark brown silty ash with orange mottles and occasional small stones and fragments of coal. The ditch cuts were also comparable with moderately steep to vertical sides and generally flat bases. The ditches ranged in width between 0.45m and 0.58m; depths varied between 0.05m (a shallow terminal) and 0.26m.



Figure 2 Detailed location of trenches



Plate 1: Trench 1 from the east (ditches located in the western half)

No datable finds were recovered, although the presence of coal and ash indicates a post-medieval or modern date for these features. A possible interpretation is that these features were drainage ditches, however the flat bases and steep sides do not necessarily support this. An alternative explanation might be that they were associated with the construction of the railway, the embankment for which runs a few metres to the south.

A single early Neolithic flint (see Appendix 2) was recovered during the machining of the trench, indicating prehistoric activity in the vicinity.

Trench 2 (Fig. 2; Plate 2)

| Length | Width | Orientation | Topsoil        | Geology                    |
|--------|-------|-------------|----------------|----------------------------|
| 60.9m  | 1.2m  | E-W         | 0.3m (average) | mixed chalky clay till and |
|        |       |             |                | orange sandy gravel        |

No archaeological features were identified in this trench.

Trench 3 (Fig 2; Plate 3)

| Length | Width | Orientation | Topsoil     | Geology                    |
|--------|-------|-------------|-------------|----------------------------|
| 61.8m  | 1.2m  | E-W         | 0.42m (max) | mixed chalky clay till and |
|        |       |             |             | orange sandy gravel        |





No archaeological features were identified in this trench. Significant evidence of modern intrusion/scoring probably associated with agriculture and/or the construction of the railway and embankment to the south was present.



Plate 2: Trench 2 looking west



Plate 3: Trench 3 looking west

Trench 4 (Figs 2 and 3; Plate 4)

| Length | Width     | Orientation | Topsoil        | Geology                    |
|--------|-----------|-------------|----------------|----------------------------|
| 48.6m  | 1.2m      | N-S         | 0.3m (average) | mixed chalky clay till and |
|        | (average) |             |                | orange clay and gravel     |

A massive modern truncation (15) was identified, running the length of the trench and parallel to a field boundary to the east. The feature was filled with compacted redeposited natural orange clay, grey chalky clay and topsoil; occasional fragments of post-medieval tile were noted but not retained. Two trench extensions were excavated at right angles to the main trench to further expose the feature. A hand-excavated segment and a machine-cut trench revealed across the feature it to be at least 0.3m deep with a steep edge and fairly flat base. It is possible that the cut increased in depth towards the west, beyond the easement/evaluation area. Natural gravel was revealed in the base of the machine-excavated slot; natural clay was exposed along the eastern edge of the trench.

No other features were present; no finds other than occasional tile and coal fragments were noted in/recovered from the topsoil.

#### Trench 5 (Figs 2 and 3; Plate 5)

| Length | Width | Orientation | Topsoil        | Geology                 |
|--------|-------|-------------|----------------|-------------------------|
| 50m    | 1.2m  | E-W         | 0.4m (average) | sandy gravel and orange |
|        |       |             |                | brown clay              |

As with trench 4, an extensive but patchy/ephemeral modern feature (17) was identified running the length of the trench, parallel with a field boundary to the south. A similar mixed fill comprising redeposited topsoil and clay was identified, containing traces of post-medieval tile and fragments of coal/coke. A machine-excavated extension on the northern edge of the trench revealed the feature to be roughly linear, approximately 4m wide and 0.15m deep.

No other features were present; no finds other than occasional tile and coal fragments were noted in the topsoil.



Plate 4: Trench 4 looking north, showing modern feature **15** 



Plate 5: Trench 5 looking east, showing modern feature **17** 

#### 6 **DISCUSSION**

The absence of archaeological features predating the post-medieval period, combined with the presence of two extensive modern features, the absence of subsoil and the general lack of finds suggests that this part of the proposed pipeline has been subject to truncation/disturbance in the recent past.

It is possible that at least some of this disturbance can be related to the construction of the railway in the 19th century, perhaps due to the quarrying for embankment material and/or access roads. More recent disturbance may derive from agricultural practices, such as ploughing. The second edition Ordnance Survey Map (1890) shows that there has been relatively little change to the topography of the landscape. The drains and field boundaries are the same although there has clearly been encroachment of modern industrial units to the north, and expansion of the town from the south.

#### 7 CONCLUSIONS

The evaluation results indicate that recent activities, possibly associated with the construction of the railway, have truncated/removed any earlier remains on the site. The presence of a single early Neolithic flint in the topsoil of trench 1 provides some further evidence for prehistoric activity in the vicinity.

#### ACKNOWLEDGEMENTS

The author would like to thank Anglia Water Services, who commissioned and funded the archaeological work. The project was managed by Judith Roberts, who also edited the report. The majority of the machine-watching was undertaken by Steve Hickling, thanks are also due to site assistants Rob Wardill and Jon Bolderson, who also carried out the survey. The illustrations are by Carlos Silva; the flint was identified by Richard Mortimer.

The brief for archaeological works was written by Andy Thomas, County Archaeology Office, who also visited the site and monitored the evaluation.

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## **Appendix 1: Context Data**

| Context | Туре                         | Cut | Trench | Dimensions   | Description   | Date               |
|---------|------------------------------|-----|--------|--|---|--------------------|
| 1       | Ditch                        | INU | 1      | (L x w x D)<br>>0.5m x 0.56m x   | Linear ditch with vertical sides and flat base,   | 19thC +?           |
| 2       | Ditch fill                   | 1   | 1      | 0.1/m  | Mixed dark orangey brown/black silty ash with<br>occ small stones and coal fragments  | 19thC +?           |
| 3       | Ditch                        |     | 1      | >0.5m x 0.45m x<br>0.26m   | Linear ditch with vertical sides and flat base,<br>orientated N-S to E of ditch 1   | 19thC +?           |
| 4       | Ditch fill                   | 3   | 1      |  | Mixed dark orangey brown/black silty ash with occ small stones and coal fragments   | 19thC +?           |
| 5       | Ditch                        |     | 1      | >0.6m x 0.57m x<br>0.05m   | Linear, shallow ditch terminal with moderate<br>sides and irregular base, orientated N-S to E of<br>ditch <b>3</b>          | 19thC +?           |
| 6       | Ditch fill                   | 5   | 1      |  | Mixed dark orangey brown/black silty ash with occ small stones and coal fragments   | 19thC +?           |
| 7       | Ditch                        |     | 1      | >0.5m x 0.56m x<br>0.16m   | Linear ditch with moderate to vertical sides and irregular base, orientated N-S to E of ditch 5                             | 19thC +?           |
| 8       | Ditch fill                   | 7   | 1      |  | Mixed dark orangey brown/black silty ash with occ small stones and coal fragments   | 19thC +?           |
| 9       | Ditch                        |     | 1      | >0.5m x 0.48m x<br>0.10m   | Linear ditch with moderate to vertical sides and flat base, orientated N-S to E of ditch 7                                  | 19thC +?           |
| 10      | Ditch fill                   | 9   | 1      |  | Mixed dark orangey brown/black silty ash with occ small stones and coal fragments   | 19thC +?           |
| 11      | Ditch                        |     | 1      | >0.5m x 0.48m x<br>0.10m   | Linear ditch with moderate to vertical sides and flat base, orientated N-S to E of ditch 9                                  | 19thC +?           |
| 12      | Ditch fill                   | 11  | 1      |  | Mixed dark orangey brown/black silty ash with occ small stones and coal fragments   | 19thC +?           |
| 13      | find                         |     | 1      |  | Unstratified (topsoil) find – early Neolithic flint   | Early<br>Neolithic |
| 14      | Fill of<br>modern<br>feature | 15  | 4      |  | Mixed backfill comprising redeposited reddish<br>brown/chalky grey clay and topsoil with occ<br>post-medieval tile and coal | 19thC +?           |
| 15      | Modern<br>feature            |     | 4      | > 48m long x $>$ 5m<br>wide x $>$ 0.29m<br>deep  | Extensive modern truncation running length of trench; extends beyond confines of trench.                                    | 19thC +?           |
| 16      | Fill of<br>modern<br>feature | 17  | 5      |  | Mixed backfill comprising redeposited reddish<br>brown/chalky grey clay and topsoil with occ<br>post-medieval tile and coal | 19thC +?           |
| 17      | Modern<br>feature            |     | 5      | <ul> <li>&gt; 50m long x &gt;c.</li> <li>4m wide x &gt;</li> <li>0.15m deep</li> </ul> | Extensive linear modern truncation running<br>length of trench, extends beyond confines of<br>trench. Old trackway/access?? | 19thC +?           |

# Appendix 2: Finds Data By Richard Mortimer

A single flint waste flake (blade) of early Neolithic date was recovered from an unstratified context (13) in Trench 1.





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